

An aerial photograph of a rural landscape. In the foreground, a wide asphalt road curves from the bottom left towards the center, where it intersects with another road. To the right of the intersection, there is a small cluster of buildings, including a large white building with a flat roof and a smaller blue-roofed structure. A dirt path or track runs along the right side of the road. The middle ground is filled with green fields, scattered trees, and several houses with various roof colors. The background shows a vast, flat landscape under a cloudy sky.

Bushfield-Woodford Strategic Framework Plan

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Warrnambool City Council is honoured to have an important custodian role in partnership with Eastern Maar Citizens in looking after Country. Warrnambool City Council is proud of our Maar heritage and story. We acknowledge the Maar people and celebrate their rich, diverse and ongoing contribution to us all.

This Strategic Framework Plan was funded by the Victorian Planning Authority through its Streamlining for Growth Program. The plan has been prepared by Arup Australia in collaboration with the City of Warrnambool, with the input of community and stakeholders and assistance from Ochre Imprints.

All professional care has been taken to ensure that the content of this document is current and accurate. However, it is not purported that it is complete, and it is not guaranteed that the content of the document is free of errors. Council accepts no liability for error, loss, damages, or other consequences arising from reliance on information contained in this document.

Foreword

The township of Bushfield and Woodford represents a well-established and well-presented semi-rural environment with vibrant, enthusiastic and engaged community members within Eastern Marr Country. The township is in an area of high amenity due to its location across the winding valleys of the Merri River and tributaries, which form an extensive and exceptional water feature in the area. It is on the one hand quite close to the services provided by urban Warrnambool, and on the other, separated from Warrnambool by an expansive agricultural landscape. Because the township is such a pleasant place to live, it is important the inevitable pressure for growth is well managed.

This Strategic Framework Plan (the Plan) aims to ensure future development and population growth meet the aspirations of the majority of the Bushfield-Woodford community and considers broader Victorian Government, Council and Eastern Marr policy objectives.

Council conducted a number of community and stakeholder engagement activities to identify the key themes and to obtain and understand feedback on the draft plan. Council thanks residents in and around Bushfield and Woodford who generously gave their time at community engagement events, completed surveys and provided feedback to inform the Plan.

Executive Summary

Executive Summary

Purpose of the document

This Strategic Framework Plan (the Plan) guides the future growth and development of Bushfield-Woodford. It provides an overview of current conditions, responding to key issues within the townships, and outlines a clear path forward to inform future decision-making and infrastructure investment in a way that meets community and stakeholder expectations.

Current issues

Extensive background analysis, community and stakeholder engagement was undertaken to understand existing conditions in Bushfield-Woodford. This includes notable features, future aspirations, and specific constraints that will shape how the townships continue to evolve. Some of the key issues facing Bushfield-Woodford include:

- Protection of the townships' rural village character.
- Importance of the natural environment, particularly the Merri River, network of creeks, and surrounding areas.
- Importance of community facilities, supported by quality public realm and adequate connectivity.
- Improvements to domestic wastewater management, as well as long-term integrated water management planning.
- Road infrastructure quality and traffic safety.
- Active and public transport links to Warrnambool.

Strategic approaches

Building on and responding to existing conditions, a comprehensive plan for the future of Bushfield and Woodford is put forward. This includes a vision, with key objectives and supporting actions organised under seven cross-cutting themes. Together, these describe a desired future state for the townships, what this should look like and how to realise it. Key elements of the Plan include:

- No change to townships' boundary or zoning to protect the townships' rural village character.
- No small lots to maintain the rural village character, enable onsite wastewater treatment, and support natural environment amenity.
- Collaboration with the Department of Transport and Planning to develop options for traffic improvements on Bridge Road and the Hopkins Highway.
- Analysis and prioritisation of local traffic links, including active transport connectivity.
- Collaboration with Wannon Water to develop a long-term wastewater solution, including consideration of a regional Integrated Water Management Plan.
- Cooperation with community groups to analyse and prioritise the provision and maintenance of facilities.

Introduction

Introduction

What is the Bushfield-Woodford Strategic Framework Plan?

The Bushfield-Woodford Strategic Framework Plan (the Plan) is a high-level long-term planning framework that sets out the future planning and development of the Bushfield and Woodford townships over the next one-to-two decades. The purpose of the strategic framework plan is to:

- Identify the key strategic planning issues facing the town, including community aspirations and needs.
- Set out the future vision for Bushfield and Woodford.
- Refresh the land use and development framework.
- Provide a basis for public space and infrastructure improvements and further work.
- Provide guidance for future stakeholder discussions and investment.

How will the Strategic Framework Plan be used?

The Strategic Framework Plan will be used by Warrnambool City Council to determine the application of local planning policies, land use planning zones and overlays.

The Plan will serve as a holistic policy document that guides decision-making by Council and a range of other stakeholders, and will inform further work such as planning scheme amendments, capital works projects, service provision, advocacy and partnerships, and further investigations and studies.

It will guide Council's consideration of applications for re-zonings and for planning permits. Council will also use the Strategic Framework Plan to establish what additional work is required to determine the future provision of infrastructure and services.


Study area


This Strategic Framework Plan applies to the study area shown in Map 1 on the following page.

The study area is defined by the settlement boundary surrounding the townships of Bushfield and Woodford provided in Clause 02.04 of the Warrnambool Planning Scheme. The settlement boundary encompasses approximately 498 ha of rural residential land, defined as land zoned as either Low Density Residential Zone (LDRZ) or Rural Living Zone (RLZ) and is located approximately 2.5km north of the Warrnambool boundary, 7km north of Warrnambool city centre and 225km west of Melbourne. See Map 2 for regional context.




Legend

 Study area

 Key water course and body

Map 1
Bushfield - Woodford Strategic Framework Plan
Study Area

 Scale: 18,000 at A4
N

How was the Strategic Framework Plan developed?

The Plan was developed using a range of inputs including assessment of existing studies and policy relating to the area and the region, analysis of townships and consideration of surrounding best practice examples of sustainable rural township planning. This analysis is summarised in Part A of this SFP.

The Bushfield-Woodford Plan has also been informed by engagement with the Registered Aboriginal Party for the area (Eastern Maar) and engagement with the community and stakeholders. Engagement sought to identify key information regarding the history, existing conditions, and future aspirations for the townships and to test key ideas within this document.

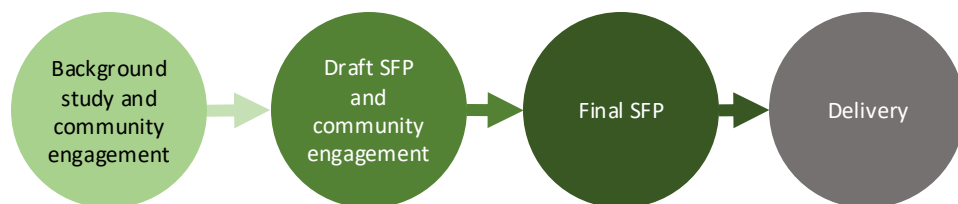


Figure 1: Strategic Framework Plan development process

The development of this strategic framework plan was guided by inputs from stakeholders and community engagement, ensuring inclusivity and alignment with the needs and aspirations of the wider community.

Key documents reviewed include:

- *Warrnambool 2040 (W2040)*
- *Rural Housing and Settlement Strategy (2010)*
- *Council's City-Wide Housing Strategy (2013)*
- *Warrnambool Open Space Strategy (2014)*
- *Warrnambool Community Services and Infrastructure Policy (2016) and Community Services and Infrastructure Plan 2011 - 2026 (2013)*
- *Domestic Wastewater Management Plan 2020 – 2025 (DWMP)*
- *Floodplain Management Plan 2018 - 2023*
- *Resource Recovery and Waste Minimisation and Management Plan 2017 – 2021*
- *Active Warrnambool 2019 – 2030 (2019)*
- *Sustainable Transport Strategy 2010 – 2020*
- *Glenelg Hopkins Regional Catchment Strategy (2013 – 2019) and Native Vegetation Strategy*

Structure of this document

The document is structured as follows:

- **Introduction**, this section, outlines the context of the project, its scope and the process of its development including key findings from Community and Stakeholder Engagement.
- **Part A, Existing conditions**, outlines the key existing features, issues and opportunities affecting the township and informing its future development.
- **Part B, Strategic Framework Plan**, provides the future vision for the township, and the objectives and actions to achieve this.

Community and Stakeholder Engagement

Engagement with the community and stakeholders is essential to creating a successful plan and future place. Multiple community engagement activities have been undertaken to inform the initial drafting of the SFP.

Community engagement

A community survey and map was opened for comment for 3 weeks in October and November 2022. Responses included:

- ✓ **1077** website visits
- ✓ **281** unique users
- ✓ **169** map comments
- ✓ **38** survey responses

A community drop-in session was held for all Bushfield-Woodford residents on 28 March 2023. Responses included:

- ✓ **50+** community members attended the session
- ✓ **200+** comments were received from community members

This initial engagement enabled the preparation of a draft SFP. In September and October 2023 this was shared with community members and stakeholders who were invited to provide feedback on the draft SFP. Responses included:

- ✓ **60+** written submissions

Submissions from community relating to a community hub and submissions received from community relating to recent planning applications were also reviewed during the preparation of the plan.

The strong community participation provides evidence of the high level of interest in the project. These submissions have allowed us to refine the draft based on the feedback received.

Stakeholder engagement

In addition, **11 stakeholders** were engaged including key government organisations and major stakeholders such as infrastructure providers. Stakeholders engaged included:

- Department of Transport and Planning
- Department of Energy, Environment and Climate Action
- Environmental Protection Authority Victoria
- Moyne Shire Council
- Woodford Primary School
- Wannon Water
- Southern Rural Water
- Glenelg Hopkins Catchment Management Authority
- Country Fire Authority
- Telstra
- Powercor

Part A

Bushfield-Woodford
existing conditions

Introduction

This section summarises findings of the detailed background analysis and community and stakeholder engagement. It identifies the key features and aspirations, constraints, and opportunities of Bushfield and Woodford that will shape how it changes in the future.

The analysis has considered key state and local government policy and strategy, existing studies of the area and surrounds, the state and local planning policy framework and provisions, and findings of engagement with the Traditional Owners of the land on which the townships exist, represented by the Eastern Maar Aboriginal Corporation, community and stakeholders. Findings are organized according to key themes identified as relating to the town and its future growth and development.

This section is structured as follows:

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About Bushfield and Woodford

Bushfield and Woodford townships are well-established and well-presented rural communities located approximately 2.5km from the Warrnambool boundary, 7km inland of the Warrnambool CBD and approximately 3 hours' drive from Melbourne.

History and pre-European landscape

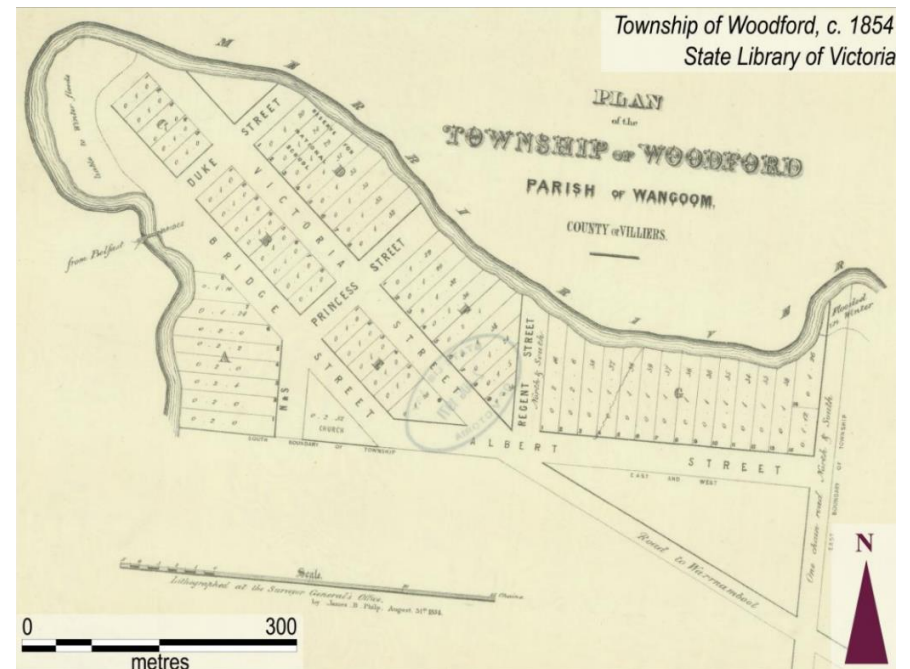
The south-western Victorian landscape within which Bushfield and Woodford exist was characterised by flat to undulating plains dotted with hills formed by extinct volcanoes and low-lying lakes and swamps. Tower Hill was a major landmark that typifies this form. Open eucalypt woodlands with sparse understory over grassy and herbaceous ground cover and dense swamp scrub characterised key waterways. This landscape provided habitat for an abundance of fish and game such as kangaroos, lizards, water birds, and yabbies. The Gunditjmara people were the original custodians of the land who cared for it and used its resources for food, medicine and craft.

The earliest recorded arrivals of Europeans to the region were whalers and sealers along the coastline around 1810. By 1830 permanent pastoralist squatters began to occupy the district and expanded rapidly. By 1840 much of the land in the region had been taken up by colonial settlers, and disease, dispossession of land and loss of resources, and violence and conflict that this introduced had caused significant harm to the Aboriginal population.

Woodford was first settled in the 1840s and was the first crossing point of the Merri River between Port Fairy (then known as 'Belfast') and Warrnambool. Subdivision plans for land sales around

1854 show the alignment of the Merri River and Yarrpturk Creek largely unchanged from today, and included a school, mechanics institute, hotel and church. Development expanded from there with maps showing subdivision occurring as early as 1891 in Bushfield.

In the 1860s the Aboriginal populations were moved to missions at Framlingham (1865) and Lake Condah (1866). In 1970 the land and the mission at Framlingham was returned to the Traditional Custodians under the Aboriginal Lands Act.



Bushfield and Woodford today

Today, Bushfield and Woodford represent strong communities with strong connections to nearby Warrnambool, but a distinctive rural village character.

According to the 2021 census, Bushfield has a resident population of 596 and Woodford has a resident population of 436. While separate townships, the two have converged over time as they have grown. Key facilities in the townships include a school, several parks and open spaces including a sports oval, a community meeting space, and a country fire station.

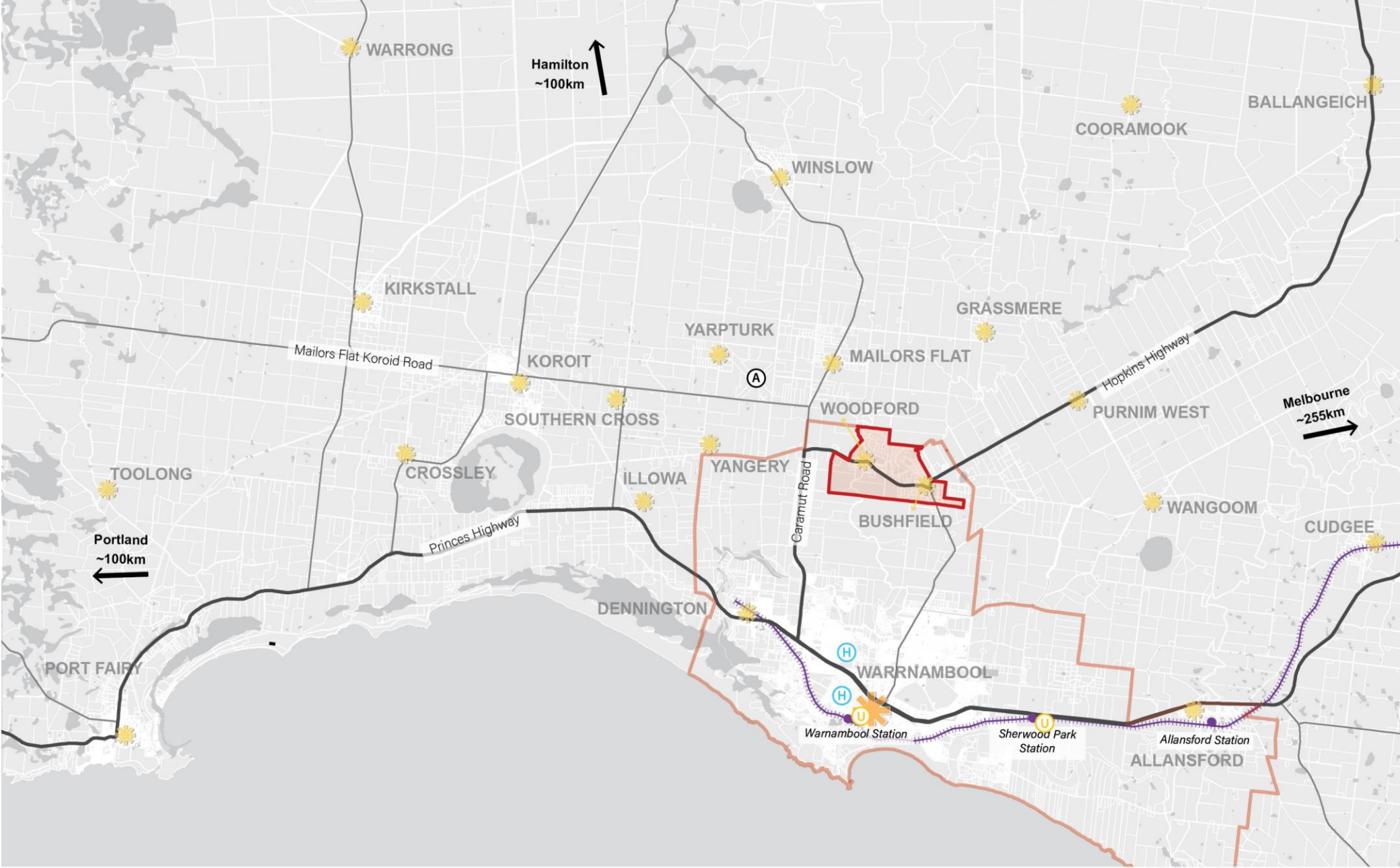
The townships are picturesquely situated amongst the hills and valleys along the banks of the Merri River, which bisects the townships and connects to Warrnambool. The Merri River is a critically important natural feature of the region. It provides a popular recreational space for locals, ecological functions and flood conveyance within the Hopkins Catchment, and habitat for a diverse range of native flora and fauna. However, much of the native vegetation has been cleared for grazing or development.

The townships are surrounded by high quality agricultural and grazing land, which separate them from Warrnambool fringes. The agricultural land surrounding the townships is characterised by large, flat, rectangular grazing paddocks. However, these agricultural uses and broader development have cleared the landscape of much of the native vegetation and caused harm to the health of the Merri River.

Borh Woodford and Bushfield are within a broader, medium-risk bushfire landscape characterised by extensive areas of grassland. Although interspersed with areas of fragmented vegetation, the grassland vegetation will be the dominant driver of bushfires.

Warrnambool's boundary is located approximately 2.5km south of Bushfield and Woodford and is a major regional centre for South-West Victoria. As of the 2021 census, the population of Warrnambool was 35,743. It is the largest city in the South West region of Victoria, and is the eleventh largest city in the state overall. The city is located approximately 300 kilometres south-west of the state capital, Melbourne.

Bushfield and Woodford function as satellite townships to Warrnambool which has a major economic and social role for them and the surrounding towns. The townships are dependent on the city for a range of services such as shopping, employment, education, and healthcare. However, residents of Warrnambool also come to Bushfield and Woodford for its nature, sports clubs and primary school. Its proximity to Warrnambool combined with its distinctive rural residential lifestyle make it a highly attractive place to live.



Legend

- | | | | |
|-----------------------------------|-----------------|---------------------------|---------------------|
| Study area | Regional centre | Principal Freight Network | Hospital |
| Warrnambool Local Government Area | Regional towns | Declared Roads | University and TAFE |
| Waterbody | Train Stations | Train corridor | Airport |

Demographics

The Bushfield and Woodford community have a large family representation, with an above average household size of 3.1 persons per household, which is reflected in the average dwelling size and a low percentage of single person households. Bushfield-Woodford has an above average representation of primary and high school aged children.

The townships community consists of above average household incomes and home values, high levels of home ownership, and low levels of long-term health conditions and housing stress.

Demographics suggests low levels of diversity, potentially owing to the small size of the community or limited housing choices, with a relatively limited offering of homes smaller than 3 bedrooms (6.5%), non-detached dwellings (0%) or rental options (3.7%), and a low level of households that use languages other than English at home.

Where the available data regarding the local economy within Bushfield and Woodford is limited, data for the broader Greater Warrnambool region is included below.

- Bushfield-Woodford had a below average unemployment rate of 3.4% compared to regional Victoria's rate of 4.1% and an above average participation rate in 2021.
- Bushfield-Woodford had an above average level of high school education compared to regional Victoria in 2021.
- Leading industries by number of businesses in Greater Warrnambool include agriculture, forestry and fishing, construction. Leading industries by employment are retail, agricultural and forestry, and education and training.

Data available for Warrnambool North, which includes the townships of Bushfield and Woodford, shows that as at 2016 there were estimated to be 320 jobs in the area. These jobs accounted for 1.9% of total jobs in the Warrnambool LGA. Unemployment at the time was less than 1%.

Table 1: Key demographic data for Bushfield-Woodford

2021 ABS Census Data	Bushfield and Woodford (Suburbs)	Regional Victoria
Population	1,032	1,576,613
Median Age	41	43
Aboriginal and Torres Strait Islander population (%)	1.8%	2.0%
Language other than English used at home (%)	1.4%	13.6%
Long term health conditions (%)	36.1%	37.2%
Private dwellings	347	748,182
Unoccupied dwellings (%)	3.7%	13.3%
Dwelling type - % detached	100.0%	89.9%
Dwelling type - % other	0.0%	10.1%
Avg. number of bedrooms	3.7	3.2
Household size	3.1	2.4
Single person households (%)	10.2%	29.3%
Avg. household income	\$2,318 p.w.	\$1,386 p.w.
% of homes owned	95.1%	72.5%
% of homes rented	3.7%	23.6%
% of owners or renters in housing stress*	7.3%	15.4%

*Housing stress measured as spending greater than 30% of household income on mortgage or rental costs.

Planning and Policy Context

The following section details the existing state and local planning policy framework and provisions applying to the townships and other key Council and State strategies, policies and studies that sit outside the planning scheme and have informed the Plan.

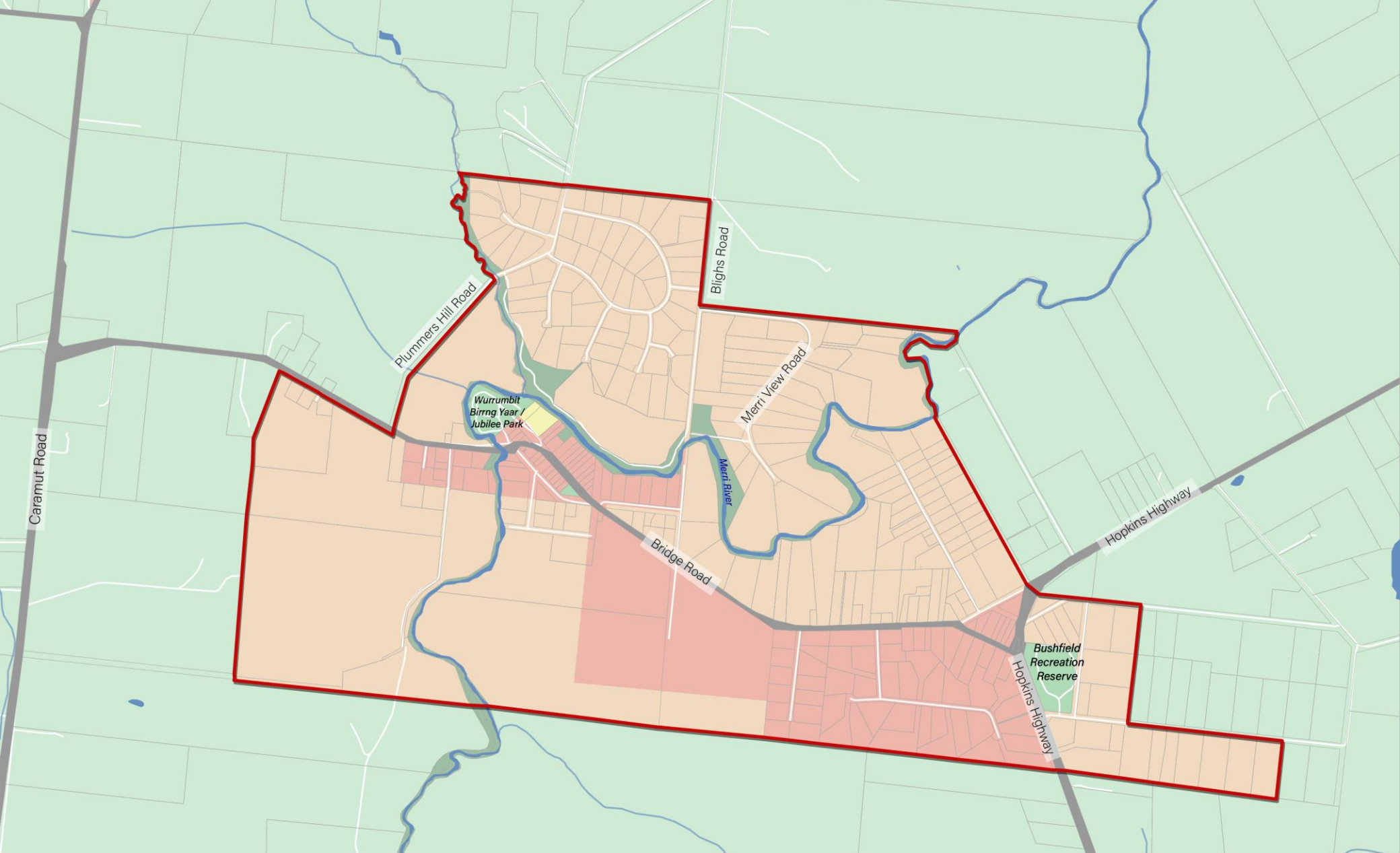
Planning Policy Framework

- **Clause 02.02 Vision** sets out the Council Plan (2017-2021) vision for Warrnambool as “A cosmopolitan city by the sea” with four objectives relevant to land use planning:
 - Sustain, enhance and protect the natural environment.
 - Foster a healthy, welcoming city that is socially and culturally rich.
 - Maintain and improve the physical places and visual appeal of the city.
 - Develop a smarter economy with diverse and sustainable employment.
- **Clause 02.04 Strategic Framework Plan** identifies the urban settlement boundary that surrounds the Bushfield and Woodford townships.
- **Clause 11.03-2L-04 Settlement in Bushfield, Woodford and Allansford** provides the strategy to “Defer growth within Bushfield and Woodford pending resolution of sewerage and effluent management options.”
- **Clause 16.01-3L Rural Living** applies to land within the Low Density Residential Zone (LDRZ) and Rural Living Zone (RLZ) and provides the following strategies:
 - Discourage rural living and low density residential subdivision where it would prejudice conventional long-term residential development.
 - Limit rural living and low density residential development in Bushfield, Woodford and Allansford to existing zoned land.
 - Maintain the RLZ as a buffer between residential areas and surrounding farms in Bushfield and Woodford to limit the impact of residential development on adjacent farmland.









Zones

Zones applying to the townships and surrounds are depicted in Map 3 on the following page.

- **Rural Living Zone – Schedule 1 (RLZ)** – provides for very low density residential development and accompanying agricultural/farming practices which do not adversely affect the amenity of neighbouring properties. Land uses in Rural Living Zones should protect and enhance the natural environment and occupiers should base their practices on sustainable land management principles. The schedule to the zone imposes a minimum subdivision lot size requirement of 4 hectares except for the Cilmery Crescent subdivision identified in the schedule which has a minimum lot size of 1 hectare.
- **Low Density Residential Zone (LDRZ)** – applies to some areas of Bushfield and Woodford allows for smaller lots and accommodates a wider range of uses than other zones in the area. A primary consideration of the Low Density Residential Zone is the ability for dwellings in the zone to process their own wastewater in the absence of reticulated sewerage. Lots in this zone must be a minimum of 0.4 hectares if they are not connected to reticulated sewerage, but may be 0.2 hectares if reticulated sewerage were connected.
- **Public Park and Recreation Zone (PPRZ)** – recognises areas for public recreation and open space and protects and conserves areas of significance where appropriate. It also may provide for commercial uses where appropriate. In Bushfield and Woodford, this zone applies to the Bushfield Recreation Reserve, Wurrumbit Birrng Yaar (meaning long water hole) / Jubilee Park, and the Mechanics Institute Park on the south-east intersection of River Rd and Bridge Rd.
- **Public Conservation and Resource Zone (PCRZ)** – purpose is to protect and conserve the natural environment and natural processes for their historic, scientific, landscape, habitat or cultural values. Facilities which assist in public education and interpretation of the natural environment are also encouraged with minimal degradation of the natural environment or natural processes. Appropriate resource based uses are also permitted. In Bushfield and Woodford, this zone applies to Jellie's Reserve, the Merri River and surrounds, and a small lot on the north side of Watsons Lane.
- **Public Use Zone (PUZ2)** – recognises public land use for public utility and community services and facilities. It also permits associated uses that are consistent with the intent of the public land reservation or purpose. In Bushfield and Woodford, Woodford Primary School is the only area which is zoned as a Public Use Zone.
- **Farming Zone (FZ)** – enables agricultural practices and associated ancillary uses. Dwellings and any other services that are permitted within a farming zone must be provided in conjunction with an agricultural use. Lots categorised in this zone ensure an adequate supply of agricultural products and associated employment. Subdivisions in the Farming Zone must be a minimum of 15 hectares.



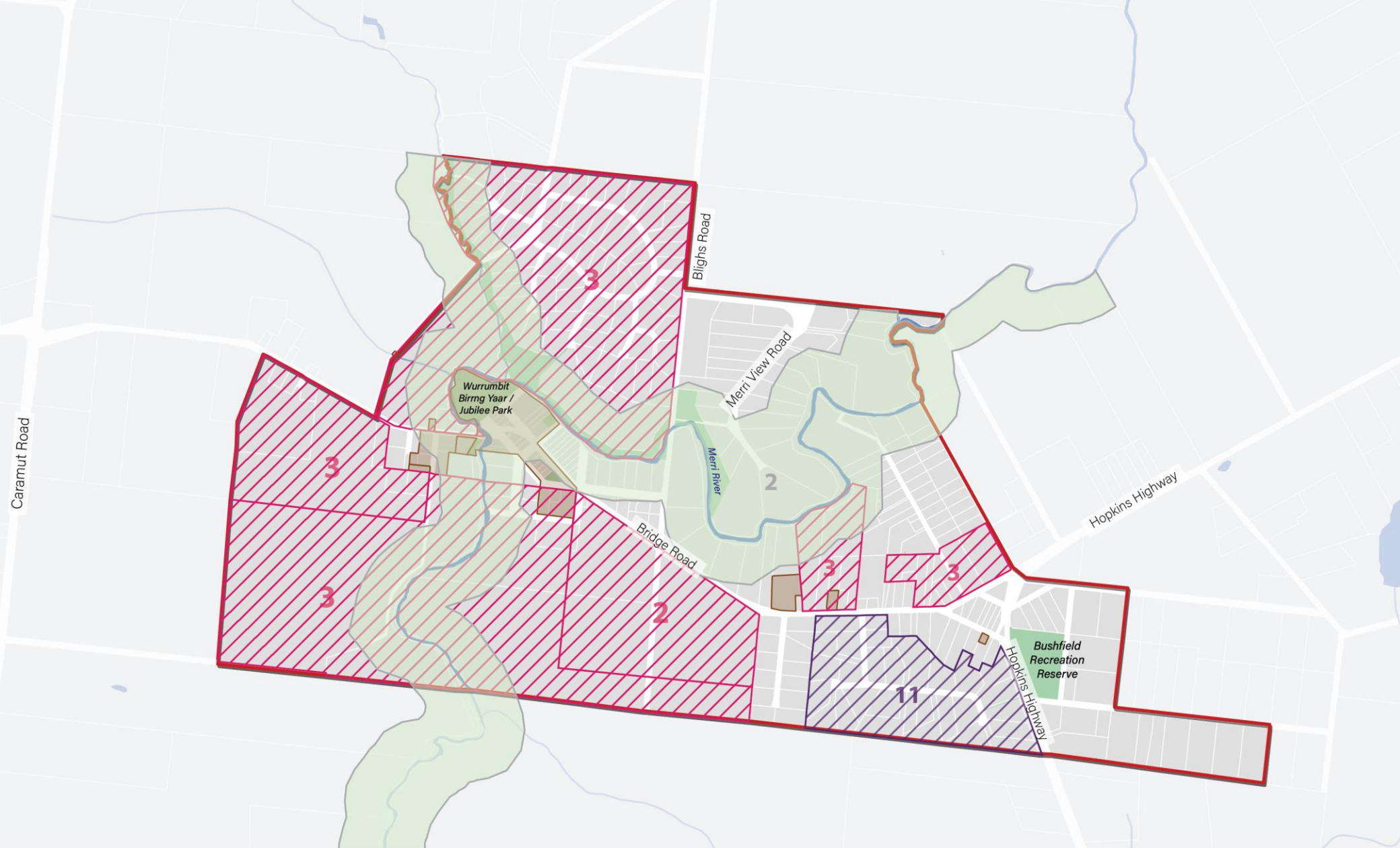
Legend

- | | | |
|--|---|---|
|  Study area |  Public Use Zone - Education |  Farming Zone |
|  Rural Living Zone |  Public Park and Recreation Zone |  Transport Zone 2 - Principal Road Network |
|  Low Density Residential Zone |  Public Conservation & Resource Zone |  Key water course and body |

Overlays

Overlays applying to the townships and surrounds are depicted in Map 4 on the following page.

- **Development Plan Overlay – Schedule 2 (DPO2)** – sets out a range of conditions and requirements for permits in the LDRZ, requiring developments to implement appropriate wastewater management systems if reticulated sewerage is not available, provide direct access to the site via sealed roads, and demonstrate that proposed dwellings will not cause a significant impact on the local environment. It also details what is required to be included in the development plan in order to satisfy the requirements of the DPO2.
- **Development Plan Overlay – Schedule 3 (DPO3)** – sets out a range of conditions and requirements for permits in the RLZ which are similar to those in the DPO2. The primary differences are that dwellings in the DPO3 are not required to be connected to available reticulated water services and they are not required to show the proposed subdivision layout. Other conditions and requirements are similar to those in the DPO2.
- **Design and Development Overlay – Schedule 11 (DDO11)** – sets subdivision parameters which aim to ensure proper protection and management of the existing lot density, pattern and rural residential amenity of the area, protect the local environment and significant views, and provide generous separation between dwellings to enable revegetation of the landscape.
- **Heritage Overlays (206,207,208,209,315,361,370) (HO)** – determines additional requirements for applications under Clause 43.01, including additional analysis concerning site plans, elevations, proposed colours and materials, visual representations illustrating the visual relationship between existing and proposed buildings, proposed fencing, scaled and detailed landscaping, and a report explaining how the proposal addresses specific relevant heritage guidelines if applicable.
- **Environmental Significance Overlay – Schedule 2 (ESO2)** – sets out application requirements for developments under Clause 42.01 to address topography, effluent treatment arrangements, elevations, location and type of native vegetation to be removed and the reason for removal, protection of the natural and habitat values of the river's edge, river bank, and/or clifftop in the vicinity of the application, landscaping, stormwater discharge, and means of safe effluent disposal which does not impact the river and its tributaries.



Legend

- | | | |
|-------------------------------------|---|---------------------------|
| Study area | Environmental Significance Overlay (ESO2) | Key water course and body |
| Development Plan Overlay (DPO2 & 3) | Heritage Overlay (HO) | |
| Design Development Overlay (DDO11) | Open Space | |

Other key strategies, policies and studies

Warrnambool 2040 (W2040)

- Warrnambool 2040 (W2040) is a community vision for Warrnambool, both the city and the wider region. Warrnambool City Council developed this vision in collaboration with the community who helped to create goals for Warrnambool's environment, economy, place and people. W2040 designates 2040 goals, 2040 outcomes, 2026 progress measures, and short-term initiatives across four major categories:
 - Our People
 - Our Economy
 - Our Place
 - Our Environment
- W2040 sets out a range of targets of relevance to the study area, in particular relating to the environment, including a target of net zero carbon emissions by 2040 for the entire municipality.

Warrnambool Council Plan 2021 – 2025 (2021)

- The *Local Government Act 2020* requires that all Councils prepare a Council Plan every four years which consolidates the Council's strategic objectives and actions for achieving these over the four year period. The Plan aims to realise the Community Vision set out in W2040 and informs Council asset management and budgeting. The plan sets out the following strategic goals:
 - A healthy community
 - A sustainable environment
 - A strong economy
 - A connected, inclusive place
 - An effective Council.

Rural Housing and Settlement Strategy (2010)

- The strategy outlines the management of housing and settlement of rural areas throughout the Shire of Moyne and the City of Warrnambool. Growth potential for Bushfield and Woodford are identified to be deferred, with a future 'village' role, progressing towards a 'town'.

Council's City-Wide Housing Strategy (2013)

The findings of the Rural Housing and Settlement Strategy are largely reinforced in the 2013 Housing Strategy, which maintains the townships' settlement boundary and role in providing a "rural lifestyle setting", while recognising that further subdivision and limited growth can be accommodated subject to structure planning and the identification of infrastructure requirements to support them.

Domestic Wastewater Management Plan 2020 – 2025 (DWMP)

- The DWMP describes the policy and legislative framework for domestic wastewater management in the region, the profile of Warrnambool and a risk assessment of the existing onsite wastewater situation for areas within the local government area. It also includes a township-by-township plan, along with implementation and action plans for the DWMP.
- The DWMP reports that there are 998 OWMSs within Council boundaries, of which 196 are without a compliant permit in place within key constraint areas (including Bushfield and Woodford), with many on "reduced size lots" (< 2000 m²), within watercourse setbacks, and many of them being aged systems (over 25 years old).
- Other risk factors mentioned in the DWMP that also apply to this study area include poorly draining soils and steep topography.

Green Warrnambool (2018)

- Green Warrnambool sets out the Council's approach to delivering the sustainability outcomes articulated in W2040. It aims to respond to the sustainability vision that "Warrnambool will be the most environmental sustainable regional city in Australia" and six goals and associated actions covering emissions reduction, climate adaptation, waste management, biodiversity, marine and waterway management, and urban forest. The strategy sets out for each the 2040 target, and interim targets and actions which have been considered in the development of the sustainability objectives and strategies for Bushfield and Woodford.

Warrnambool Open Space Strategy (2014)

- The Warrnambool Open Space Strategy (the Strategy) provides the framework for planning and managing Warrnambool's open spaces into the future. The Strategy, developed in 2014, directs open space planning and management across the municipality to 2026.
- The Strategy recognises the Bushfield and Woodford precinct as an area currently experiencing, and projected to experience, continued population growth. It acknowledges that while accessibility to open space and the diversity of open spaces available within the precinct are satisfactory, more work is required to improve the connectivity of these spaces.
- The Strategy identifies the continued implementation of the Jubilee Park Master Plan, and the investigation of an accessible river crossing between Wurrumbit Birrng Yaar / Jubilee Park and Jellie's Reserve, as the key recommendations for the precinct.

Sustainable Transport Strategy 2010-2020 (2010) (currently being updated)

- The Sustainable Transport Strategy recognises a range of actions which support the update of sustainable transport in Warrnambool City Council.

- Several of the actions are particularly relevant to Bushfield and Woodford, including a focus on strengthening the pedestrian shared path network, high traffic speeds, and improving the sustainable transport outcomes in new residential estates.

Warrnambool Community Services and Infrastructure Policy (2016) and Community Services and Infrastructure Plan (CSIP) 2011 - 2026 (2013) (currently being updated)

- The Community Services and Infrastructure Plan 2011 – 2026 (CSIP) was developed to provide a guide for the Warrnambool City Council, together with other service providers and community organisations, about the community infrastructure and services needs of Warrnambool's population as it grows. The plan informed the development of Warrnambool's Community Services Infrastructure Policy which was adopted in 2013 and reviewed in 2016.
- The CSIP supports the delivery of hub-based delivery models for community facilities and services that are integrated (shared and co-located), multi-purpose and flexible. The report also supports the early provision of community services and infrastructure. A facility sharing approach is also encouraged to enable communities to utilise school infrastructure to support their needs.

Warrnambool: A safe and connected city 2018-2026 (2018)

- The Road Users Plan provides a summary of crash statistics, road safety issues, and an action plan for improving road safety in Warrnambool.
- The Plan takes a safe systems approach to seek to provide safety improvements for everyone using or interacting with road systems including walking, cycling, riding motorcycles, travelling in cars, light vehicles and heavy vehicles.

Bushfield-Woodford Bushfire Assessment (2024)

- A Bushfire Assessment for the townships of Woodford and Bushfield was undertaken to inform the Plan. It is intended to help facilitate growth in appropriate areas, while mitigating bushfire risk in accordance with relevant sections of the Warrnambool Planning Scheme.
- The Bushfire Assessment describes the townships' bushfire context, identifying the bushfire landscape type and specific hazards that may influence bushfire behaviour, to understand relevant risks at different locations and across various scales.
- Recommendations for the location and intensity of future development are tailored to different areas within the municipality, based on variation in bushfire risk.

Bushfield-Woodford Domestic Wastewater Investigation (2024)

- The Bushfield-Woodford Domestic Wastewater Investigation was also undertaken to inform the Plan. In the absence of reticulated water and sewerage services, all dwellings within the townships must be self-sufficient.
- The Domestic Wastewater Investigation sought specifically to understand the land capacity for onsite wastewater management and any associated environmental or health risks and identify how to mitigate these.

Engagement findings

This section provides a summary of key findings from engagement with community, stakeholders and the Eastern Maar Aboriginal Corporation. Refer to the Community and Stakeholder Engagement section earlier in the Introduction for more detail on engagement activities.

The Strategic Framework Plan received a great number of comments from a range of community members, local council, and state government departments. This input has shaped the development of the SFP and in particular informed:

- Identification and prioritisation of issues, opportunities and features specific to the area.
- Development of the overarching vision and aspiration for the township, including identification of features that make the township unique
- Validating, prioritising and refining findings of analysis.
- Validating, prioritising key propositions for the future of the townships, and identification of additional strategies and actions.

A summary of findings from community and stakeholder engagement is contained in Part A of this plan.



Figure 2: Screenshot of community comments provided on online survey (top right) and community attendance at drop-in session (bottom right) 25

Traditional Owner engagement

- The Eastern Maar Aboriginal Corporation (EMAC) are the Registered Aboriginal Party for the area within which Bushfield and Woodford townships exist and are the representative of the ancestors of the Traditional Custodians of the land.
- The Plan has been developed in consultation with the EMAC to add to and confirm the documentation of history of the area and knowledge of Country and provide feedback and input into the Plan and in particular strategies relating to Aboriginal Cultural Heritage and Values.
- To date there is little representation of Aboriginal heritage or values in the area and few Aboriginal people known to be living in the townships.
- The EMAC identified the cultural significance and heritage of the Merri River to the local Aboriginal population, supported by the archeological findings documented around the river.
- The EMAC highlighted the existence of the Eastern Maar Country Plan which can provide guidance for the goals and objectives of the EMAC that can be pursued in the townships and through the Strategic Framework Plan. They noted however that the Country Plan was currently being updated.
- The EMAC and Warrnambool City Council committed to ongoing consultation and partnership as projects arise in the townships to realise opportunities that recognize, protect and celebrate Aboriginal Cultural Values and Heritage.

Community engagement

- Protecting the rural village character is important to the community. A key appeal of the townships were the quiet and rural lifestyle that they offered. Subdivision and new development should maintain the townships' unique character.
- There was mixed sentiment within the community on future development and subdivision. Overall, a need for limited, small-scale development to accommodate growth was recognised but it was said that it should not detract from a rural village character.
- There were some concerns raised that recent development in the township did not reflect this village character or were supported by corresponding improvements to key infrastructure, community facilities, and public spaces.
- The community support small-scale retail and hospitality uses located in the right locations such as near Wurrumbit Birrng Yaar / Jubilee Park, at Bushfield Community Hall and along Bridge Road. The opportunity for pop-up shops were also identified.
- Merri River is an important natural and recreational asset that is highly valued by the community. Protecting the ecological, cultural and social value of the river is a top priority. Some concerns were also raised that planning controls were not consistent with these values.
- The natural environment was important to residents who wanted to remove willows and plant more native vegetation.
- Parks and community spaces are important places for the community but some areas for improvement were identified including improved or new facilities that are multi-purpose, improved maintenance and provided safer access to Bushfield Recreational Reserve.

- Woodford Primary School is an important hub for the community. Although the community are concerned about its capacity to support a growing community. Improvements needed included an undercover all-weather area and road safety measures surrounding the school.
- Trucks and heavy vehicle traffic were noted for their noise pollution, speeding and safety issues, particularly at Hopkins Highway, Bridge Road and the Merri River vehicle bridge.
- A safe cycling connection to Warrnambool is needed – particularly for young people – and is a priority for the community, alongside a public transport connection.
- Broader vehicle safety issues were noted as contributors to a lack of sustainable transport usage. Vehicle speeding and poor traffic calming, lack of pedestrian crossings at key intersections such as to the primary school and the recreation reserve, lack of pedestrian footpaths, and lack of cycling infrastructure were all raised as constraints to getting around by foot or on bike.
- Drainage and flooding issues affect several places across the townships, with the Bushfield Recreation Reserve, Merri View Road, Kiaman Close, Rodger Place, and Bellmans Road flagged for drainage improvement.
- Upgrades to the current septic systems were identified as important to avoid future river contamination. The community is concerned about the health and environmental risk, but some are happy with their current wastewater systems. More information was sought to inform decisions around system upgrades.
- Some gaps in coverage affect internet, television, and mobile connectivity, but previous proposals identified concerns about the impact of telecommunications infrastructure.

Existing conditions

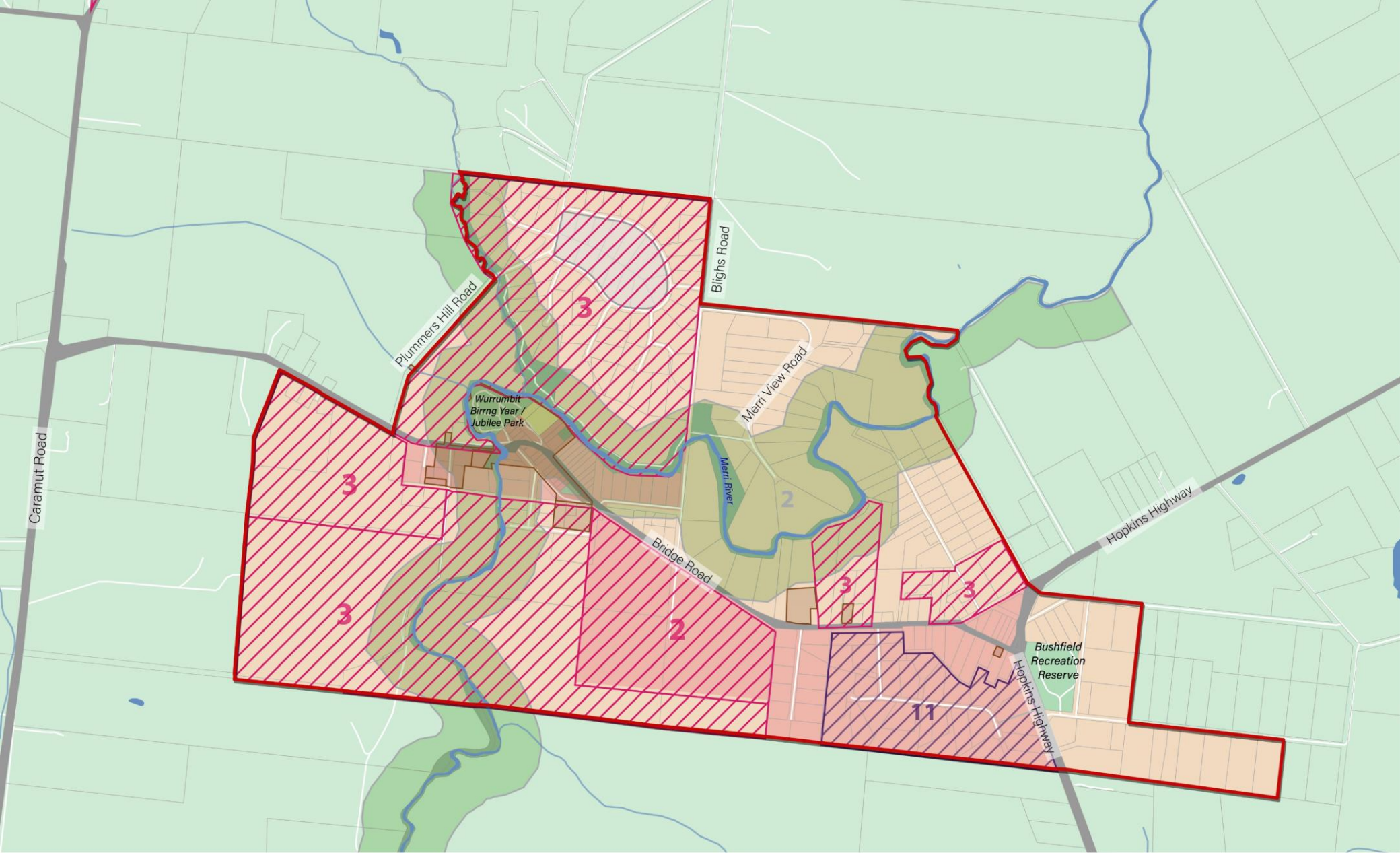
The following section summarises the key findings from background analysis and community and stakeholder engagement. It provides the key features, issues and opportunities shaping the future of the townships and underpins the objectives and actions outlined in Part B of the Plan.

Land Use and Development

Map 3 and Map 4 on the previous pages outlines the existing zones and overlays that have governed land use and development outcomes to date.

- Woodford and Bushfield are zoned a mix of Rural Living Zone (RLZ) and Low Density Living Zone (RDLZ). However existing lot size patterns are not consistent with the subdivision requirements provided for in these zones.
- The RLZ includes a minimum subdivision requirement of 2ha – however a schedule to the RLZ zone varies the minimum subdivision size within the Cilmerly Crescent area down to 1ha and all other areas up to 4ha. Despite this the average occupied lot size within the township in RLZ area is 1.2ha.
- The LDRZ includes a minimum subdivision lot size of 0.4ha where no reticulated sewerage is available. The average occupied lot size within the township in LDRZ areas is 0.6ha.
- A Design and Development Overlay (DDO11) applies to the Rogers Place subdivision which is zoned LDRZ and varies the minimum subdivision lot size to 1ha. Population growth into the future is anticipated to be moderate and can likely be accommodated within the existing settlement boundary.
- There are a number of large, undeveloped lots predominantly within RLZ land.
- Some zones and overlays don't align with property boundaries. Where zones bisect properties, it makes it difficult for them to develop without seeking spot-rezonings. Limited clear guidance on future development opportunities makes it difficult to plan for future growth needs, and to direct it to locations that support positive community outcomes.
- Bushfield and Woodford's market attraction is its rural residential lifestyle, which should be preserved. There are few other townships close to Warrnambool that offer this. Some limited and well managed development and growth is an opportunity to consolidate this and add new community uses such as small shops, community facilities, and new parks and open spaces.

- Community are concerned about new development that is not consistent with the character of the townships. There is limited planning policy or planning controls in place that provide guidance on rural character within the Warrnambool LGA or specific to the Bushfield and Woodford townships. The natural landscape setting of the townships, including the Merri River and the hilly topology, large rural lots, and a clear distinction from Warrnambool were identified as distinguishing features of the townships.
- There are a number of historical buildings within the townships that are protected by Heritage Overlays including the Woodford Heritage Precinct. However there is little signage or information within the towns that highlight the heritage significance of these sites.
- The current approach to wastewater management is unsustainable for the current townships and future growth and must be resolved prior to future development. Existing Council policy is to defer growth until this is resolved. This remains the case.
- There are currently no local hospitality or retail businesses, but a number of other local businesses. The current zoning and overlays do not pose a barrier for locals seeking to open small businesses. New growth and development would support the viability of businesses and can be supported by Council policy and opportunities for temporary pop-ups at community events. These are best located close to existing community facilities. Public realm improvements around these areas would also support the viability of local convenience businesses.
- Current Council policy states a desire to retain a buffer between agricultural uses occurring within Farming Zone (FZ) land surrounding the townships and LDRZ land. Historically RLZ has been applied at the edges of the township to achieve this, with exception to some areas which were developed prior to the introduction of this control (such as at Rogers Place). This buffer is in place to protect the residents from adverse amenity impacts of farming, and ensures residential uses do not inhibit farming activities. The intent of this buffer and associated controls should be more clearly stated in local policy to ensure it is appropriately maintained.



Legend

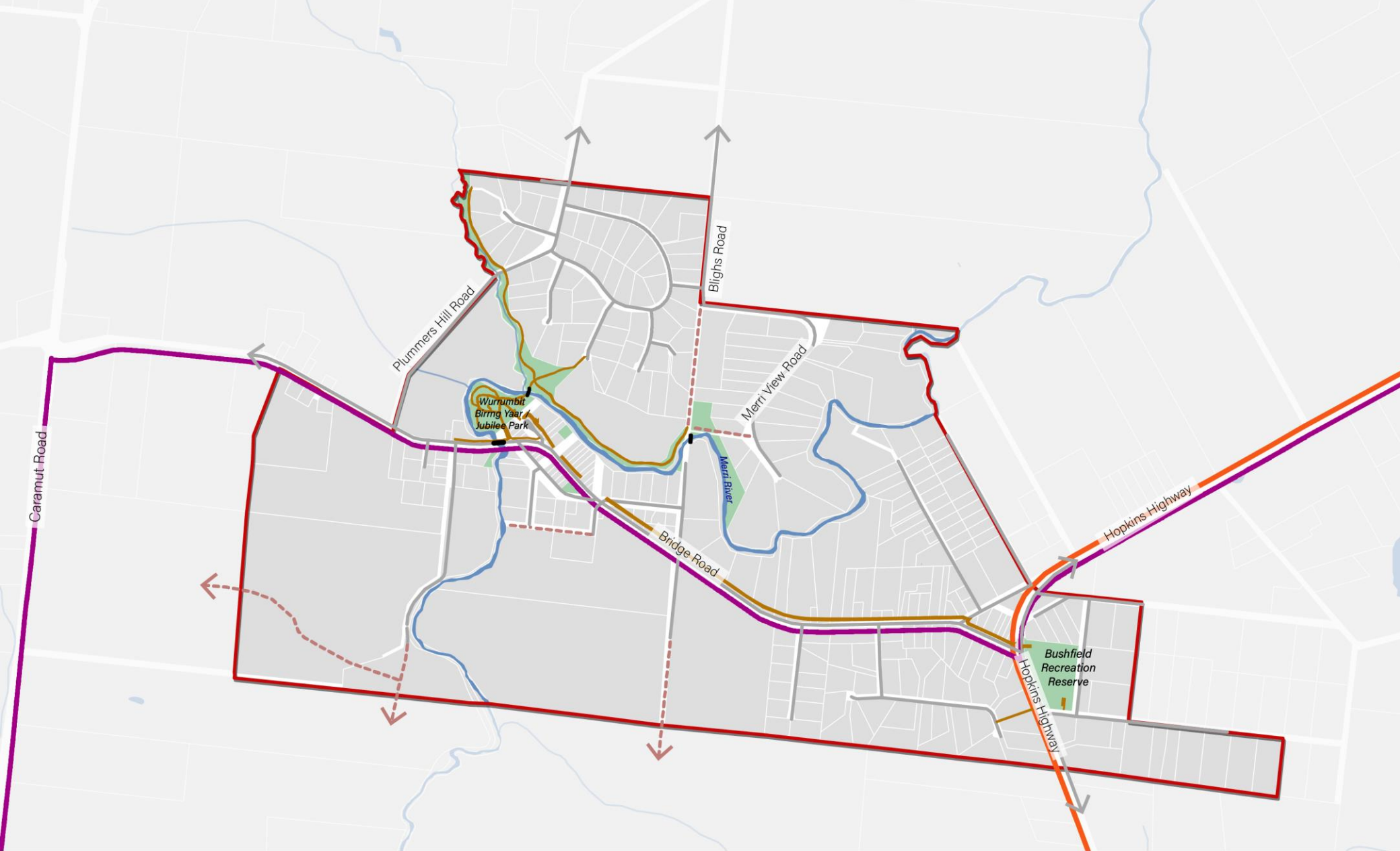
- Study area
- Rural Living Zone
- Low Density Residential Zone
- Public Use Zone - Education
- Public Park and Recreation Zone
- Public Conservation & Resource Zone
- Farming Zone
- Transport Zone 2 - Principal Road Network
- Key water course and body
- Development Plan Overlay (DPO2 & 3)
- Design Development Overlay (DDO11)
- Environmental Significance Overlay (ESO2)
- Heritage Overlay (HO)
- Climery Ct exception

Map 5
Bushfield -Woodford Strategic Framework Plan
 Zoning and Overlays
 Existing Conditions
 Scale: 18000 at A4

Transport

Map 6 on the following page shows the existing transport infrastructure and network.

- Due to poor infrastructure for pedestrian and cycling safety and prioritisation, and an absence of public transport, most trips within the townships and to surrounding areas are done by car.
- There are concerns about road safety along Bridge Rd and the Hopkins Highway which are part of the Principle Freight Network. This route is trafficked by large trucks, is subject to speeding, and has limited traffic calming and safety interventions. The Hopkins Highway is a road transport route between Warrnambool (and south-western Victoria) and Ballarat, Geelong and Melbourne. Bridge Road is used as an alternative route to Koroit, Port Fairy and Portland by drivers seeking to bypass Warrnambool.
- Intersections of Bridge Road with Plummers Hill Road and Mortlake Road, and crossings to key community destinations including the primary school and Bushfield Recreation Reserve were also identified as being unsafe and lacking pedestrian safety and prioritisation infrastructure.
- There is a shared footpath along Bridge Road however there are gaps at key sections including immediately connecting to the primary school, and crossings at intersections have insufficient safe crossing infrastructure.
- There are no other bike paths in town and many local roads have no footpaths or line markings requiring people to walk on the road. This is of particular concern for younger people getting to, and moving between school, parks and recreation facilities.
- Many of the local roads have poor connectivity and some are unsealed. Many lack stormwater infrastructure creating drainage issues. New additions to the street network are single-serving loops and lack connectivity with the existing network.
- New roads are directed by the Infrastructure Design Manual which was introduced in 2007 and is regularly updated. All new roads are to be as per the IDM and it will be used to guide the design and aspiration for upgrades to existing road infrastructure.
- Community raised concerns that the two pedestrian bridges crossing the Merri River (connecting Jellie's Reserve and Jubilee Park and at Miles Road) are unsafe and become inaccessible when the river floods. These are critical pedestrian and bike links between the north and south of the River with limited alternatives.
- Community have also raised concern with the safety of the Bridge Road vehicle bridge over the Merri River which is very narrow and causes concern when large trucks pass.
- There is no protected bike path to Warrnambool and limited public transport. The Hopkins Highway presents an opportunity to establish this bike connection, but it is very narrow at some points which can challenge the ability to provide fully separated bike paths within the existing road reserve.
- There is not public transport or school bus available to support commuter transit. There has previously been a bus servicing the townships however, this was prior to recent growth. Surrounding towns also have no or a limited public transport service.
- There is strong support amongst community and Council for the Merri River path network to be extended to support recreation and transport. Private ownership of some sections of the Merri River present barriers to delivering public footpaths along it.
- A gravel trail network provides access to the river and connects Wurrumbit Birrng Yaar / Jubilee Park and the primary school to Jellie's Reserve and other open spaces further east. However limited signage and wayfinding makes the path network hard to navigate and limits it's use, particularly for residents further east in Bushfield.



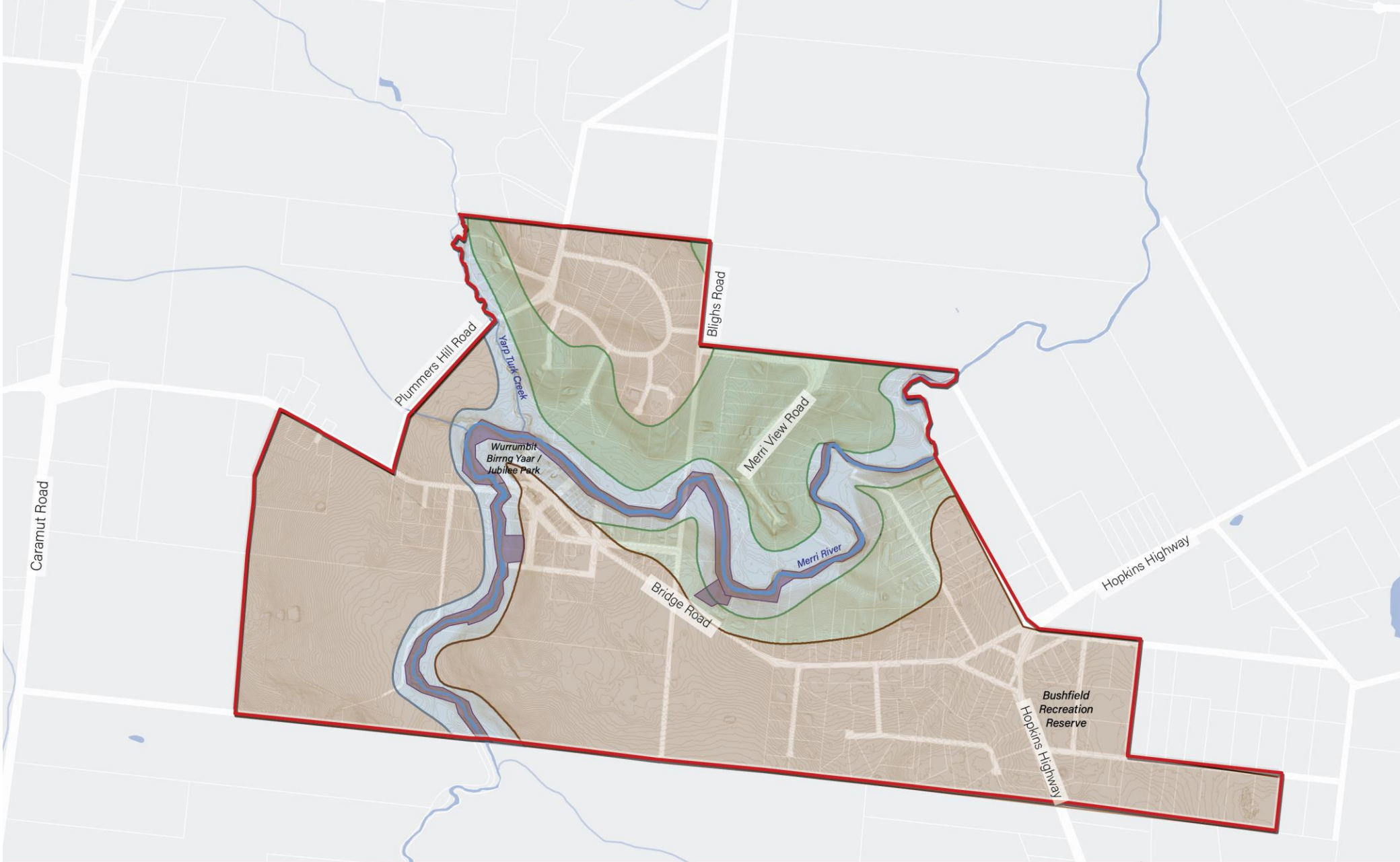
Legend

- | | | |
|----------------------------------|---------------------------------------|---------------------------|
| Study area | Footpaths and trails | Key water course and body |
| Regional Bus Route | Existing roads | Open Space |
| Principal Freight Network - Road | Unused road reserve or private access | |

Landscape and Natural Environment

Map 7 on the following page shows the pre-1750 Environmental Vegetation Classes and areas identified as having endangered native vegetation within the study area.

- The region is characterised by flat, undulating plains dotted with hills formed by extinct volcanoes. Key pre-1750 biomes recorded in Bushfield-Woodford include swamp scrub located along the banks of the Merri River, plains grassy woodland, and riparian shrubland. However, much of the native vegetation in the region has been lost to previous agricultural uses and existing native vegetation in the area is poorly documented.
- Water is central to the landscape, and the Merri River is a critical ecological feature and a valued cultural and social asset for the townships. The water quality of the Merri River is poor, recording the worst water quality and flora out of all estuaries in the Glenelg Hopkins region. This is considered to be due to the exotic pastures in the catchment and the excess nutrients in the water from nearby urban and agricultural uses.
- Soil type is a considerable challenge for Bushfield and Woodford. The light to medium clay-based soils that are present through the area drain poorly and make it difficult to dispose of wastewater using on-site systems. This poses a risk to the Merri River and improved wastewater management and drainage infrastructure are important to the health of the environment.
- Community engagement raised issues with drainage across the townships (e.g., Bushfield Recreation Reserve, Merri View Road, Kiaman Close, Rodger Place, and Bellmans Road), driven by soil conditions and the current approach to drainage infrastructure.
- Non-native willows that have grown along the Merri River need to be removed and managed. Even when cleared locally, upstream willows can re-establish themselves downstream and harm local native vegetation, requiring regional management.
- Informal paths down to the water's edge demonstrate a desire for greater access to the Merri River. The lack of formalised infrastructure presents safety risks and causes environmental damage when people try to access it.
- Currently an Environmental Significance Overlay (ESO) applies to the Merri River (and 150m either side) which includes 'catch-all' permit requirements that allow the impact of new development on the River to be evaluated. It does not currently apply to the un-named creek downstream from the tributary known as Yarturk Creek or to Sawpit Creek to the south of the township boundary.
- The Merri River and surrounds are subject to flooding, endangering human safety and property. Several flooding events have been reported in recent years, however, no formal flood or drainage modelling of the area exists to fully understand the risk.
- Glenelg Hopkins Catchment Management Authority and Southern Rural Water (SRW) each have a role in managing the health of the Merri River. There is also strong community advocacy and volunteering relating to the Merri River, presenting an opportunity for partnerships and expanded replanting activity.
- Land within the Bushfield-Woodford SFP is within a Bushfire Prone Area. Any work to inform future planning policy needs to address this risk as a driving decision maker by formulating clear links to Clause 13.02-1S Bushfire Planning of the Warrnambool Planning Scheme. A Bushfire Assessment was undertaken as part of the background work for the Plan, identifying a particular risk of grassfires within the broader bushfire landscape and making recommendations to guide the development of Plan Actions.



Legend

- Study area
- 0.5 Contours
- Key water course and body

Pre-1750 Ecological Vegetation Class (EVC)

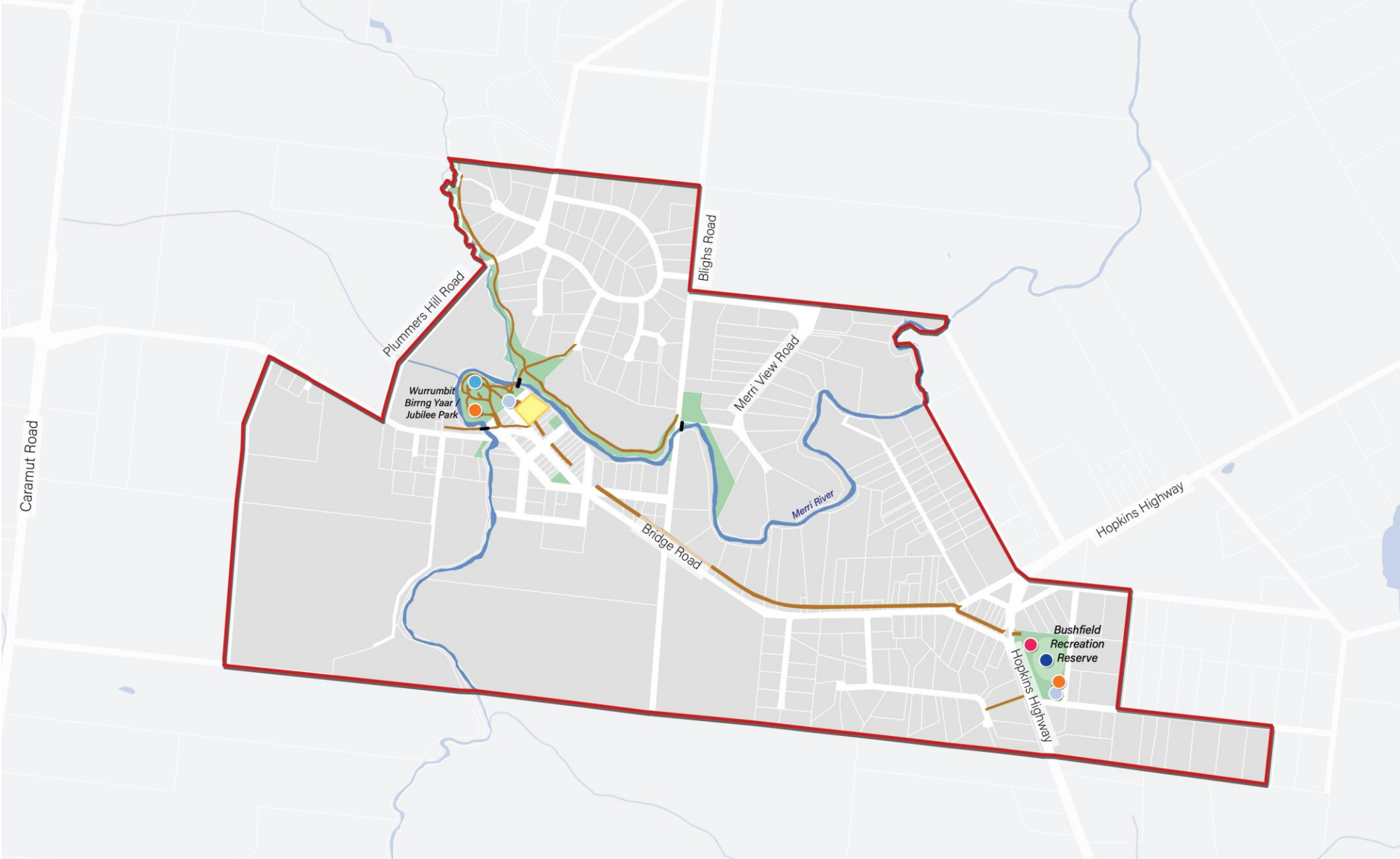
- Plains Grassy Woodland
- Riparian Shrubland / Escarpment Shrubland
- Swamp Scrub

- Endangered native vegetation
- Bioregion of the framework plan area:
Victorian Volcanic Plains

Community Infrastructure, Public Realm and Open Space

Map 8 on the following page shows the existing public open spaces and community infrastructure.

- There are two strong existing community centres at Bushfield and Woodford centred around the main community facilities, including the Woodford Primary School and Wurrumbit Birrng Yaar / Jubilee Park in Woodford, and the Bushfield Community Hall and Recreation Reserve in Bushfield. However, the quality of public realm could better support the role of these places as community centres with improved transport connectivity and upgrades to support longer dwell times such as seating, shading and things of interest.
- Community have highlighted that the Bushfield Community Hall is capacity constrained and in need of upgrades and expansion. It is also heavily affiliated with local sporting clubs and so less accessible for community members not involved in these. The community have advocated for a new community hub to host a variety of community activities.
- Community infrastructure analysis from 2013 and updated analysis for this Plan suggests there is a need for more community spaces now and as the community grows. New spaces should consider opportunities to also provide and co-locate other services not currently available such as early years services. An updated municipal community infrastructure study is needed to confirm what should be provided in the townships.
- Community are concerned that the Woodford Primary School also has capacity issues. However, investigations found that the school will be able to support the growing community. Although, upgrades to the existing infrastructure and buildings may be needed and the school is lacking access to flat, unflooded and proximate open spaces for recreation.
- Community centres between Bushfield and Woodford are poorly connected, with the Merri River path terminating at Miles Road and safety issues and gaps along the Bridge Road path. Access to the Bushfield Recreation Reserve is a major safety concern, with no pedestrian crossing or traffic calming infrastructure at key crossing points (Bridge Road and Rogers Place connection) and no footpaths on the eastern side of Hopkins Highway.
- The Merri River is a significant natural asset that provides ecological, open space and recreation services to the community. The river has a walking track and bridges. However these could be extended and provide more formalised access to the river's edge, which would enhance community connection, improve safety, and protect the river.
- There is over 16ha of open space available in the townships. Many residents also have access to large backyards. Large open spaces at Wurrumbit Birrng Yaar / Jubilee Park and Jellie's Reserve are located near the Woodford Primary School and provide picnic areas, pavilions, a playground and tennis courts. Programmed sporting activities occur at the Bushfield Recreation Reserve which hosts netball, football and cricket, and is home to the North Warrnambool Eagles Football Netball Club and North Warrnambool Eels Cricket Club. A playground is also located at the Bushfield Recreation Reserve. Local sport is important to the community, though it can restrict access to these otherwise public spaces for much of the week.
- New open spaces should continue to be provided with a focus on social and environmental activities such as barbeques, dog walking areas, and access to nature. Where possible they should be located along the Merri River and consider community needs.
- Some existing open spaces, such as Jellie's Reserve and the open space south of Watsons Lane could be better utilised. Minor upgrades such as signage, paths and improved lighting (where appropriate to ecological and character objectives) could improve access and use, particularly north of the Merri River.



- Legend**
- | | | | |
|--|--|--|---|
| Study area | ● Sports Oval | ● Community Hall | Open Space |
| Woodford Primary School | ● Tennis Court | Footpaths and trails | Key water course and body |
| Playground | ● Netball / Basketball Court | Bridges | |

Aboriginal Cultural Heritage and Values

- The Eastern Maar Aboriginal Corporation (EMAC) are the Registered Aboriginal Party for the area. This plan has been developed in consultation with the EMAC.
- Background research for this Plan included an investigation of the potential for Aboriginal cultural heritage in the area.

Documented history

- Prior to European colonisation the landscape would have been characterised by open eucalypt woodlands with sparse understorey over a species rich grassy and herbaceous ground layer. Nearby Tower Hill was a major feature of the landscape and a place of meeting and exchange for the Gunditjmara people.
- The traditional custodians cared for and used the abundant resources of the land including kangaroos, wallabies, lizards, muscles, yabbies, ducks, fish, kangaroo grass and tussock grass, yam daisies and black wattle. They would have used these for medicine, food and making things like baskets, bags and nets.
- European whalers and sealers first came to the west Victorian coastline around 1810. The earliest recordings of colonisation in the townships occur in the 1840s where Woodford was chosen as the first crossing point of the Merri River between Port Fairy and Warrnambool. As with many other places, colonisation introduced disease, dispossession and loss of land and resources and violence in the face of Aboriginal resistance, which resulted in death and demographic decline.
- An Aboriginal mission was established in 1865 at Framlingham 20km east of the townships, where Aboriginal people were forced. Another was established in 1866 at Lake Condah nearby.

Archaeological studies and Registered Aboriginal Places

- The area around the Merri River is designated as an area of Cultural Heritage Sensitivity (CHS). While not identified on mapping, Yarrpturk Creek is also an area of high cultural heritage sensitivity as defined by the *Aboriginal Heritage Act 2006*. CHS protections apply to waterways and areas 200m either side of waterways, and to registered cultural heritage places (Aboriginal Places) and the areas within 50m of those places, where significant ground disturbance has not occurred.
- Areas of CHS require the preparation of a Cultural Heritage Management Plan (CHMP) where high impact activities are proposed, prior to those works being undertaken. It is illegal to carry out an activity that can disturb Aboriginal places (recorded or unrecorded) without authority (typically provided by an approved CHMP or Cultural Heritage Permit).
- There are currently three registered Aboriginal places within the townships, with a further 17 in the 3km surrounding. These are predominantly stone artefact scatters.
- There is potential for further unidentified Aboriginal places to exist within the study area, in particular at elevated locations including those areas not identified as CHS. This is due to the existence of previous archaeological finds in the area, the low levels of soil disturbance and presence of the Merri River and topographic features.

Sustainability and Resilience

- Bushfield-Woodford, and the broader Warrnambool region, will increasingly be affected by the impacts of climate change, including increased average and extreme temperatures, reduced rainfall, increased extremity of severe rainfall events and bushfire frequency and intensity. Planning for the future should act to reduce and regenerate the environment around it and build resilience to climate changes.
- In 2020 Warrnambool City Council trialled the implementation of the Sustainable Subdivisions Framework (SSF) for two years, along with a number of other regional and urban local governments. The SSF provides guidance to new subdivision development to build more sustainably. While the directions of the SSF are effective, there was limited uptake as the scheme was voluntary, and both developers and Council required more information and direction on how to apply and evaluate projects.
- A recent study by Council of a new development East of Aberline found that half of all emissions came from stationary energy and one third came from transport.
- Warrnambool City Council are partnered with 31 other Councils in a request to elevate sustainability requirements and standards within the planning scheme. If approved this would likely be the most effective means of achieving sustainable outcomes in Bushfield-Woodford.
- Council and industry should work together to implement the Sustainable Subdivisions Framework or other future sustainability policies to support successful implementation.
- Sustainability for single-site developments can also utilise existing frameworks such as the Built Environment Sustainability Scorecard (BESS) to set benchmarks and encourage more sustainable building.
- Sustainability measures in Bushfield and Woodford will need to address a range of areas, including:
 - Future private development including single lot development and small and medium subdivision projects.
 - Existing properties, including support for retrofits and upgrades.
 - Support for sustainable lifestyles, such as behaviour change and community programs and provision of services.
 - Restoration of the natural landscape.
 - Improvements to public realm and Council assets, including streets and public buildings.
- To this end, sustainability should be embedded across the entire Strategic Framework Plan.
- There are also opportunities for programs that improve the resilience of the township to future climate-related stresses and shocks, such as safer infrastructure along the Merri River, increased canopy cover that keeps streets cool and makes active transport comfortable and water efficiency measures to reduce water supply demand and wastewater load.

Utilities and Services

- Bushfield-Woodford does not have access to reticulated sewerage. Onsite wastewater management systems (OWMS) are the predominant system used in the townships. These systems pose risks to the health and safety of the existing community and environment. They also are not suited to support new development and prevent the creation of smaller lot sizes that would contribute to improved housing diversity and affordability in the townships. Council policy to date has been to defer growth in the townships until a sustainable wastewater management solution is found.
- OWMSs in the townships are of varied age and size. A large number of systems are unpermitted. Several are within the 60m and 30m setback zones surrounding watercourses (being the Merri River) in contravention of Environmental Protection Authority (EPA) codes. Maintenance, monitoring and regulation of systems is an issue.
- The soil conditions in the townships reduce the effectiveness of onsite wastewater treatment mainly due to the low permeability, clay soil type and lots which are constrained by their proximity to the groundwater table (<5m). Lots within close proximity to the groundwater table are predominantly those located along the Merri River and some lots in the east of the Bushfield Recreation Reserve. Site specific Onsite Wastewater Management System (OWMS) design is required where proximity to a waterway or depth to groundwater may be identified as a constraint.
- If wastewater is not managed effectively, untreated effluent can leak into the surrounding landscape and water system causing risk to human health and the natural environment. The effectiveness of an OWMS relies heavily on human upkeep and monitoring.
- Community are seeking greater clarity from Council on the future approach to wastewater to inform their decisions about wastewater system upgrades. It will be important to clarify how a transition to an alternative wastewater system would affect people with recently upgraded systems.
- Current practices should not continue if the townships are to remain sustainable and healthy. A range of wastewater management options need to be investigated in detail to determine site specific costs, impacts and management considerations. This should build on the Domestic Wastewater Investigation and consider the preparation of a broader Integrated Water Management Plan for the region in the short-to-medium term, which will help in planning for all elements of the water cycle in an environmentally sensitive way, while helping to mitigate domestic wastewater risk.
- Soil conditions also pose broader challenges for drainage. There is a mixed approach to drainage currently including natural, open verges and limited underground systems on newer roads. Surface runoff can have significant impacts on the health of the Merri River and cause property damage. Community engagement identified a number of locations where drainage was an issue including at Bushfield Recreation Reserve, Merri View Road, Kiaman Close, Rodger Place, and Bellmans Road.
- The Merri River waterway health is currently assessed as being poor. This is due to a number of upstream and downstream issues, however unsustainable wastewater management practices also pose a risk to the River.
- There is no reticulated water or gas connection in Bushfield-Woodford. Reticulated gas connection is not consistent with sustainable development in regional contexts, so connection is not recommended.
- Community have raised concerns with the reliability of mobile, internet and television coverage. Telecommunications infrastructure needs to be in elevated and close locations to the populations it serves and coverage diminishes with distance. The provision of new infrastructure to support improved coverage has mixed support with a number of concerns raised including the visual impact of infrastructure.

Part B

Bushfield-Woodford Strategic Framework Plan

Introduction

This section provides the plan for the future of Bushfield and Woodford. It sets out a vision for the future and the key objectives and actions required to achieve this. The Plan builds on and responds to the findings provided in Part A.

This section is organised by theme. Each theme provides an introduction that explains in more detail what is envisaged for the future of the townships in relation to that theme.

The theme is followed by a series of objectives and actions.

- Objectives describe the outcomes that are sought that will help to realise the vision.
- Actions provide the tangible interventions that will be undertaken to achieve the objective that they relate to.

Once adopted, the plan will be supported by an Implementation Strategy. This Strategy will outline how the Strategic Framework Plan will be delivered, including identifying priorities, implementation mechanisms and roles and responsibilities.

This section is structured as follows:

Introduction	41
Vision for Bushfield and Woodford	42
Land Use and Development	43
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Landscape and Natural Environment	50
Community Infrastructure, Public Realm and Open Space	52
Aboriginal Cultural Heritage and Values	55
Sustainability and Resilience	57
Utilities and Services	59

Vision for Bushfield and Woodford

Bushfield and Woodford will provide a sustainable, rural-village lifestyle surrounded by bushy landscapes and farming land.

The community is connected by a healthy and thriving Merri River which is an ecological, cultural and recreational feature of the townships.

Rural living in the townships will add to Warrnambool's diversity of housing choices. Connected streets and paths will make sustainable transport convenient, safe and comfortable.

Some limited and well-managed new growth and improved public spaces will support vibrant community centres to develop in Bushfield and Woodford with safe and sustainable connections along Bridge Road, the Merri River and to nearby Warrnambool.

Any new development in the townships will add to the village character, preserving and enhancing the natural landscape, and connecting and building on the community with new open spaces, streets and community facilities.

Land Use and Development

Any new development and land uses in Bushfield and Woodford will contribute to a sustainable, vibrant, and connected rural village community that respects and enhances the unique character and natural environment. This will foster a sense of belonging and pride and support the viability of new local conveniences and amenity that serve the community and its visitors.

Any new development must be done in such a way as to manage the risk to the environment from the new wastewater sources.

Development will be guided by planning policy and controls that identifies the unique aspects of Bushfield and Woodford's character such as the existing lot size patterns and the township's landscape setting.

Some 1 hectare lots will be supported on existing vacant LDRZ land. Larger rural living lot sizes (4 hectare) on the edges of the township will be preserved to maintain a buffer between the LDRZ and the surrounding agricultural uses, and along the river to preserve habitat, flood plain, and land which may be needed for critical future stormwater, sustainable transport and public open space reserves and infrastructure. Some 2 hectare lots will be supported on existing vacant RLZ land which is not immediately adjacent to the river or required to maintain a buffer to the surrounding agricultural uses.

Preservation of the farming zoned land between the townships and Warrnambool will also help to maintain the rural village character and lifestyle of the area.

New development that improves housing diversity across the municipality, contributes to essential community infrastructure and aligns with the townships' preferred rural character will be supported in the right locations. Clearer direction on new open spaces, community infrastructure needs, and how new streets should look will ensure new development positively contributes to the townships and community. All new development will be consistent with objectives relating to environmental management, sustainable wastewater, bushfire and flood and drainage risks.

Some well managed growth within the townships will support the viability of new businesses to occur that provide local services and convenience, such as local shops and hospitality. These will be encouraged to occur around established community centres around the primary school and Bushfield recreation reserve. Opportunities for temporary pop-ups, such as during community events or sports events, will further support the prospects of local convenience to establish in the townships.

Objective 1

Allow some new development which contributes to the preferred rural village character and community development.

Actions

1. Recognise and define the preferred rural village character in local policy.
2. Align planning controls and lot size requirements with preferred character outcomes and municipal housing diversity objectives, including concentrating smaller lot sizes (1 hectare minimum) in LDRZ areas and modifying the Schedule to RLZ to allow some 2 hectare lots away from the river and areas required to provide a buffer to agricultural uses.
3. Maintain the existing settlement boundary for Bushfield-Woodford.
4. Maintain a buffer between low density residential uses in Bushfield-Woodford and surrounding agricultural uses beyond the settlement boundary.
5. Ensure development contributes to new accessible open spaces, community infrastructure and streets and paths, and provide guidance on the preferred outcomes for these.

Objective 2

Encourage the establishment of new amenities and land uses.

Actions

1. Review planning policy to support the establishment of local convenience land uses such as hospitality, retail and community services, in particular in community centres.
2. Encourage temporary retail during sporting and community events.

Attributes of preferred rural village character

Neighbourhood or rural character is a factor required to be considered regarding decisions triggered by the rural living zone and low density residential zone applied to the townships. However the character of Bushfield and Woodford is not currently defined within the Warrnambool Planning Scheme.

Neighbourhood or rural character can relate to public and private attributes and is the cumulative impact of big and small contributions that establishes character. Character is not a description of attractiveness and should not be confused with heritage or amenity.

Preferred character describes the unique features of a township that either exist or are aspired to for an area. This can be included within local policy to support decisions relating to character. Character may also be supported through other planning controls, such as lot size or landscaping requirements.

The assessment of character in Woodford and Bushfield was determined with regard to: feedback from community consultation; onsite and desktop-based analysis; review of resident submissions to recent development relating to character; and review of Council policy and strategy as it describes character. Review of character considered the following attributes: township features and public realm; natural landscape features and landscape character; key vistas; subdivision pattern and urban structure; building mass, setbacks and siting; landscaping; fencing, boundaries and car access; and architectural style including colours and materials.

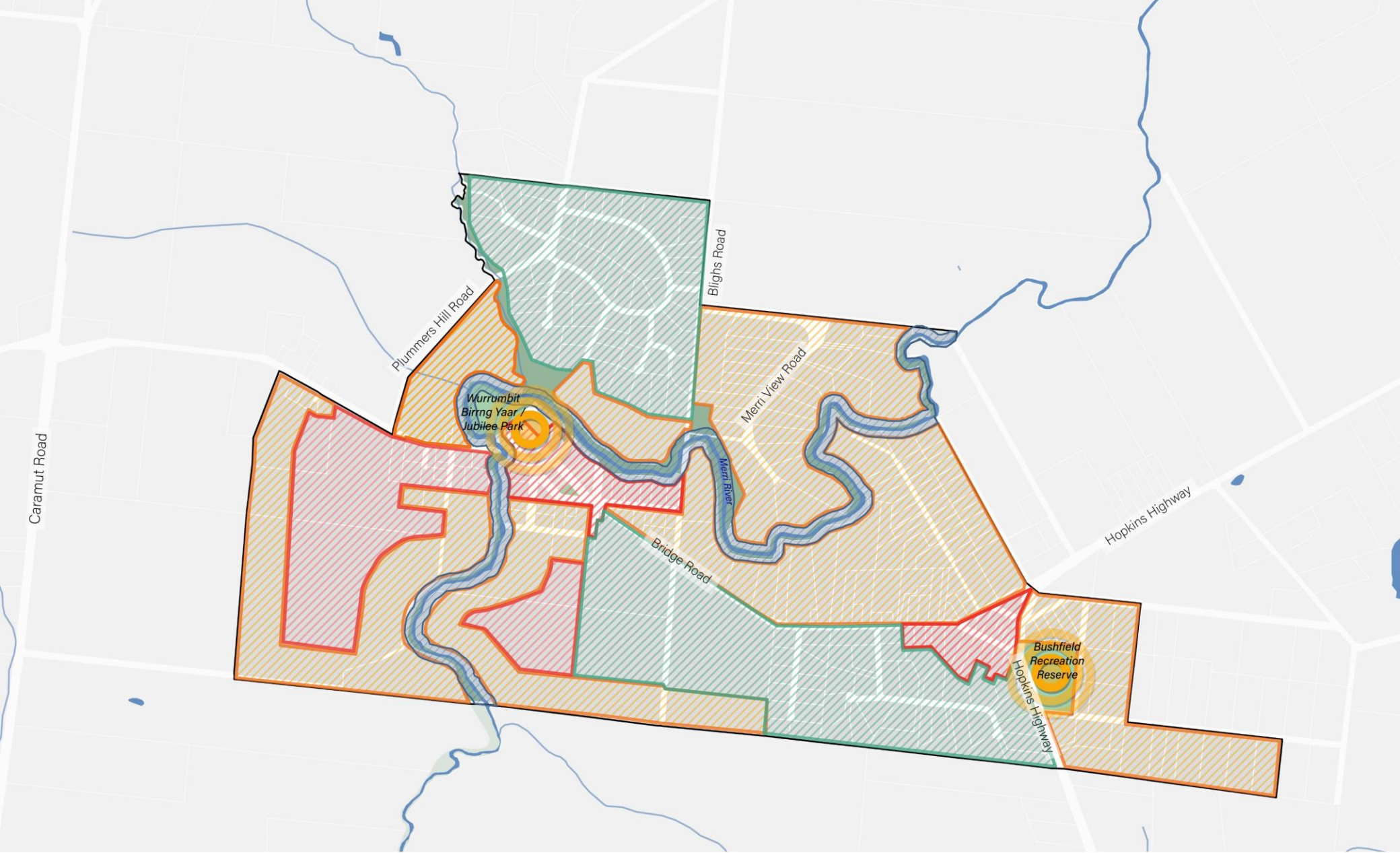
Based on this assessment the following attributes of rural village character for the townships were identified:

Township features

- Community centres situated around community and sporting facilities
- Heritage buildings including Woodford Heritage Precinct
- Natural setting along the Merri River and amongst the hilly topology, bounded by agricultural land.
- Agricultural buffer of Farm Zoned land between township and Warrnambool city fringe.

Built form and landscaping

- Smaller lots of 1 hectare around existing community centres.
- Larger rural lifestyle lots of 4 hectares and larger undeveloped lots around the edges of the settlements and adjacent to waterways, with 2 hectare lots in other Rural Living Zone areas.
- Detached, spaced-out single and some two-storey housing set-back from the road and the river and creek.
- Natively vegetated lots and use of materials and colours which blend into the landscape.
- Predominantly open rural-style fencing or landscaped property boundaries.



Legend and Key actions

- Maintain existing settlement boundary
- Existing community centres

- Proposed minimum lot size requirement of 4 hectares
- Proposed minimum lot size requirement of 2 hectares
- Proposed minimum lot size requirement of 1 hectare

- New development should be set back from the river (indicative buffer)
- Key water course and body

Transport

Bushfield-Woodford will have a safe, sustainable, and connected network that enhances the well-being of and quality of life for residents and visitors. The townships will create an environment that encourages active transport and ensures the safety of people walking and riding bikes.

The future transport network will include a safe, high quality, separated shared path along Bridge Road that connects the two townships, with safer pedestrian crossings at key intersections and allowing for new developments south of Bridge Road to access the path on the northern verge. Pedestrian safety and traffic calming infrastructure and signage will make accessing key community facilities safer, including crossing Hopkins Highway to access the Bushfield Recreation Reserve, and crossing Bridge Road to access Woodford Primary School and Jubilee Park.

Some existing roads along key routes will be upgraded to improve the safety of pedestrians and people riding bikes, including new footpaths, signage, traffic calming treatments, or line painting. Clear direction will be provided to new roads to ensure they provide adequate walking and cycling infrastructure, with sufficient planting to make the streets comfortable.

The Merri River trail network will be extended along public land with formalised paths, and clearer connections and signage for how to access the path network and how to get around. Opportunities to extend this further, including the potential for a connection to Warrnambool along the River will be explored.

The township will have options to get to Warrnambool and the surrounding towns by means other than car. Opportunities for a new, off-road bike path connecting to Warrnambool along Hopkins Highway, and for public transport that serves the surrounding townships at key commuting times will be investigated.

To accommodate growth while mitigating bushfire risk, boundary roads will be developed along the Merri River corridor and in newly developed areas to protect from interfacing permanent grassland hazards.



Objective 1

Bushfield and Woodford provide safe and sustainable transport options that connect the townships.

Actions

1. Investigate opportunities to deliver new safe cycling and walking paths and trails along the Merri River, including formalising trails on public land, investigating opportunities to extend through, or adjacent to private properties, and for new development to contribute to the public trail network.
2. Deliver pedestrian and cycling safety upgrades along Bridge Road to connect community centres.
3. Investigate opportunities to deliver safe pedestrian and cyclist crossings of Bridge Road to access Woodford Primary School and at key intersections to provide access to the footpath on the northern verge, and crossings of Hopkins Highway to access the Bushfield Recreation Reserve.
4. Identify other key routes and connections for pedestrian and cyclist road safety improvements including options to provide separated footpaths, signage and line marking.
5. Implement traffic calming measures to encourage safer, slower driving through town.
6. Create comfortable walking conditions along key routes by providing seating, shading, and lighting in appropriate locations.
7. Advocate and partner with the Victorian Government and Moyne Shire Council to investigate alternative freight routes that bypass the townships.

Objective 2

Bushfield and Woodford have safe and sustainable transport options that connect to Warrnambool.

Actions

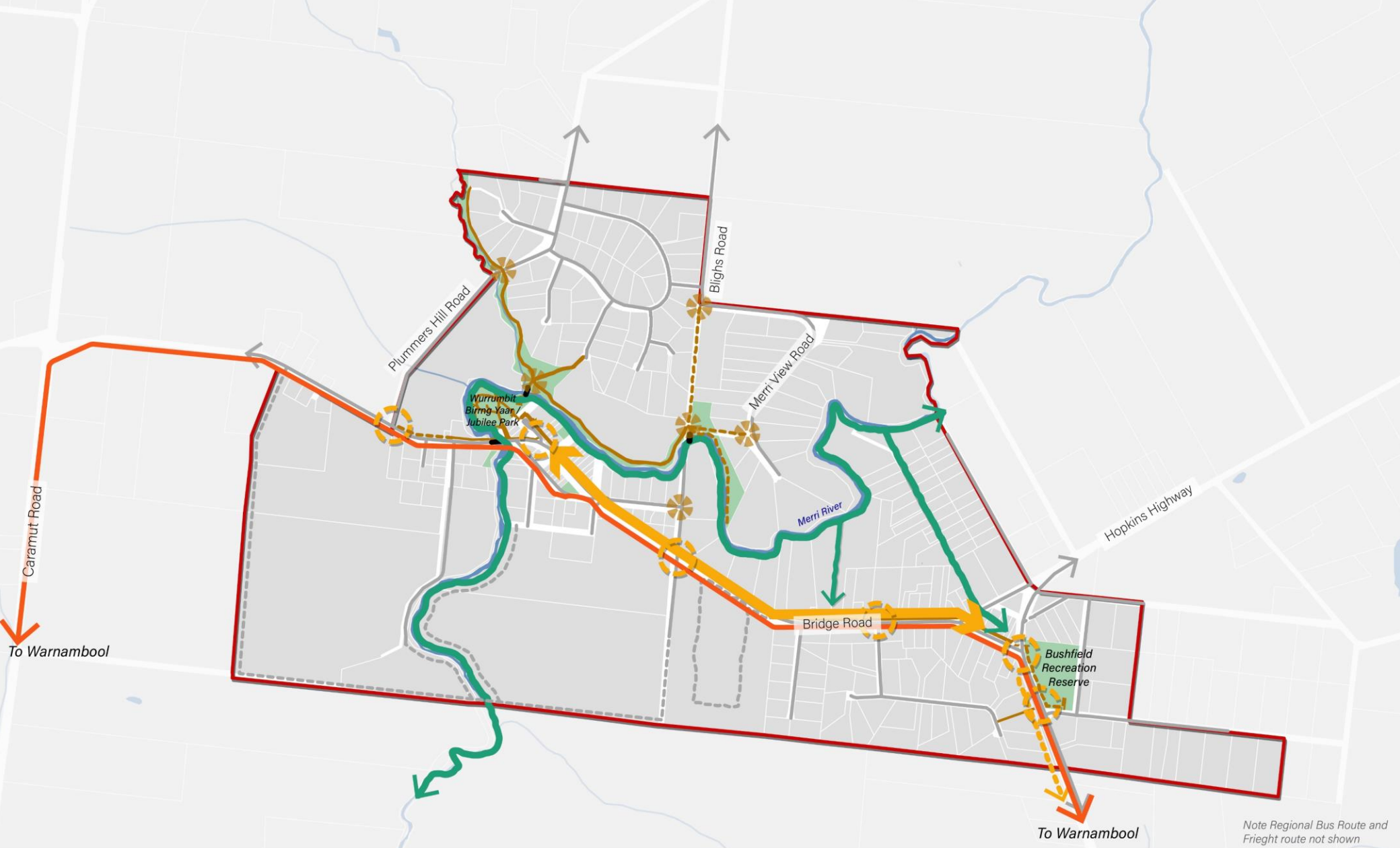
1. Investigate opportunities for new public transport connections to Warrnambool including investigation of on-demand options.
2. Investigate opportunities to acquire space for and deliver a protected walking and cycling path connecting the township to Warrnambool and other major town centres.
3. Implement planning or commercial mechanisms that future proof reserves for potential future transport corridors and crossings, including for a path along Hopkins Highway and the Merri River.

Objective 3

New development contributes to a sustainable and safe transport network

Actions

1. Develop preferred street section designs for new local and sub-local roads, including guidance on footpaths, cycling infrastructure and planting.
2. New roads create a permeable street for pedestrians and cyclists network that provides through-block links and extends and connects the existing network.
3. New roads should support convenient access to new and existing community facilities, open spaces and natural features.
4. New development will include perimeter roads along the settlement boundary and River to manage bushfire hazard.
5. Investigate opportunities to widen narrow public open space connecting reserves to comply with Council standards.



Legend and Key actions

Study area

↔ Explore opportunities for Merri River as a green link that connects the town and to Warnambool

Future roads planned or required for bushfire management purposes

➔ Advocate for new public transport links to surrounding towns

⦿ Traffic calming and pedestrian safety infrastructure at key intersections

➔ Safe and continuous pedestrian and cycling infrastructure along Bridge Road

↔ Investigate separated, safe cycling connection to Warnambool

--- Extend and formalise trail network on public land

⦿ Improved signage and wayfinding for trail network

Existing roads, footpaths and trails

Bridges

Open Space

Key water course and body

Map 10
Bushfield -Woodford Strategic Framework Plan
 Transport Map
 Key Strategies

Scale: 18000 at A4

Landscape and Natural Environment

The landscape and environment of Bushfield-Woodford will be thriving and sustainable, centred around the Merri River and integrated with the community. The River will be a major feature of the townships and their identity, providing a range of environmental, social and cultural functions.

Partnerships and programs with water authorities and community organisations will help to protect the health of the Merri River and revegetate the banks and surrounding landscape with native plants. This will contribute to the cooling of streets and area, the rural character of the townships, and the role of the Merri River as a major biodiversity corridor. Revegetation will be carried out while managing fuel and hazardous vegetation around the river corridor to ensure bushfire risk is not increased.

Flooding of the Merri River and drainage issues across the town will be better understood and managed with targeted infrastructure and safety improvements. Improved and sustainable drainage, wastewater management and other infrastructure will be critical to supporting the health of the Merri and its environs.

Improved signage and recreational infrastructure will help to build communities understanding of the natural functions of the river and the landscape, access and enjoy it safely and in a way that protects the environment. This will include celebrating the cultural significance of the landscape.



Objective 1

The Merri River is a thriving and healthy waterway full of biodiversity and nature-based recreation.

Actions

1. Partner with Glenelg Hopkins CMA to determine a program to improve the health of the Merri and surrounding environs, including through partnership with community organisations.
2. Review the ESO and other statutory mechanisms to ensure they are fit-for-purpose for protecting and rejuvenating the Merri River and its tributaries.
3. Deliver infrastructure along the Merri River to protect riverbanks and provide recreational access to the river, including footpaths and waterway access.

Actions identified within Utilities and Services will be important in managing contaminant and stormwater loads in the Merri River.

Objective 2

The landscape and development is sustainably managed to mitigate environmental hazards and promote community resilience.

1. Conduct a flood investigation and drainage strategy to determine risks and identify mitigating measures.
2. New development should consider fire-sensitive development measures including engineered and form-related responses, consideration of landscaping, minimum setbacks and perimeter roads alongside permanent vegetation hazards, and non-combustible fencing along the settlement boundary.

Objective 3

Landscapes and green spaces are protected and revegetated to support biodiversity.

Actions

1. Encourage the retention and restoration of native vegetation on existing and new properties, while considering bushfire risk.
2. Deliver new planting on key corridors to support Warrnambool 2040's goal to have 30% canopy cover from vegetation in urban areas by 2040, while considering bushfire risk.
3. Investigate opportunities to deliver a continuous and connected public reserve on both sides of the river and creeks and enhance the role of the Merri River as a biodiversity corridor in line with Warrnambool 2040's biodiversity targets.
4. Explore opportunities for improved mapping and documentation of existing native vegetation.
5. Improve signage and interpretation along Merri River highlighting its ecological and cultural significance to support community engagement and stewardship of the river.

Community Infrastructure, Public Realm and Open Space

Community facilities and open spaces in Bushfield-Woodford will continue to be the thriving heart of the community and its connection to nature. Improvements to community spaces will ensure they are fit for purpose and can serve a range of diverse needs. Open spaces will provide a range of social, natural and recreational functions that support community development.

Targeted improvements to the public realm and transport network will support the role of key community centres as places to connect, socialise and spend time. Gateways to the townships will create a sense of identity and support safe movement around the townships.

The open space network will be expanded and improved, providing a greater diversity of experiences for different parts of the community, from programmed sports, formal recreation and socialising areas, connection to nature and culture, and other informal and passive recreational activities.

Improvements along the Merri River, such as opportunities for boardwalks and waterway access, will help to ensure people can access the water in a way that is safe and protects the banks of the river. Minor upgrades to the existing path network and public open spaces will greatly enhance the open space offering for the townships, such as formalisation of paths, provision of seating and shading, and improved signage and wayfinding to identify public spaces. New open spaces provided by new development will contribute to a network of connected open spaces along the Merri River and help to extend the trail network.



Objective 1

Community facilities will support the development of new and existing community

Actions

1. Investigate opportunities for greater management and utilisation of existing community infrastructure assets such as the school.
2. Undertake a municipal-wide Community Infrastructure Needs Assessment to determine the role and requirements of existing and new community infrastructure in Bushfield-Woodford.
3. Investigate opportunities to deliver a new or expanded community hub in line with findings of needs assessment.

Objective 2

Build a network of connected open spaces that support a diversity of cultural, recreational and ecological uses.

Actions

1. New recreational spaces must be designed to be sensitive to the surrounding ecological and cultural values of the area.
2. Upgrade spaces at Jellie's Reserve and Watsons Lane River Reserve to improve utilisation, including extending path network, ensuring adequate maintenance, and providing minor infrastructure upgrades such as picnic tables, park benches, barbecue facilities, covered areas, and other informal sporting uses.
3. Improve signage and wayfinding around parks and trails to clearly identify public access and connectivity to key community destinations to encourage use
4. New development should provide new open spaces and paths along the Merri River and connected to existing or new paths.
5. New open spaces design and function should respond to community needs, including provision of nature-based experiences and social spaces like barbeque and picnic spaces.

Objective 3

Community centres have a high quality and comfortable public realm that encourages people to spend time there, creating a sense of identity and connecting the community.

Actions

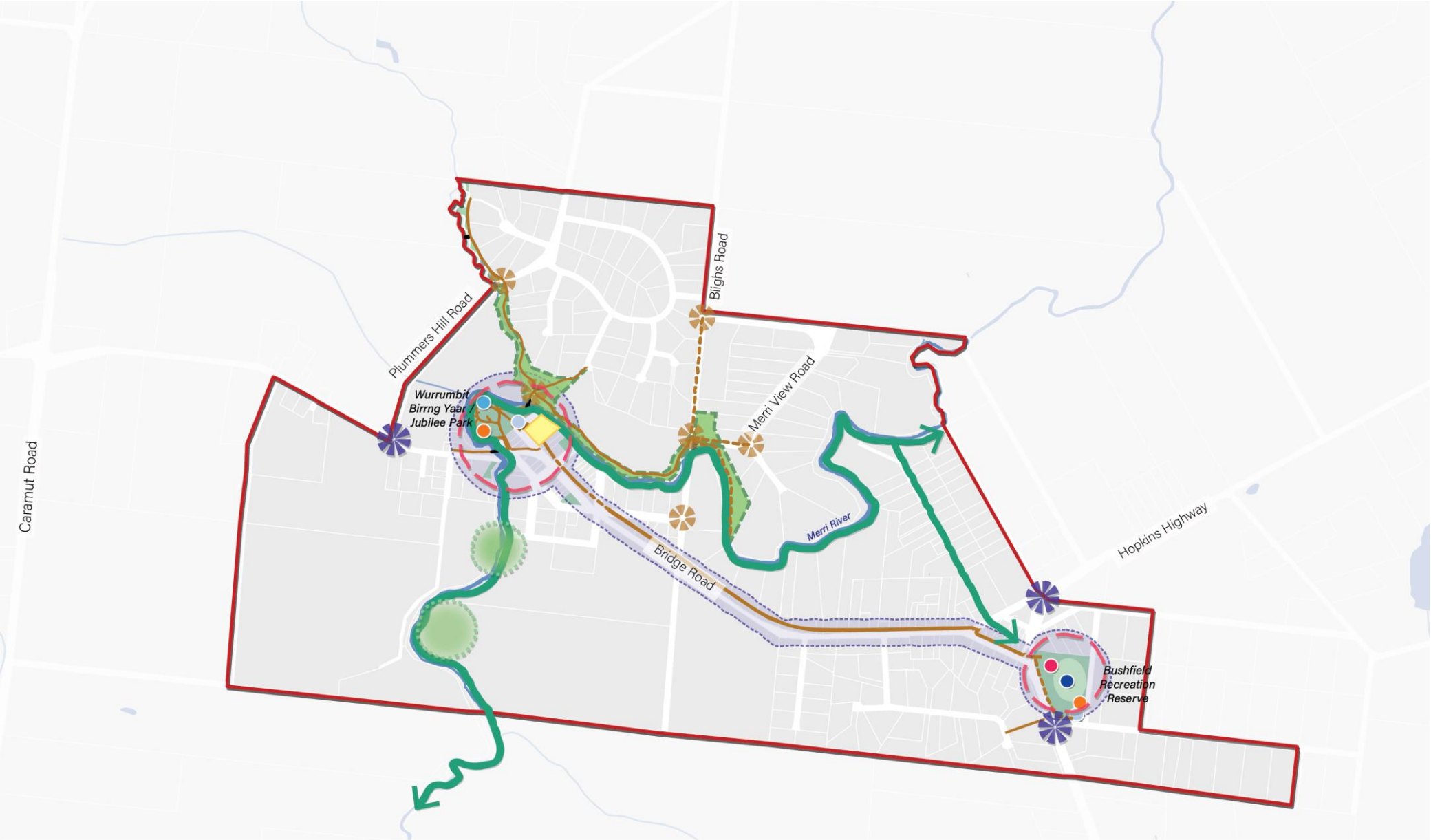
1. Deliver targeted public realm improvements that emphasise community centres and create spaces to spend time and socialise, such as seating, benches, safe footpath spaces, and signage. There is also an opportunity to better identify the heritage precinct of Woodford.
2. Deliver public realm improvements at township gateways at Plummers Hill Rd and Hopkins Highway to establish a sense of entrance and township identity and improve road safety.
3. Deliver transport and public realm improvements to create safe and accessible connections between key community infrastructure and open spaces, including along Bridge Road.

Objective 4

The Merri River is the connective heart of the townships, providing cultural, ecological and social value.

Actions

1. Deliver new and upgraded access to the Merri River, including safe bridges, and investigate opportunities to provide continuous and connected public reserve on both sides of the river and creeks.
2. Deliver a diversity of recreational uses along the Merri River appropriate to its ecological and cultural values, such as nature play and formalised access to the river.



Legend and Key actions

Study area

Improved signage and wayfinding for trail network

Extend and formalise trail network on public land

Merri River as a connective, ecological, cultural and social asset

Upgrade existing open spaces north of the Merri River

Encourage new open spaces to be provided adjacent to the Merri River and provide connections to and along the waterway

Explore opportunities for new, expanded or upgraded community facilities

Public realm improvements at community centres and key routes

Create key gateways to the townships

Woodford Primary School

Playground

Sports Ground

Tennis Court

Netball Court

Open Space

Key water course and body

Footpaths and trails

Community Hall

Map 11
Bushfield -Woodford Strategic Framework Plan
Community Infrastructure, Public Realm & Open Space
Key Strategies

Scale: 18000 at A4

Aboriginal Cultural Heritage and Values

Aboriginal Cultural Heritage and Values will become a known, important and visible part of Bushfield-Woodford. New projects and developments will provide opportunities to recognise, protect and celebrate the Eastern Maar culture, heritage, and values as the Traditional Owners of the land.

Warrnambool City Council and Bushfield-Woodford will be committed to ongoing partnership and consultation with Eastern Maar to identify opportunities to ensure the townships development contributes to the realisation of the goals, objectives and opportunities for the Eastern Maar people and their culture and heritage.

Partnerships with the Eastern Maar Aboriginal Corporation (EMAC) will provide opportunities to embed Aboriginal practices and values of Caring for Country in achieving the townships environmental objectives. New projects will provide means to return Culture to Country and share understanding and knowledge about the townships and their heritage. Opportunities to undertake Cultural Heritage Management Plans and other studies will help to add to our understanding of history.

This will help to create a township that respects, values and celebrates the cultural heritage and values of the Traditional Owners – building stronger, more connected and more inclusive communities, and ensuring that the rich cultural heritage of the area is preserved for future generations.



Objective

Protect and celebrate the Eastern Maar culture, heritage and values as the Traditional Owners of the land and seek opportunities to realise the Eastern Maar's goals in Bushfield-Woodford. This is centred on four principles which are to be embedded and guide the approach to all activity in Bushfield-Woodford.

Actions

1. Commit to the ongoing partnership and consultation with Eastern Maar to identify opportunities to apply the principles in planning and development in the township.
2. Work with Eastern Maar to support Aboriginal-led caring for Country to enhance and protect culturally significant places including the Merri River.
3. Incorporate storytelling of Bushfield-Woodford's living cultural heritage and history into placemaking where appropriate and as determined by Eastern Maar.
4. Encourage the preparation of voluntary Cultural Heritage Management Plans throughout the study area due to the potential for yet unidentified Aboriginal cultural heritage, including for Council projects.

Engagement

We have engaged with the EMAC to determine a set of principles to guide future development based on EMAC's Country Plan

1. Eastern Maar's right to self-determination. Protect Eastern Maar's right to self-determination and ensure they can freely pursue their economic, social and cultural development, consistent with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).
2. Ongoing and meaningful engagement with Eastern Maar. In implementing the SFP, engage with Eastern Maar for place-based decision making and engage with them on matters that impact their Country.
3. Embedded and promoted cultural values, voices and identity. Work with Eastern Maar to integrate their cultural values, goals, voices and stories as documented in their Country Plan into the Bushfield and Woodford townships and landscape.
4. Strong partnerships for a healthy Country and protected culturally significant places. Work with Eastern Maar to protect and promote culturally significant places and the health of Bushfield and Woodford's land, sky and waters.

Sustainability and Resilience

Sustainability and resilience must be at the heart of any township. Bushfield-Woodford will be a thriving and resilient community that is connected to and supported by its surrounding natural environment, while being protected from the risk of bushfires.

All new development will be sustainable, integrated with the natural landscape, considerate of bushfire risk, and aligned with Council's sustainability policies. Sustainability is embedded in all aspects of the township's development – from promoting sustainable transport choices by providing safe, accessible walking and cycling networks to meeting water efficiency standards at the lot scale and within the public realm, as well as implementing integrated water management measures, and designing around existing natural features of the site and surrounds.

New and existing development and the community at large will contribute to the municipality's broader objectives to reach net zero greenhouse gas emissions by 2040 and achieve other targets relating to canopy cover, biodiversity, waste and water.

Bushfield-Woodford will continue to have an engaged and informed community that are aware of and understand the importance of sustainability issues - promoting sustainable behaviours and environmental stewardship.

Sustainability is an outcome that is embedded across all themes of the Strategic Framework Plan. In particular, strategies included within the Landscape and Natural Environment, Services and Utilities, and Transport themes include strategies aimed at supporting sustainable community development.

Objective 1

New subdivisions and development are sustainable, integrated with the natural landscape, and contribute to the municipality's environmental objectives.

Actions

1. Any new development should retain and design around existing natural features of the site.
2. New subdivisions demonstrate how they align with the Sustainable Subdivisions Framework categories, objectives and metrics including:
 - Integrated Water Management.
 - Ecology and Urban Heat.
 - Streets and Public Realm.
 - Site layout and Liveability.
3. New developments where two or more dwellings are proposed should demonstrate how they:
 - Produce net zero carbon emissions (not connected to gas, energy efficiency and produce renewable energy onsite).
 - Better manage water quality, use, collection and wastewater generation and distribution.
 - Protect and enhance greening and biodiversity in a fire-sensitive manner.
 - Be more resilient to changing climate impacts.
 - Provide a healthier and more comfortable environment for building occupants.

Objective

All new developments, and where appropriate existing developments, are located, designed and managed with consideration of local bushfire risk.

Actions

1. Future development should be setback to ensure it is sufficiently protected from radiant heat (at least 19 metres from grassland and 48 metres from forest areas).
2. Perimeter roads should be introduced to protect from permanent vegetation hazards and along the river corridor. In areas where a road cannot be used to provide appropriate setback and or for existing developments, additional vegetation management controls should be considered.
3. An area that is better protected from bushfires (e.g., Bushfield Reserve) should be created within the townships.
4. New development must consider safe access and egress in a bushfire emergency, with the staging and conditions of subdivisions planned to ensure buffers and safe egress are maintained throughout development.
5. No new development should occur in areas with poor egress (north of the Merri River).

Utilities and Services

Sustainable infrastructure will ensure the existing and future community is a sustainable and healthy one.

Sustainable infrastructure will ensure that the townships touch the environment lightly and preserve and protect the landscape setting that make the townships special. This infrastructure will also protect the townships from the increasing effects of climate changes.

Decisions regarding new infrastructure will be discussed and informed by the needs of the community and the environment to ensure the right infrastructure is provided to support the town's sustainability, safety and resilience, while maintaining the aspirations and vision for the townships.

Objective 1

Water and waste services are sustainable, resilient, and reliable for existing and future residents.

Actions

1. Investigate and agree on new wastewater solutions for the township. See **Wastewater next steps**.
2. Improve processes and data gaps outlined in the **Wastewater next steps**, including ensuring appropriate resources are available to support this.
3. Introduce a minimum subdivision lot size requirement of 1 ha within LDRZ to manage risk relating to wastewater management.

Objective 2

Sustainable infrastructure in Bushfield-Woodford supports the safety and connectivity of the community.

Actions

1. Investigate and confirm environmental hazards and implement mitigation measures where required, including confirming bushfire, drainage and flooding hazards.
2. Investigate opportunities to improve the quality of telecommunication coverage in Bushfield-Woodford.

Wastewater options

Currently, all wastewater in Bushfield-Woodford is being treated with Onsite Wastewater Management Systems (OWMSs). Many of these systems are old, poorly maintained and or monitored, beyond their useful service capacity, and would not meet current standards. This is not deemed to be sustainable or safe for human health or the environment going forward.

A range of options for how wastewater can be better managed in the future require further investigation. Some options will require the identification of land required to locate treatment infrastructure. Improvements to wastewater management can also be achieved by reducing the total hydraulic load required for treatment through improved water efficiency and greywater separation and treatment.

The ability of properties to safely contain and treat water onsite varies according to a range of factors including lot size, soil conditions, hydraulic load, proximity to a waterway and topography. The Bushfield-Woodford Domestic Wastewater Investigation recommended a minimum subdivision lot size of 1 hectare for Low Density Residential zoned land. For larger lots that can accommodate effective onsite water management, improved OWMSs (Option 1) may be adequate where supported by appropriate user maintenance and monitoring processes. Some existing, smaller lots with other constraints (e.g., grade, soil, waterway proximity) may not be able to meet current treatment standards with improved OWMS (Option 1).

Options that may be worthy of future consideration include:

1. Improved Onsite Wastewater Management

Continue owner-managed OWMSs with improved secondary wastewater treatment systems. Continued onsite management will also require improvements to permitting processes and data collection, owner operation and maintenance education and behaviour, site evaluation and ongoing monitoring and compliance enforcement.

2. Sewerage to central sewerage treatment plant (STP)

Reticulated sewerage connecting to the existing treatment plant at Warrnambool.

3. Sewerage to decentralised STP

Reticulated sewerage connecting to a new local treatment plant. This is a more conventional approach that enables safe, off-site and local treatment.

4. Cluster-based reuse

Wastewater is conveyed offsite by gravity sewers to local treatment systems that serve a cluster of properties, for example located within local road reserves, and which can be used to irrigate local open spaces.

5. Effluent drainage to wetlands

Wastewater is conveyed offsite by gravity sewers to a constructed sewer, providing treatment, ecological and amenity benefits.

Wastewater approach and next steps

Key next steps to identifying a feasible and preferred long-term future solution include:

- Collect place-based data including identifying unpermitted systems, auditing high-risk sites, understanding the water load for the townships.
- Engage with Wannon Water and other key stakeholders to discuss governance and funding and identify preferred options for further investigation.
- Detailed feasibility study on preferred option(s) including confirming an implementation pathway. This should include further consultation with community.
- Identify and set aside required land for treatment and storage, based on findings of the feasibility study.

Identifying an alternative wastewater solution could take a number of years. Fully implementing that solution will take substantially longer. While this is being progressed, the following actions can be taken to ensure the townships are healthy and sustainable:

- Improve processes and data gaps, including providing the resources required to support this:
 - Address data gaps in particular relating to unpermitted systems and high-risk sites in the township.
 - Increase owner knowledge and maintenance of OWMSSs.
 - Update policy and procedures around permitting, land capability assessment, inspections and enforcement.
- A sustainable wastewater approach which is compatible with conventional low-density residential development has not been determined:
 - Existing systems at the end of their useful lives must only be replaced by improved OWMSSs (Option 1).
 - New residential development should only be permitted where lot sizes are 1 hectare or greater in accordance with the Bushfield-Woodford Domestic Wastewater Investigation.

