An aerial photograph of Bacchus Marsh, Victoria, Australia, showing a mix of urban development, green fields, and a winding road. The sky is blue with scattered white clouds. A purple triangle is in the top-left corner.

BACCHUS MARSH

URBAN GROWTH FRAMEWORK

FINAL REPORT AUGUST 2018

PRODUCED BY



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AUGUST 2018

CONTENTS

	EXECUTIVE SUMMARY	6
1	INTRODUCTION	11
	Why a UGF for Bacchus Marsh?	11
	What is the project?	14
	Planning context	16
	Growth context	17
	Consultation	18
	Structure of the UGF	19
2	VISION & PRINCIPLES	21
	Vision	21
	Principles	22
3	UGF ELEMENTS	25
4	ELEMENT 1: ENVIRONMENT	26
	Key issues	27
	Environment objectives	31
	Environment strategies	32
5	ELEMENT 2: EMPLOYMENT	34
	Key issues	35
	Employment objectives	40
	Employment strategies	41
6	ELEMENT 3: HOUSING & COMMUNITY INFRASTRUCTURE	44
	Key issues	45
	Community facilities and education	51
	Housing and community objectives	53
	Housing and community strategies	53
7	ELEMENT 4: TRANSPORT	54
	Key issues	55
	Transport objectives	58
	Transport strategies	58
8	GROWTH AREAS	60
	Defining and allocating strategic growth areas	60
	Component 1: District boundary	60
	Component 2: Constraints	61
	Component 3: Principles for the allocation of growth areas	62
	Component 4: Potential residential or employment growth areas	63

9	STRATEGIC OUTCOME AREAS	65
	Merrimu residential growth precinct	67
	Parwan employment growth precinct	71
	Parwan Station residential & commercial growth precinct	75
	Hopetoun Park North residential growth precinct	79
	Investigation and transition areas	81
	Supporting projects	82
10	IMPLEMENTATION	86
	UGF actions	86
	Sequencing the growth	89
	APPENDICES	92
	Appendix 1 Background studies	93
	Appendix 2 Consultation process	94
	Appendix 3 Agency consultation	97
	Appendix 4 Assessment of land constraints, Bacchus Marsh growth areas	100
	PLANS	
	Plan 1 Urban Growth Framework	10
	Plan 2A Regional Context	12
	Plan 2B Local Context	13
	Plan 3 Natural Features & Open Space	28
	Plan 4 Physical Constraints	30
	Plan 5 Employment	38
	Plan 6 Housing & Community	50
	Plan 7 Transport & Movement	56
	Plan 8 Key Actions	88
	TABLES	
	Table 1 Key growth actions – state/regional	8
	Table 2 Residential growth areas settlement types	84
	Table 3 Key growth actions – state/regional	86
	Table 4 Key growth actions – local	89
	FIGURES	
	Figure 1 The UGF delivery	14
	Figure 2 Jobs by industry in Moorabool, 2011–2051	35
	Figure 3 Adequacy of broadhectare land stock	46
	Figure 4 Growth area investigations	61
	Figure 5 Consultation outcomes	94

ACRONYMS

AEO	Airport Environs Overlay
BMID	Bacchus Marsh Irrigation District
CHRGP	Central Highlands Regional Growth Plan
Council	Moorabool Shire Council
DDO	Design and Development Overlay
DEDJTR	Department of Economic Development, Jobs, Transport and Resources
DELWP	Department of Environment, Land, Water and Planning
ESO	Environmental Significance Overlay
FO	Flood Overlay
ICPO	Infrastructure Contribution Planning Overlay
INZ	Industrial Zone
IWM	Integrated Water Management
LPPF	Local Planning Policy Framework
PEP	Parwan Employment Precinct
PSP	Precinct Structure Plan
SLO	Significant Landscape Overlay
SPPF	State Planning Policy Framework
SRW	Southern Rural Water
UDF	Urban Design Framework
UGF	Urban Growth Framework
UGZ	Urban Growth Zone
VPA	Victorian Planning Authority

EXECUTIVE SUMMARY

Bacchus Marsh is growing rapidly due to its proximity to Melbourne and the jobs and opportunities this brings. Lifestyle and amenity are key growth drivers, along with affordable land and housing, and quality regional health and education facilities. High-quality surrounding rural landscapes and open space enhance liveability. Agriculture, natural resources (sand and coal) and local industry provide employment opportunities.

Bacchus Marsh is the second largest settlement in the Central Highlands region (behind Ballarat) and the closest to Melbourne. Growth in Bacchus Marsh has well exceeded the rates of Ballarat or Melbourne for many years, and the existing planning framework needs to be revised. Train station usage has grown significantly, and local road congestion has increased. Retail, industry, education and health services need to respond to the increasing demand. Open space planning and provision of community services are needed to support the town's growth.

State planning policy identifies that Bacchus Marsh can and should grow due to its locational advantages. An Urban Growth Framework (UGF) provides a long term land use vision of how growth can be planned for, matched with coordinated infrastructure delivery by agencies and other stakeholders. The vision of the UGF is:

Bacchus Marsh will be an emerging regional growth centre, providing metropolitan-edge convenience, set within a distinctive agricultural valley framed by steep escarpments and significant waterways. Bacchus Marsh will be planned as a rural city in a farming district, and as the gateway to Victoria's Central Highlands region.

Bacchus Marsh will draw new residents, investors and tourists due to its liveability, comparatively affordable land, diversity of residential lot sizes, access to services and attractive landscapes. The Bacchus Marsh Irrigation District is a food bowl for Victoria, and a range of other state-significant natural resources present opportunities for economic growth.

As a rural city, Bacchus Marsh's service role and investment in education, health, retail and local industry will be strengthened. The combination of landscape, natural resources and liveability are unique to Bacchus Marsh and will be central to managing future growth.

A coordinated UGF, which includes a strategy for implementation, will ensure that housing, employment, road networks, rail corridors, local services, open space and other opportunities are provided for residents and visitors to enjoy. A comprehensive growth plan will ensure Bacchus Marsh remains a regional settlement with its own unique identity and not a physical extension of Melbourne's rapid growth. Importantly the UGF aims to create a unified Bacchus Marsh where all neighbourhoods, from Parwan to Darley, are connected and integrated.

The vision set out in the UGF is to be achieved by:

- identifying four strategic outcome areas for 2041 and beyond so as to guide areas for development clear of constraints
- planning for new residential areas with capacity for a range of housing needs, supported by local services and schools
- planning for new employment areas to grow the local economy
- identifying high-level infrastructure needs to support growth, from roads to train stations to new schools and parks
- protecting high-value agricultural land, such as the Bacchus Marsh Irrigation District
- protecting natural and built environmental values.

The UGF is a long term vision, which makes precise growth projections difficult. Sequencing of new growth fronts should be continuously reviewed based equally on supply and demand analysis and on the ability to deliver needed infrastructure, particularly the Eastern Link Road.

The UGF is a broad high-level document. It makes recommendations on identified opportunities for urban growth as well as new employment precincts (amongst other initiatives). These are conditional on relevant Council resolutions, Planning Minister support (where amendments occur) and a range of further assessments that will occur at the appropriate time.

The key actions of the UGF can be divided into two categories, state/regional and local. State/regional projects will support future growth in accordance with *Plan Melbourne* and the *Central Highlands Regional Growth Plan*.

A list of priority state/regional projects that support the implementation of the UGF are provided in *Table 1 Key growth actions – state/regional*.

Table 1 Key growth actions – state/regional

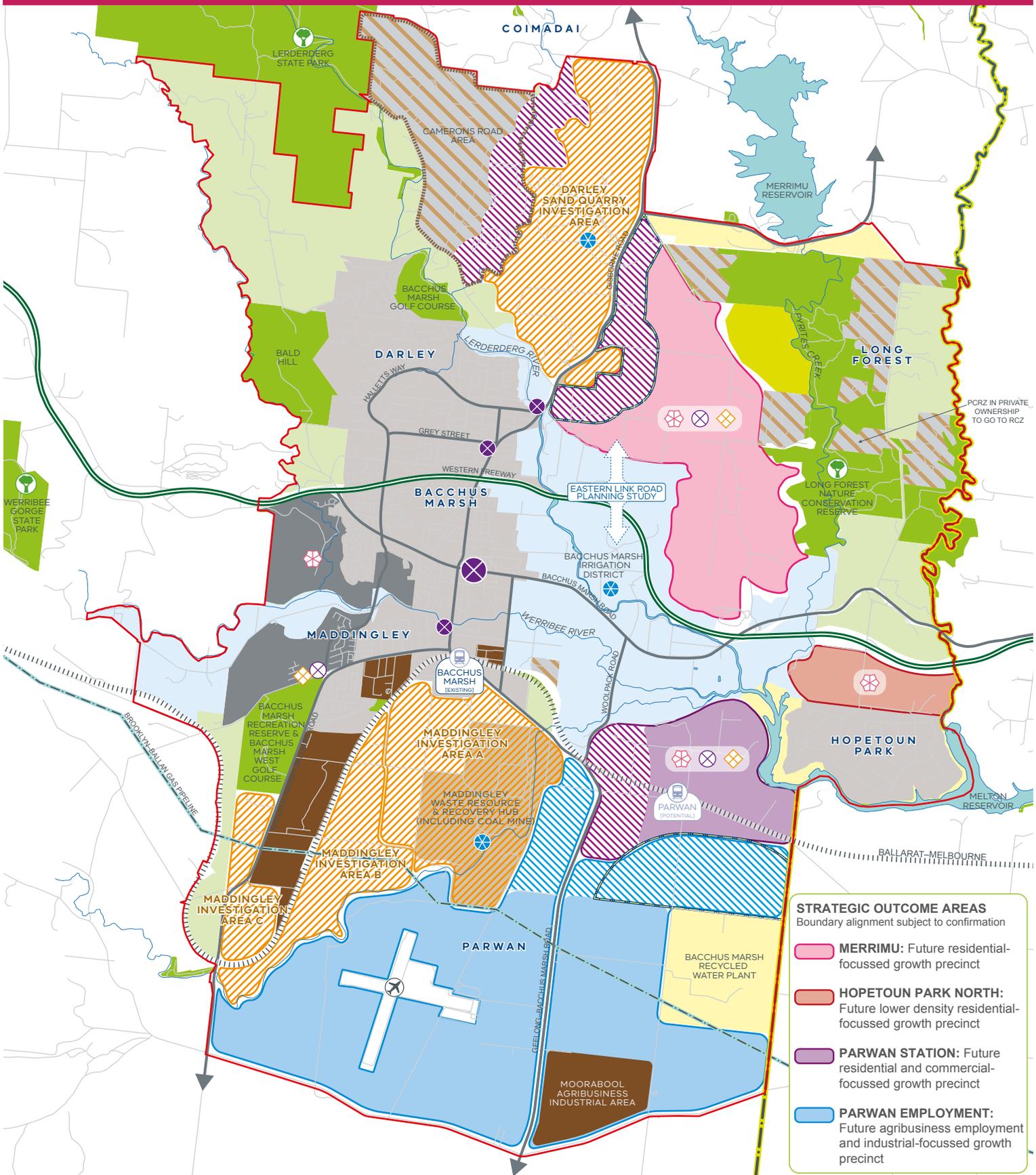
REF #	PROJECT	TIMING ¹	RESPONSIBILITY
1	District Open Space Framework to address key principles to ensure an integrated network of parks, open space and trails, protect escarpments, achieve biolinks, and integrate open space outcomes with waterway management.	Immediate	Council
2	Eastern Link corridor alignment study to ensure integration of transport networks and land use planning.	Short term	VicRoads
3	Water and gas supply for the Parwan Employment Precinct.	Short term	Council/RDV
4	Bacchus Marsh Irrigation District planning study to review zones, overlays, policy statements and buffers to inform a set of principles to protect and facilitate investment in the agricultural sector, and address opportunities to facilitate value-adding enterprises.	Short term	Council/VPA
5	Maddingley Waste and Resource Recovery (WRR) Hub planning study to determine appropriate zone and overlay controls for the WRR hub site and surrounds (including amenity buffer). Bacchus Marsh Grammar and other key stakeholders need to be engaged in this process.	Short term	Council
6	Maddingley Investigation Areas A and B: Investigate options for new land uses, compatible with existing buffers and site locational attributes.	Short term	Council
7	Primary school needs: Determine the need for additional government primary schools in existing communities at Bacchus Marsh and Maddingley; identify the location/s and rezone land.	Short term	Council/ Department of Education and Training
8	Update the Bacchus Marsh Integrated Transport Strategy to include consideration of the Bacchus Marsh Urban Growth Framework	Short term	Council/ VicRoads
9	Integrated Infrastructure Delivery Framework: Address all higher order infrastructure needs and means of delivery including integrated water management principles.	Short term	Council/VPA
10	Parwan Employment Precinct: <ul style="list-style-type: none"> • Planning scheme amendment to implement a Precinct Structure Plan (PSP) and Infrastructure Contributions Plan (ICP). • Prepare a land use amenity plan to provide appropriate buffers to sensitive uses and avoid incompatible land uses. • Prepare an Integrated Water Management Plan, to demonstrate how sustainable whole-of-water cycle management will be provided. 	Short to medium term	VPA

REF #	PROJECT	TIMING ¹	RESPONSIBILITY
11	Maddingley integrated college precinct: planning and access study for Bacchus Marsh Grammar and Bacchus Marsh College.	Short to medium term	Council/ Department of Education & Training/ Independent Education Sector
12	Health services precinct in Bacchus Marsh: plan and advocate for a precinct that responds to the community needs of a rural city.	Medium term	Council/ Department of Health and Human Services
13	Merrimu Residential Growth Precinct: planning scheme amendment to implement a PSP and ICP.	Medium to long term ²	Proponent
14	Parwan Station Residential/Commercial Growth Precinct (including future railway station): planning scheme amendment to implement a PSP and ICP.	Medium to long term ³	Proponent
15	Hopetoun Park North Residential Growth Precinct: planning scheme amendment to rezone land and apply a Development Plan Overlay.	Medium to long term ⁴	Proponent

Notes:

- 1 Immediate/ongoing: next 12 months
Short term: 1–5 years
Medium term: 5–10 years
Long term: 10+ years.
- 2 Timing can be brought forward if the preconditions specified in Section 9 are met and if the precinct can demonstrably deliver the northern section of the Eastern Link Road (i.e. linking Gisborne Road to the Western Freeway).
- 3 Timing can be brought forward if the preconditions specified in Section 9 are met and if the precinct can demonstrably deliver the southern section of the Eastern Link Road (i.e. linking Geelong–Bacchus Marsh Road to the Western Freeway)
- 4 Timing can be brought forward if the preconditions specified in Section 9 are met and if the precinct can demonstrably deliver:
 - Improved connectivity with the Western Freeway to and from the west; and
 - An acceptable level of community facilities/amenities in accordance with Council's Community Infrastructure Framework.
- 5 'Timing' refers to the commencement of a planning 'project' or, in the case of a planning scheme amendment, a formal 'request for authorisation' of the amendment.

Refer to *Plan 1 Urban Growth Framework*.



STRATEGIC OUTCOME AREAS
Boundary alignment subject to confirmation

- MERRIMU:** Future residential-focussed growth precinct
- HOPETOON PARK NORTH:** Future lower density residential-focussed growth precinct
- PARWAN STATION:** Future residential and commercial-focussed growth precinct
- PARWAN EMPLOYMENT:** Future agribusiness employment and industrial-focussed growth precinct

<ul style="list-style-type: none"> Bacchus Marsh district boundary municipal boundary existing urban area existing rural residential existing greenfield residential development farming Bacchus Marsh Irrigation District public uses public park environmental values 	<ul style="list-style-type: none"> state-significant environmental assets state-significant resource industrial uses investigation area (no sensitive uses) watercourses existing activity centre & retail potential activity centre & retail potential community facility potential education buffer: no sensitive uses 	<ul style="list-style-type: none"> buffer: no new uses requiring buffers to sensitive uses buffer subject to further investigation Camerons Road area railway lines/stations (existing or future potential) freeway arterial road Bacchus Marsh Aerodrome <p>NOTE: Eastern Link Road planning study to be undertaken by VicRoads; location and alignment subject to confirmation.</p>
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INTRODUCTION

State planning policy identifies Bacchus Marsh as a peri-urban regional centre with potential for significant growth. Unprecedented rates of residential growth are already occurring in the town and there is an opportunity to provide needed infrastructure and build the local economy. Maintaining housing affordability is also a key challenge as more residents are being drawn to Bacchus Marsh.

It is essential that identified new growth areas play a role in delivering the needed local jobs, infrastructure and housing stock. The Bacchus Marsh District UGF will guide this.

The UGF was prepared by Moorabool Shire Council, supported by the Victorian Planning Authority (VPA). The UGF is underpinned and informed by:

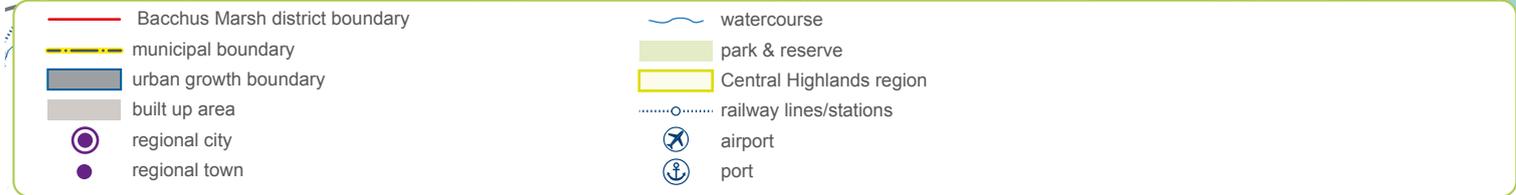
- *Central Highlands Regional Growth Plan* which identifies Bacchus Marsh as the second-largest town in the region and earmarks it for significant growth. It also seeks for Bacchus Marsh to transition from a commuter centre to a self-sustaining employment town.
- *Plan Melbourne 2017–2050*, which identifies Bacchus Marsh as a peri-urban town with growth potential.
- Preparation of *Moorabool 2041*, an urban growth strategy that guides growth in the shire and focuses on Bacchus Marsh as the largest town.
- State and Local Planning Policy Framework of the *Moorabool Planning Scheme*. Clause 11.01–2 of the *State Planning Policy Framework* designates Bacchus Marsh as a regional centre.
- *Background Report* to the Bacchus Marsh UGF.

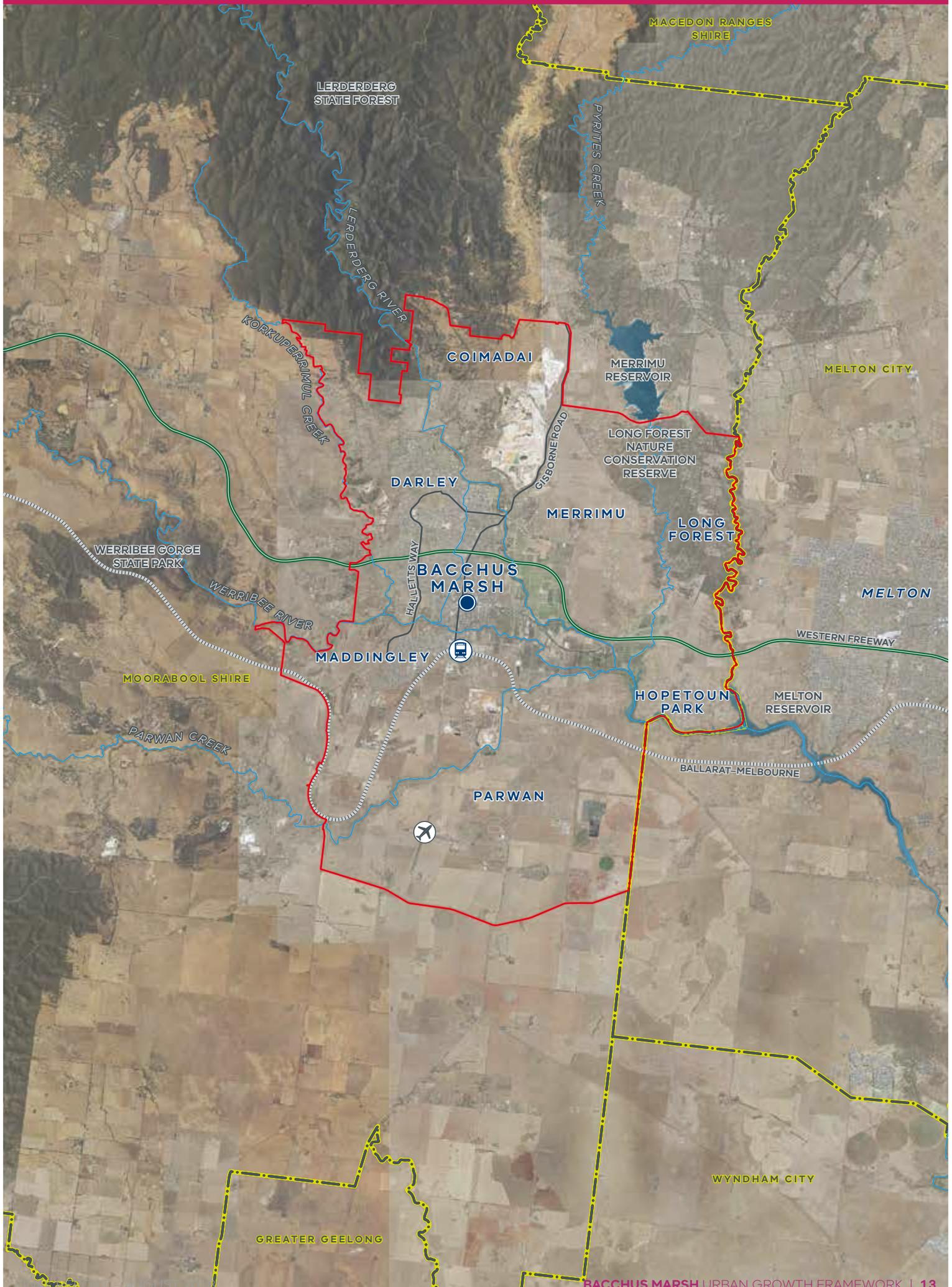
WHY A UGF FOR BACCHUS MARSH?

The population of Bacchus Marsh is estimated to double over the next two decades to around 40,000 residents. This growth presents an opportunity to provide needed infrastructure and build the local economy, and importantly, encourage continued housing affordability. A UGF is needed to guide this growth appropriately and maximise Bacchus Marsh's exceptional mix of locational, economic and aesthetic appeal.

The UGF is a strategic document that will guide growth to 2041 and beyond. It defines the settlement boundary and nominates potential growth areas based on land capability and growth needs. It ties growth areas to particular infrastructure delivery and provides objectives and principles for each potential growth area.

There is an existing framework plan within the *Moorabool Planning Scheme*. This will be replaced by *Plan 1 Urban Growth Framework*.





WHAT IS THE PROJECT?

The project's aim is to deliver a strategic document that will guide population, infrastructure and economic growth within Bacchus Marsh to 2041 and beyond.

Work commenced on the Bacchus Marsh UGF in late 2014. A request was made to the Minister for Planning in 2015 to prepare an amendment to the planning scheme. Subsequently a project brief was developed between the parties and a scope of works was signed off by the Minister for Planning.

Growth Area Framework Plans Requirements are set out in Clause 11.02-2 of the *State Planning Policy Framework*.

The Bacchus Marsh UGF is based on long term projections that are and will continue to be influenced by a range of factors beyond Council's control. For this reason, the UGF does not prescribe growth areas of specific size for development at set times – these steps will be applicable to later, more detailed planning stages. Rather, the UGF identifies areas that are capable of accommodating growth more broadly, lists the infrastructure that potential growth areas need to deliver, and sequences growth according to investment needs.

The UGF sets out a strategic vision for Bacchus Marsh. It identifies the settlement boundary, where future potential growth can occur, key priority projects for Council to undertake and relevant partnerships with other government bodies.

The ultimate goal of the UGF is to articulate a comprehensive work plan for guiding future growth and development, and to ensure alignment and common purpose between state, regional and local planning decisions (see *Figure 1 The UGF delivery*).

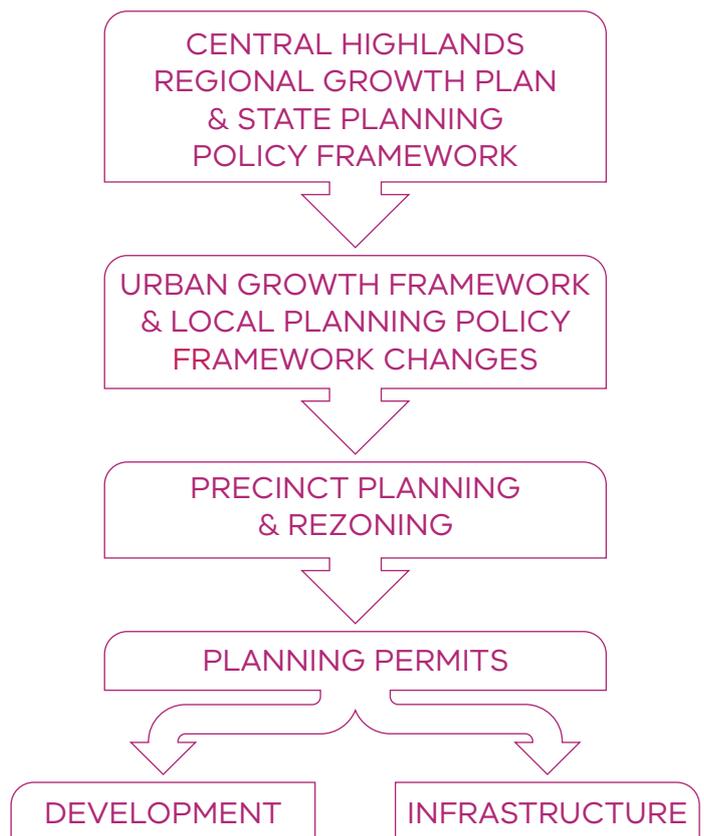


Figure 1 The UGF delivery

The UGF comprises:



How will the UGF be implemented?

Implementation of the UGF into the Moorabool Planning Scheme will be via the Local Planning Policy Framework. Subsequent planning processes will include rezoning of growth areas and precinct planning via Precinct Structure Plans or Development Plans. Developer contributions will be collected to pay for needed infrastructure. Planning permit applications will be guided by approved precinct plans.

What is the UGF process?

There are a number of steps required to prepare the UGF. Some of these have already been completed as part of previous work or stages. A list of background studies is provided in Appendix 1. As well, the UGF guides some tasks that will need to be undertaken in the future. These are shown in *Figure 1 The UGF delivery*.

How is Bacchus Marsh defined?

Bacchus Marsh refers to the area within the Bacchus Marsh district boundary as shown on Plan 1. It comprises the existing urban and rural areas of Bacchus Marsh, Darley, Maddingley and Pentland Hills (part), together with the adjoining localities of Parwan, Merrimu, Long Forest, Hopetoun Park, Coimadai (part) and Rowsley (part). This area is collectively referred to as Bacchus Marsh.

The boundaries of the Bacchus Marsh district have been determined as follows:

- The municipal boundary forms a clear eastern edge.
- Nerowie/Glenmore Roads form a logical southern boundary.
- The western boundary is formed by the railway line, Werribee River, the existing urban zone boundary and the Korkuperrimul Creek.
- The declared water supply catchment, Lerderderg State Park and dense vegetation defines the northern boundary beyond which urban growth would be limited and/or highly constrained.

PLANNING CONTEXT

State planning policy seeks to direct a greater share of growth to regional Victoria. *Plan Melbourne 2017–2050* specifically identifies Bacchus Marsh as a peri-urban town with growth potential. Bacchus Marsh is located in the Central Highlands region. The *Central Highlands Regional Growth Plan* identifies Bacchus Marsh as a regional centre, second in size to the Ballarat regional city. These two settlements are projected to accommodate a majority of the region's growth over the next 30 years. Bacchus Marsh has strong links to Melbourne and can attract residential and employment growth from the metropolitan region.

The *Central Highlands Regional Growth Plan* sets the following directions for growth in Bacchus Marsh:

- Support Bacchus Marsh as a regional centre and key growth location.
- Support the development of new north–south transport links.
- Growth should be supported in locations that will accommodate the largest increases in population.
- Provide a balanced approach to growth by promoting a range of local employment opportunities as an alternative to Bacchus Marsh's role as a commuter centre.
- Undertake investigations for employment and agribusiness opportunities at the Bacchus Marsh Aerodrome and in Parwan.
- Identify the need for and encourage the provision of social, service and transport infrastructure to support significant growth and investigate implementation opportunities including development contribution plans.
- Encourage the development of Bacchus Marsh to protect surrounding regional environmental, heritage, landscape, resource and agricultural assets and consider natural hazards.
- Maintain the character and form of a distinct regional settlement, separated from Melbourne's western growth corridor.

Moorabool 2041 and local policy

At the local level, Bacchus Marsh is the municipality's main centre for retail, services and employment, and anticipated for the most growth. It is intended to be the focus area for activity and high-order community facilities, including libraries, performing arts and leisure centres.

Council's strategic planning strategy, *Moorabool 2041*, seeks to manage growth in Bacchus Marsh in a manner that responds to existing context and character. Key components of this work include community engagement and visioning, as detailed in *Section 2 Vision & Principles*.

Background strategic work includes: *Bacchus Marsh Housing Strategy* (Mesh, 2016), *Moorabool Shire Retail Strategy* (Macroplan, 2015), and the *Bacchus Marsh Integrated Transport Strategy* (Moorabool Shire, 2015). These studies are discussed in detail in *Report 2 – Technical Findings*.

GROWTH CONTEXT

There is strong demand for new housing in Bacchus Marsh which is driving population growth. Council's *Bacchus Marsh Housing Strategy* notes that Bacchus Marsh is an integrated component of the wider metropolitan housing market and is therefore competing for growth with Melton and Wyndham. *Plan Melbourne 2017–2050* foreshadows that peri-urban regional centres can and should provide viable alternative housing choices for new residents settling in Victoria.

In part, the attraction is the affordability of land and quality of landscape and amenity in the district. Other key drivers include access to quality education (four primary schools, two colleges), a regional hospital, a main street retail precinct, historic buildings and landscapes (including the Avenue of Honour) and high-quality rail and road linkages with Melbourne, Ballarat and Geelong. The *Bacchus Marsh Housing Strategy* confirms that many of these growth drivers are beyond Council control or influence:

- Total housing demand will largely be influenced by macro level and regional population growth. This includes an ageing population, the increase in migration and increases in fertility (more babies being born).
- Within adjoining growth areas, the ongoing capacities and pricing of broadhectare lots released within the growth areas of Melton and Wyndham will continue to cater for large-scale demand, although any shortage of land supply may increase demand in Bacchus Marsh.
- National, state and local government land use policies affecting Melbourne's Growth Areas will significantly impact the future of Bacchus Marsh, for example changes to Melbourne's Urban Growth Boundary or policy direction to increase housing densities.
- Dwelling demand will not solely be generated by additional household growth; there will also be household lifecycle changes, preferences and needs. Dwelling demand may increase through down/upsizing and changing tenure (i.e. renter to purchaser). Other drivers of household types include economic pressures (such as the increasing costs of housing and children living at home for longer) and social trends (higher rates of divorce and single parents).

How does the UGF seeks to manage growth?

The UGF:

- » Sets the vision for Bacchus Marsh.
- » Defines the settlement boundary and identifies where future potential growth can occur within it.
- » Identifies key priority projects to manage growth and connect the neighbourhoods of Bacchus Marsh (either for Council to undertake or in partnership with other government bodies).

The UGF seeks to promote growth that delivers local jobs and infrastructure while enhancing the district's character. It achieves this by building upon existing parameters and needs of Bacchus Marsh:

- The existing urban development is situated largely in the west and is serviced by the Western Freeway, one north–south arterial, a rail line and one train station.
- There is an existing major infrastructure shortfall – the need for a second north–south arterial, the Eastern Link Road. Planning for future growth areas provides the opportunity to leverage infrastructure contributions towards the delivery of this road.
- There are existing employment sites to the south. More local jobs are needed and can be provided by expanding the existing employment sites with value-add and complementary uses.
- Land in the eastern portion of Bacchus Marsh provides potential for new growth areas, creating a character that is distinctive to the existing urban areas in the west.
- Connections within and between the existing and future urban areas will be linked by transport infrastructure – most significantly, the Eastern Link Road.
- Bacchus Marsh needs more local jobs and opportunities to encourage investment and build the local economy (refer to *Section 5 Element 2: Employment*).

CONSULTATION

Community engagement phases

Council's firm commitment to community engagement is outlined in its Community Engagement Policy (adopted 5 September 2012).

The UGF and technical background reports were informed by extensive community engagement. These reports are discussed in further detail in *Report 2 – Technical Findings*.

As part of *Moorabool 2041*, and more specifically for the UGF, Council undertook the following consultation:

Phase 1 – *Moorabool 2041* in 2014–15

Phase 2 – *Urban Growth Framework* in early 2017

An outline of the consultation outcomes and process is provided at Appendix 2.

Agency engagement

The UGF is informed by ongoing engagement with all relevant agencies. A full list of agencies and outcomes of this engagement is provided in Appendix 3.

STRUCTURE OF THE UGF

The UGF consists of five parts:





VISION & PRINCIPLES

VISION

Bacchus Marsh will be an emerging regional growth centre, providing metropolitan-edge convenience, set within a distinctive agricultural valley framed by steep escarpments and significant waterways. Bacchus Marsh will be planned as a rural city in a farming district and as the gateway to Victoria's Central Highlands region.

Bacchus Marsh will draw new residents, investors and tourists due to its liveability, comparatively affordable land, diversity of residential lot sizes, access to services and attractive landscapes. The Bacchus Marsh Irrigation District is a food bowl for Victoria, and a range of other state-significant natural resources present opportunities for economic growth.

As a rural city, Bacchus Marsh's service role and investment in education, health, retail and local industry will be strengthened. The combination of landscape, natural resources and liveability are unique to Bacchus Marsh and will be central to managing future growth.

PRINCIPLES



To identify growth areas for 2041 and beyond

- » Guide new development towards areas capable of change, and away from constraints
- » Provide certainty to the community and development industry
- » Limit potential for liveability and character to be compromised
- » Maximise opportunities for housing and jobs growth.



To plan for new residential areas

- » Identify areas that are suitable for housing growth
- » Ensure that these areas are large enough to be self-sufficient for infrastructure, such as schools and community centres.



To plan for new employment areas

- » Better support the local economy
- » Provide local job alternatives for the two-thirds of adult employees who travel outside the Shire for work
- » Use existing employment areas, such as the Bacchus Marsh Irrigation District, to provide value-add and complementary new local job opportunities.



To identify high-level infrastructure requirements

- » Plan for the Eastern Link Road as a long term solution to reduce the congestion and loss of amenity on Grant Street
- » Plan for a potential second station at Parwan if future growth supports its need
- » Plan for schools and community centres in response to population and demographic needs.



To protect agricultural land

- » Plan for existing and future agricultural uses by setting aside and protecting valuable agricultural land.



To protect features of natural and built environmental value

- » Protect valued features such as the Lerderderg and Werribee Rivers, the Avenue of Honour, Long Forest Nature Conservation Reserve, market gardens and escarpments
- » Improve connectivity between nature reserves, forested Crown land, remnant patches of native vegetation and waterways.



UGF ELEMENTS

Four key elements define the UGF:

ENVIRONMENT

Bacchus Marsh will be a desirable place to live, visit and invest. Urban growth will be managed to ensure liveability, sustainability and resilience to the impacts of climate change.

EMPLOYMENT

Bacchus Marsh will support a variety of new jobs, services and industries. The diversity of its economy, from agriculture through to professional services, will underpin its economic resilience. Its interdependence with the Melbourne and Ballarat economies will be embraced while sustaining the unique local lifestyle.

HOUSING & COMMUNITY INFRASTRUCTURE

Bacchus Marsh will be a healthy and safe regional city with infrastructure and places for people to meet, connect and form a strong sense of community.

TRANSPORT

Bacchus Marsh will become a healthier and more sustainable city through increased opportunities for public transport, walking and cycling within the town.

ELEMENT 1

ENVIRONMENT

The natural landscapes of Bacchus Marsh District are diverse and complex, defined by their valleys, ridgelines, plateaus and escarpments. Highly fertile alluvial soils in the floodplain valley between the Lerderderg and Werribee Rivers support prime agricultural land. Escarpments and gentle rises separate the valley from much of the settlement of Bacchus Marsh and the plateau landscapes. Upon more elevated land north of Darley and south of Maddingley, extensive sand deposits and brown coal deposits are found. Grassland habitats, forest habitats (Long Forest Nature Conservation Reserve, Lerderderg State Park) and significant geological sites are common across the study area.

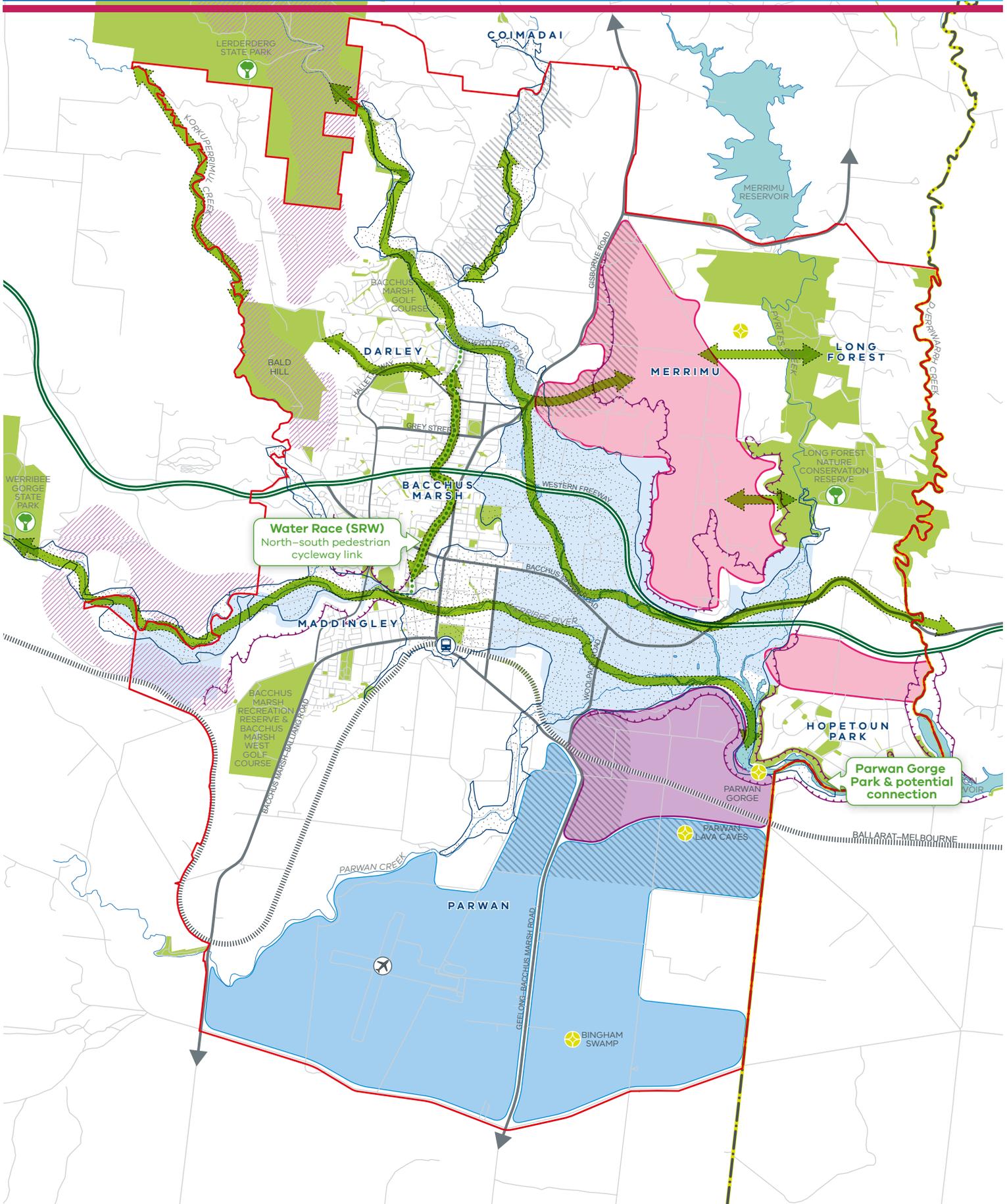
The Bacchus Marsh Valley was a significant place for the Wurundjeri and Wathaurong people who shaped the surrounding landscape, encouraging the grassland characteristics of Parwan and Balliang through the use of fire and land management.

The natural landscape and environmental assets of Bacchus Marsh are to be respected. They create a sense of place, attract new residents and are vital to supporting current and future resident and employment populations. The key to managing and directing growth is embracing these features, while protecting and enhancing significant environmental values, to build upon the town's aesthetic and landscape characteristics.

KEY ISSUES

Natural features considered by the UGF include:

- **Waterways** – six waterways (the Lerderderg and Werribee Rivers, and the Pyrites, Parwan, Korkuperrimul and Djerriwarrh Creeks) flow through the study area. Each provides opportunities for passive open space linkages, as well as being culturally sensitive due to historic Aboriginal occupation. Many waterways contain River Red Gums, which are a protected species. Each waterway needs to be carefully managed with respect to road and other infrastructure that may be required to traverse it.
- **Habitat values** – Bacchus Marsh includes areas of significant biodiversity value. Long Forest Nature Conservation Reserve to the north-east of Bacchus Marsh protects a range of vegetation of botanical significance and a number of flora and fauna species regarded as threatened in Victoria. The reserve also includes the southernmost occurrence of Bull Mallee (*Eucalyptus behriana*) in Victoria. Significant numbers of River Red Gums are found along the Werribee and Lerderderg Rivers. Victorian Volcanic Plain grassland is common throughout the district and requires Commonwealth referral for clearing. The Lerderderg State Park, to the north of Bacchus Marsh, contains a range of vegetation types, including a riparian Blue Gum and Manna Gum community of State significance and 23 significant plant species, together with nine significant animal species.
- **Reserves and parks** – the Lerderderg State Park, Werribee Gorge and Long Forest Nature Conservation Reserve are located either entirely within or adjoining the district. These are significant tourism drawcards and contribute greatly to the study area's landscape and biodiversity.
- **Cultural and geological heritage** – there are many sites of cultural heritage and/or geological significance across the district. In many cases these are of state or national significance, such as Parwan Lava Caves, and are on private land. More effective management and, in some cases, ensuring controlled public access (such as for geological research) are important outcomes.
- **Viewsheds and landscape** – one of the most striking features of Bacchus Marsh is its natural landscape character and setting, including:
 - Topography – the changing topography of ridgelines, hills and plateaus.
 - Open feel – the rural and low density surrounds, wider streetscapes, large open space areas, farmlands, orchards and market gardens are at the heart of the town. These elements complement the natural features that contribute to the town of Bacchus Marsh having an open and country feel.



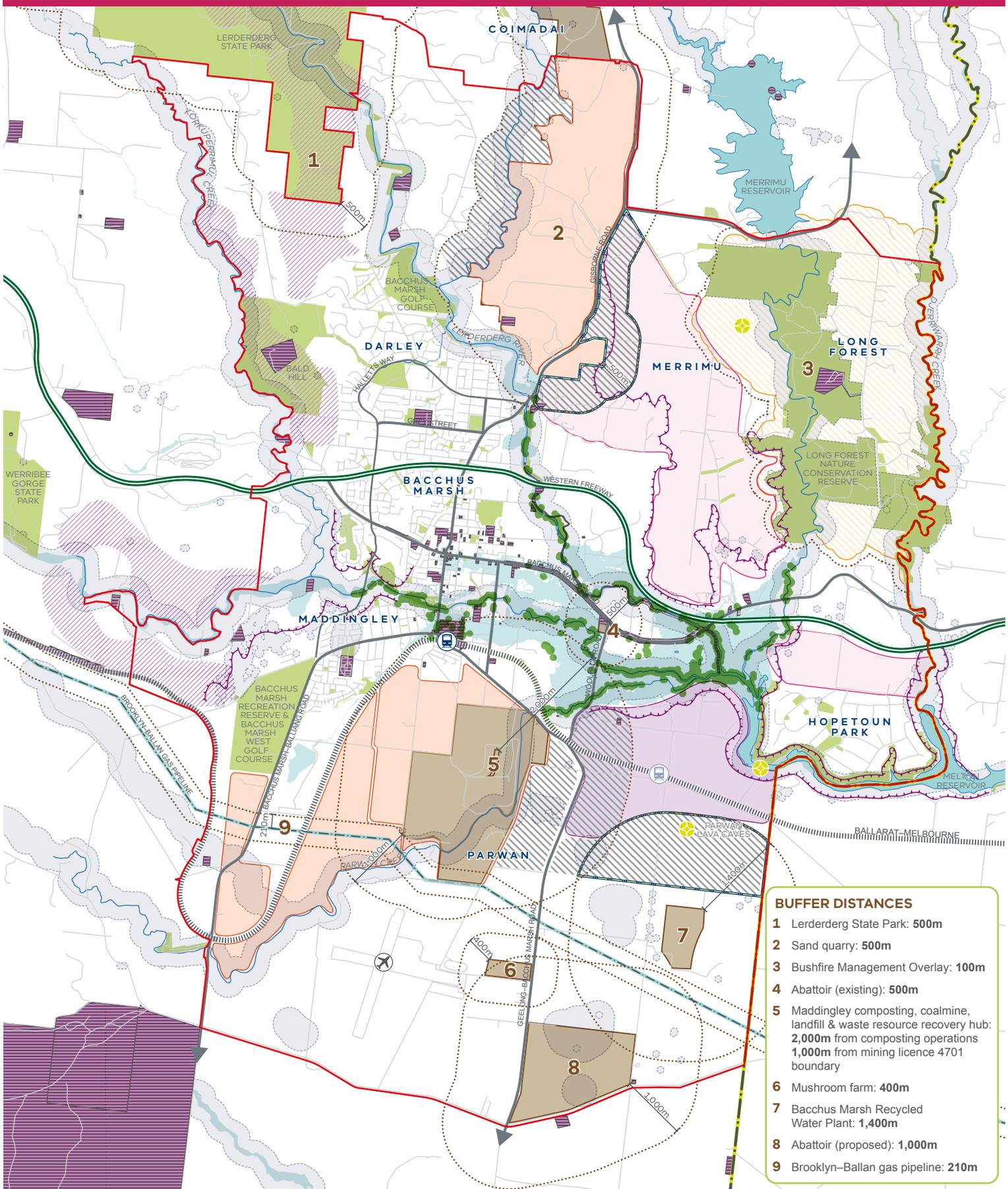
Water Race (SRW)
North-south pedestrian
cycleway link

Parwan Gorge
Park & potential
connection

	Bacchus Marsh district boundary		alluvial soils		state-significant environmental assets
	municipal boundary		open space		watercourse
	future residential growth precinct		potential open space and environmental links		railway line/station
	future residential / commercial precinct		escarpment		freeway
	future employment growth precinct		steep topography		arterial road
	buffer interface required for sensitive uses		environmental feature		Bacchus Marsh Aerodrome
	Bacchus Marsh Irrigation District				

Built features considered by the UGF include:

- **Gateway town entries** – the township provides rural and natural gateway entries, in particular the entrance from the Western Freeway through the historical Avenue of Honour, which is complemented by the farmlands and market gardens. Green gateway views comprising Long Forest, Djerriwarrh Creek and Anthony's Cutting visually separate Bacchus Marsh from the metropolitan Melbourne area and are identified as priorities both within the current planning scheme and by the State Government.
- **Built heritage** – Bacchus Marsh is noted for its historic buildings and structures. Preservation and management of these assets is important to the local economy, tourism opportunities and connection with place. The town centre also has heritage value as one of the first settlements in Victoria.
- **Significant water infrastructure** – the Merrimu and Melton Reservoirs, the Parwan Wastewater Treatment Plant (PWTP), and infrastructure for the Bacchus Marsh Irrigation District. These are managed by three separate water authorities: Melbourne Water, Western Water and Southern Rural Water respectively.
- Significant **coal and sandmining** interests to the south and north of Bacchus Marsh.
- Past growth patterns of the now **established residential areas** of Bacchus Marsh, Maddingley around the Bacchus Marsh station, and Darley north of the Western Freeway.



BUFFER DISTANCES

- Lerderderg State Park: 500m
- Sand quarry: 500m
- Bushfire Management Overlay: 100m
- Abattoir (existing): 500m
- Maddingley composting, coalmine, landfill & waste resource recovery hub: 2,000m from composting operations
1,000m from mining licence 4701 boundary
- Mushroom farm: 400m
- Bacchus Marsh Recycled Water Plant: 1,400m
- Abattoir (proposed): 1,000m
- Brooklyn-Ballan gas pipeline: 210m

settlement boundary	use requiring buffer	steep topography
municipal boundary	heritage overlay	100 year flood extent
future residential growth precinct	bushfire management overlay	watercourse
future investigation / transition precinct	river red gums (ESO8)	railway lines/station
residential / commercial precinct	area of potential cultural sensitivity	freeway
buffer interface required for sensitive uses	open space	arterial road
buffer subject to investigation	environmental feature	Bacchus Marsh Aerodrome
buffer to sensitive uses	escarpment	

ENVIRONMENT OBJECTIVES

- » Protect high-value agricultural land in the Bacchus Marsh Irrigation District (BMID) from encroachment by urban development.
- » Protect and enhance natural assets and landscape features such as the Long Forest Nature Conservation Reserve, waterways and escarpments.
- » Protect waterway corridors to ensure their function and biodiversity are not negatively impacted by any development, and seek to add strategic open space to improve wildlife corridors.
- » Preserve green corridors that physically separate Bacchus Marsh from the City of Melton.
- » Preserve and manage important heritage assets in the district including places of significance for Aboriginal people, the Avenue of Honour and town centre.
- » Provide for an integrated network of parks, open space and trails to connect residents and visitors with the natural assets of the district.
- » Pursue a sustainable approach to water management for the town that encourages the re-use of alternative water (such as collected rainwater and stormwater), minimises flood risk, ensures waterway health and contributes towards a sustainable and green urban environment.

ENVIRONMENT STRATEGIES

Water management

- » Work with Melbourne Water to understand flood risks for the township, particularly from the Lerderderg and Werribee Rivers flood events.
- » Work with Melbourne Water to enhance and rehabilitate Bacchus Marsh waterways, including the Lerderderg and Werribee Rivers, and the Pyrites, Parwan, Djerriwarrh and Korkuperrimul Creeks.
- » Review opportunities for stormwater harvesting within new residential areas.
- » Ensure new development positively addresses sensitive waterways, and ensure their function and biodiversity are not negatively impacted by any development.
- » Consult further with Melbourne Water as the Regional Floodplain Management and Drainage Authority to facilitate the servicing of drainage infrastructure for areas of new development through potential Melbourne Water Development Services Schemes.
- » Prepare an Integrated Water Management Plan for all growth areas, in consultation with relevant water authorities and agencies, to ensure sustainable whole-of-water cycle management.

Bacchus Marsh Irrigation District and Parwan Employment Precinct

- » Continue coordination with water authorities to provide treated water for agricultural uses and business in Parwan (re-use schemes) and other areas to address climate change and drought-proofing.
- » Continue working with water authorities to allow efficient movement of water in Bacchus Marsh Irrigation District to ensure water supply.
- » Ensure that incompatible land use and development does not encroach upon productive agricultural land, particularly the Bacchus Marsh Irrigation District.
- » Undertake five-yearly reviews of operations at Maddingley Waste and Resource Recovery Hub, broiler farms and wastewater treatment facilities to determine appropriate buffers between these facilities and sensitive uses.

Biodiversity, heritage and open space

- » Produce a Bacchus Marsh District Open Space Framework to inform future growth planning. The framework will identify issues and opportunities for active and passive open space, incorporating biolinks, habitat management and integrated water management.
- » Facilitate connectivity between nature reserves (e.g. Lerderderg State Park, Werribee Gorge and Long Forest Nature Conservation Reserve) and waterways in order to retain and enhance biodiversity and facilitate appropriate recreational access.
- » Implement street tree strategies for urban areas, not only to improve urban amenity but to assist with stormwater management/treatment and responses to climate change.
- » Identify important visual values along gateways into Bacchus Marsh and protect significant vistas.
- » Preserve escarpments that define the edges of Bacchus Marsh Valley and plateaus.
- » Ensure Aboriginal cultural heritage assets are protected.
- » Ensure other heritage assets in Bacchus Marsh are protected and included within Heritage Overlays under the Moorabool Planning Scheme.

ELEMENT 2

EMPLOYMENT

Local employment growth is imperative to the future of Bacchus Marsh. Currently, two-thirds of the adult employed population travel outside the Shire for work, mostly in the construction, manufacturing, transport logistics and education sectors. While this access to the external markets of Melbourne, Ballarat and Geelong has contributed to relatively low unemployment rates, local businesses employing local workers would bring economic and social prosperity to Bacchus Marsh. Local employment growth can be facilitated by expansion of the existing diverse local economy.

Increased local job opportunities will have a range of benefits. These include reduced growth in demand for road and rail infrastructure, less time lost in commuting and greater scope for expanded service offerings within Bacchus Marsh. Growth in employment will maximise Bacchus Marsh's competitive advantage, that is, available land at Melbourne's fringe, and connection to key destinations such as freight hubs in Geelong and Melbourne. This will be realised through businesses that value-add, provide beneficial expansion or can co-locate with existing export-based industries.

Employment growth will be realised through the expansion of two key existing sectors:

- population serving, includes jobs in the service industry such as health and education, retail and hospitality and tourism; and
- export-based industries, which largely comprise businesses that produce products consumed outside the shire, including farming, tourism and manufacturing, as well as state-significant quarrying and waste and resource recovery activities.

The fastest growing industries in Moorabool are professional services, construction, health care, and accommodation and food services (see *Figure 2: Jobs by industry in Moorabool, 2011–2051*).

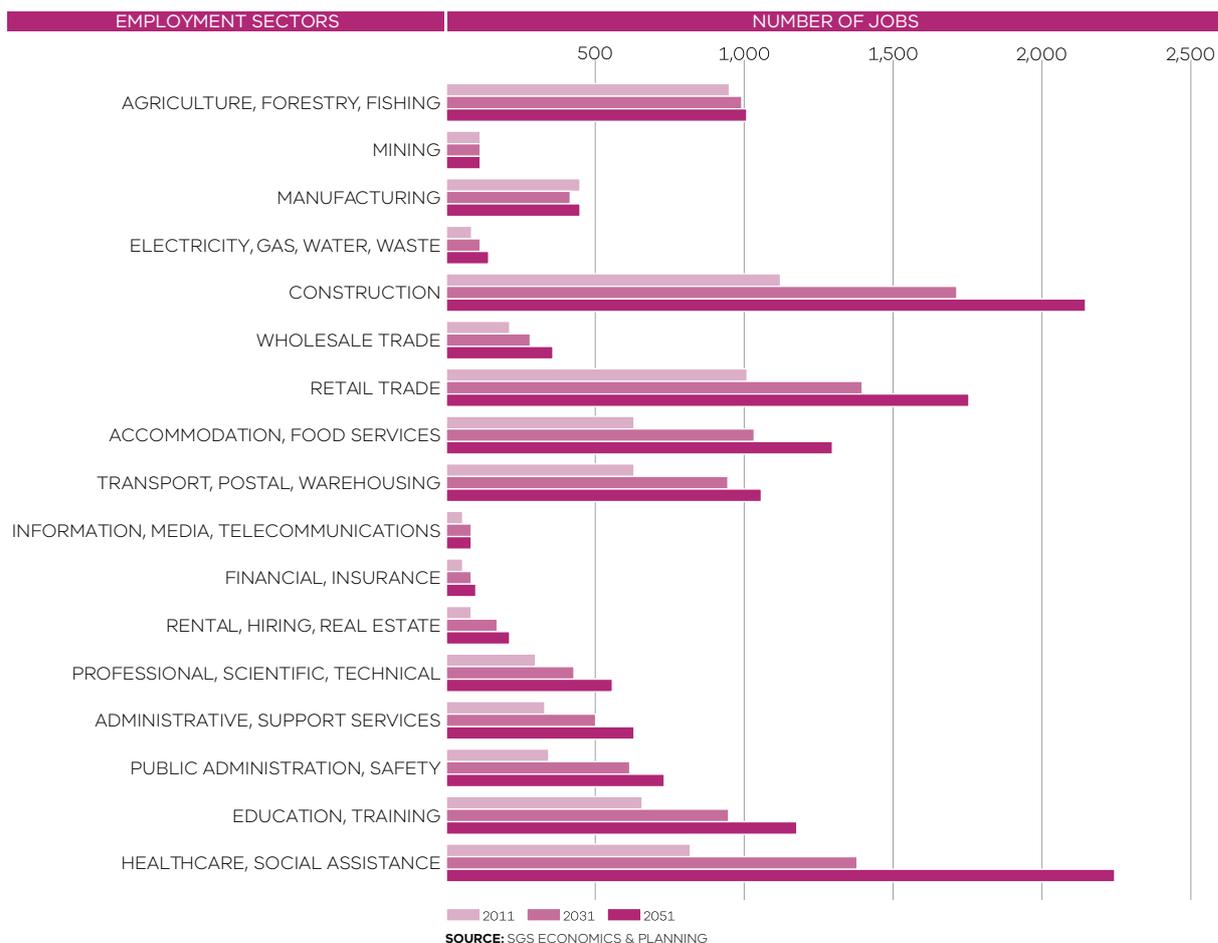


Figure 2: Jobs by industry in Moorabool, 2011–2051

KEY ISSUES

Population-serving industries

The population-serving sector has high employment multipliers (meaning they create a proportionately high number of jobs, both directly and indirectly). These industries generally see high returns on investment. Retail, health, and community and education are the fastest growing industry sectors in the shire in terms of number of jobs.

Education offers one of the highest financial returns for every dollar of output. Secondary education is especially important, as one of the shire's greatest employment growth spaces between 2006 and 2011. Existing schools should be focal points for further investment. Education demand in new growth areas may provide opportunities to establish new education facilities.

Health and community services are essential to support residents. Demand in this high employment multiplier sector will increase with a larger and ageing population. Bacchus Marsh is home to a number of services, most prominently the Bacchus Marsh and Melton Regional Hospital, which serves a catchment larger than the district. Council should advocate for investment in health services at the regional and state levels.

Retail is a high occupation multiplier industry, with retail trade being the largest employment industry in the shire. Growth is generally driven by population growth. Town centres are the focal points for retail, employment and social interaction. Research provided within the *Moorabool Retail Strategy* (Macroplan, 2015) indicates that more than half of the retail expenditure by Moorabool residents is currently escaping the municipality, and being directed primarily to

Melton and Ballarat. There is currently a shortfall of retail floor space in Moorabool to support residents. This shortfall is estimated to increase to 40,000m² by 2031 if no further additions are made.

Much of the additional retail floor space needed in coming years will be delivered in the Bacchus Marsh town centre. In order to accommodate this additional floor space, a framework is needed to clearly define priorities for future land use planning, design and renewal within the town centre. This will address the two key issues of traffic congestion and the lack of a town centre 'heart'. That work, combined with the *Bacchus Marsh Integrated Transport Strategy (2015)*, will substantially shape the performance and amenity of the centre into the future. These will build upon the many important initiatives contained within Amendment C51 to the Moorabool Planning Scheme (including the greenway link to the train station from Main Street and transport circulation priorities).

The existing network of local activity centres such as Darley and Maddingley will be reviewed for urban renewal and consolidation opportunities. These centres will provide more localised retail and service roles for local communities and visitors, in addition to their role as community focal points, public transport hubs and managed infill housing development sites.

Significant retail expenditure escape is currently occurring in the bulky goods sector. Most residents in Bacchus Marsh travel into Melton for these products (estimated at five to seven trips per household annually) due to lack of supply within the shire. There is currently no dedicated precinct or strategy to attract such businesses into appropriate locations within Bacchus Marsh.

A bulky goods precinct would be best located beyond the town centre, on a site with good accessibility and of adequate size to cater for long term demand. Given bulky goods is not a sensitive use, it does not require separation from existing industrial uses with residual off-site emissions. Council is currently undertaking a strategic assessment to identify potential locations. This strategic assessment will be exhibited before deciding on a final location for the precinct.

Some key principles for determining potential locations include:

- Preference for a single precinct.
- Site/s totalling around 5 ha in area.
- Arterial road frontage.
- Ready accessibility to local residents and residents in wider area.
- Relatively flat.
- Compatibility of bulky goods retailing within surrounding uses.

Service industry

Much of the existing industrial-zoned land within the Bacchus Marsh urban area is constrained due to its proximity to sensitive uses, with the exception of the area south of Kerrs Road, Maddingley. Constrained industrial-zoned land is generally considered best suited to local service industries. The existing industrial-zoned precinct at Park Street, Maddingley may have potential as a mixed use precinct, due to its proximity to public transport and the Main Street activity precinct.

Export-based industries

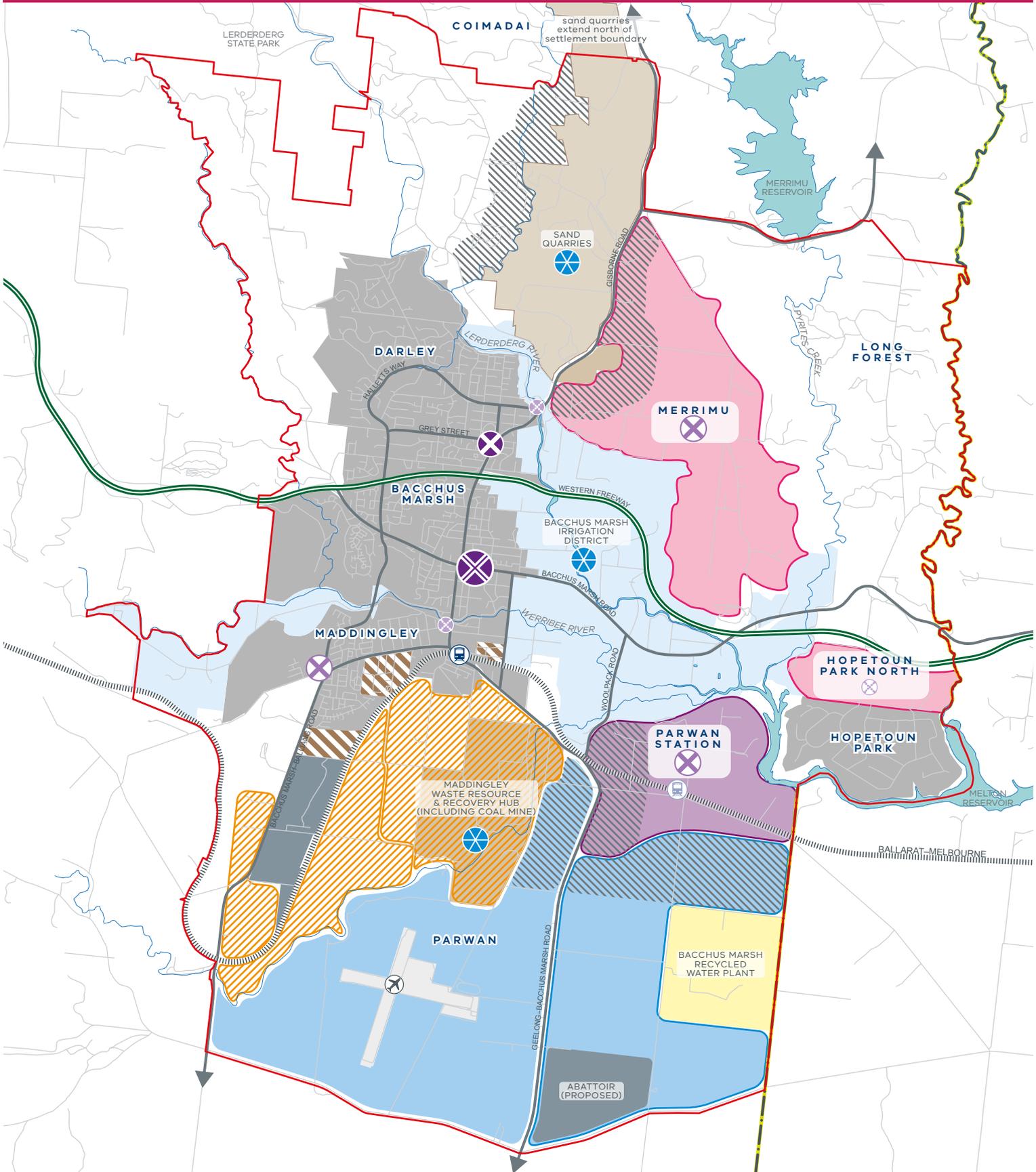
For Bacchus Marsh to transition to a self-sustaining town for employment, more local jobs in export-based industries are needed.

Long-term development of employment land in Melbourne's west will ensure a steady growth of 'spill over' into Moorabool, particularly with Bacchus Marsh being located on the periphery of the Melbourne metropolitan area. This presents a significant opportunity for the shire to attract companies seeking lower-cost areas in resource-driven, export-based industry. There is existing business potential in these industries in Bacchus Marsh and land available to address this opportunity.

There are also a number of state-significant employment uses within the district that provide significant employment and investment, including quarrying and waste and resource recovery activities. Careful planning is required to ensure that these activities can continue and expand as appropriate, with protection from future sensitive uses that may otherwise compromise these operations.

Parwan Employment Precinct

The Parwan Employment Precinct (PEP) has the potential to be a regionally significant employment hub for agribusiness and industry. Benefits include its position away from residential uses, proximity to the Bacchus Marsh Irrigation District and access to the freeway. Opportunities for the PEP are discussed in further detail in *Section 9 Strategic Outcome Areas*.



<ul style="list-style-type: none"> — settlement boundary - - - municipal boundary existing residential area potential residential growth area residential / commercial precinct buffer interface required for sensitive uses public use ~ watercourses ⊗ state significant resource/asset 	<p>EXPORT-BASED INDUSTRIES</p> <ul style="list-style-type: none"> potential employment growth precinct future investigation / transition precinct (no sensitive uses) existing extraction-based employment area existing intensive industrial area transitional local service industry areas <p>POPULATION-SERVING SECTOR</p> <ul style="list-style-type: none"> ⊗ existing major town centre ⊗ existing neighbourhood town centre 	<ul style="list-style-type: none"> ⊗ proposed neighbourhood town centre ⊗ existing local activity centre ⊗ proposed local activity centre <p>TRANSPORT</p> <ul style="list-style-type: none"> ⋯ railway lines/stations — freeway — arterial road ⊗ Bacchus Marsh Aerodrome
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State-significant industry

There are a number of state-significant natural resources and export-based industries making significant employment and economic contributions to Bacchus Marsh. These potentially have synergies with the new PEP:

- **Bacchus Marsh Irrigation District (BMID)** – state-significant irrigation and agricultural district administered by Southern Rural Water. The BMID supports most of Bacchus Marsh’s agricultural production, thanks to its fertile alluvial soils and location in the Bacchus Marsh Valley. Produce from the BMID is transported across the state, interstate and internationally. Its location along the Avenue of Honour and at the gateway to Bacchus Marsh also makes it suited for tourism opportunities. Future output must be safeguarded – most crucially through securing water supply and infrastructure.
- **Darley sand quarries** – a state-significant sand resource for Melbourne’s western growth front and construction industry. This includes both land within the settlement boundary as defined on Plan 5, as well as land further north (as approved under Extractive Industries Work Authority 342).
- **Coal resources** – the Maddingley Brown Coal operation comprises a coalmine and landfill that serves both resource extraction and refuse management: coal is extracted and pits are subsequently filled with inert construction waste. Coal is recognised as a state resource, however, Maddingley’s brown coal is of a lesser grade than Latrobe Valley, suiting it to industrial fuel uses rather than power generation.
- The **Maddingley Waste and Resource Recovery (WRR) Hub** is state-significant for its role in receiving solid industrial waste from Melbourne. The landfill also plays an important role in receiving shredder flock – recovered materials from cars and whitegoods. Additionally, material recovery operations produce composting, where extracted brown coal is mixed with green waste refuse. Maddingley WRR Hub is identified as a hub of state importance in the Statewide Waste and Resource Recovery Infrastructure Plan, and is strategically located relative to both metropolitan Melbourne and the broader Grampians Central West region. It represents an opportunity for further employment growth, both in relation to the operations at the site itself, as well as potential synergies with new industries in the Parwan Employment Precinct and elsewhere within Bacchus Marsh.

While these businesses provide a huge opportunity for the town and shire more broadly, there are off-site impacts that need to be managed. The UGF seeks to provide investor certainty for these businesses while providing sufficient separation distances to residential areas to avoid the impacts of noise, odour and dust. Plan 4 of the UGF identifies a series of buffers from these uses as relevant, where future planning (including PSPs) will prohibit new sensitive uses from occurring to protect the ongoing operation of these uses. Plan 1 of the UGF identifies the need for a buffer interface between the Maddingley WRR Hub and sensitive uses. This will be reviewed by Council, particularly for opportunities to reduce the land needed as a buffer by improving onsite management practices.

Future Maddingley employment investigation area

This investigation area is located between the Maddingley Waste and Resource Recovery Hub, Parwan Creek and the existing urban area. Due to its proximity to industrial land uses, this area is unsuitable for sensitive uses. Further studies are required to identify appropriate future uses, future direction and planning controls. These issues are discussed further in *Section 9 Strategic Outcomes Areas*.

EMPLOYMENT OBJECTIVES

Export-based employment objectives

- » Plan for greater self-sufficiency in the Bacchus Marsh economy through growth and diversification.
- » Recognise and protect the role of the Bacchus Marsh Irrigation District as a major part of Melbourne's food bowl.
- » Plan for a regionally significant employment hub of value-adding agribusiness and export-led businesses within the PEP.
- » Encourage local service industrial uses that benefit from proximity to the town centre and can conform with amenity separation distances.
- » Protect state-significant sand resources at Darley and Coimadai.
- » Protect the state-significant Maddingley Waste and Resource Recovery Hub (including coal mining).
- » Manage the transition of extractive industries and heavy industrial uses.
- » Provide long term options for employment growth for uses compatible with buffer requirements.

Population-based service employment objectives

- » Ensure education provision matches projected demand.
- » Ensure health provision matches projected demand.
- » Develop and enhance the vitality and viability of activity centres (in accordance with an activity centre hierarchy).
- » Focus the shire's major retail growth and investment in the Bacchus Marsh town centre.
- » Plan for a bulky goods precinct to reduce escape expenditure.
- » To provide for service industries on industrial zoned land in Maddingley (north of Kerrs Road).

EMPLOYMENT STRATEGIES

Export-based employment strategies

Bacchus Marsh Irrigation District (BMID)

- » Designate, define and protect the BMID to encourage ongoing investment, particularly in water infrastructure.
- » Plan for water security including exploring the possibility of using recycled water supply in the BMID.
- » Ensure incompatible land use and development does not encroach on the agricultural practices of the BMID.
- » Manage the interface and potential land use incompatibilities between the BMID and non-farming uses.
- » Investigate opportunities for agricultural education uses to further support the agricultural focus of Bacchus Marsh.

Parwan Employment Precinct

- » Designate, develop and promote the PEP as a regionally significant employment hub.
- » Prioritise gas and water supply (including recycled water) and actively seek appropriate public funding for infrastructure.
- » Work with the relevant state agencies to facilitate and attract potential business and investment to the precinct.
- » Provide appropriate buffers to protect key industries developing and investing within the PEP.

Extractive industries, mining, and waste and resource recovery

- » Support the ongoing operation of extractive industries, including state-significant sand quarries.
- » Support the ongoing operation of the state-significant Maddingley Brown Coal Waste and Resource Recovery Hub (including coal mining).
- » Manage negative off-site amenity impacts on sensitive land uses by providing adequate separation distances (i.e. prohibit sensitive uses within buffers as appropriate) and support opportunities for new and advanced onsite treatment to manage offsite amenity impacts.
- » Investigate potential new end uses for quarries when sand resources are depleted, and ensure new end uses are managed at the precinct level to ensure compatibility.

Future Maddingley Employment Investigation Area

- » Ensure any new development proposal in this area is supported by an Integrated Water Management Strategy that considers alternative water supplies.

Population-based employment strategies

Health, education and community

- » Ensure sufficient land is set aside and zoned for education, health and community purposes in existing urban areas and new residential growth areas.
- » Encourage new and upgraded health and community facilities.
- » Advocate for more focused investment in schools – state and private sector.
- » Explore and encourage higher education and training establishments to locate and expand in Bacchus Marsh.
- » Plan and advocate for the consolidation of facilities, parking and access between Bacchus Marsh Grammar School and Bacchus Marsh College.
- » Address government primary school provision in the existing urban area by working with the Department of Education and Training to:
 - review school provision in the Bacchus Marsh and Maddingley area (1–2 years)
 - locate and deliver a fourth school for Bacchus Marsh and Maddingley (5–7 years).

Retail

- » Plan for activity centres in accordance with the activity centre hierarchy for Bacchus Marsh and ensure sufficient commercially zoned land.
- » Ensure activity centres are delivered in early stages, co-located with community facilities and, where applicable in each stage, plan for new growth areas.
- » Ensure new retail matches projected population numbers.
- » Encourage commercial growth in accordance with the town centres hierarchy.
- » Define and establish characters within activity centres and with a central ‘heart’ of activity.
- » Support businesses that promote local products.

Bacchus Marsh town centre and bulky goods precinct

- » Plan for and position Bacchus Marsh town centre as the key centre for economic development in the shire.
- » Prepare an urban design framework (UDF) for the town centre to plan for improved public realm outcomes, encourage development of underutilised sites and identify locations suitable to more intensive development.
- » Plan for a bulky goods precinct in Bacchus Marsh, subject to meeting agreed locational criteria contained with an endorsed strategy.
- » Prepare a precinct plan to guide growth of the bulky goods precinct including design and landscape guidelines to create a sense of place.

Service industry

- » Encourage service industries to establish in Maddingley (north of Kerrs Road) and investigate rezoning this precinct from Industrial 2 Zone to Industrial 3 Zone.
- » Investigate rezoning the Park Street, Maddingley industrial precinct from Industrial 2 Zone to Industrial 3 Zone or Mixed Use Zone, to limit manufacturing and facilitate service industry and other compatible uses.
- » Investigate rezoning the Griffith Street, Maddingley industrial precinct from Industrial 2 Zone to Industrial 3 Zone.

ELEMENT 3

HOUSING &
COMMUNITY
INFRASTRUCTURE

Bacchus Marsh's population is expected to double to 40,000 residents by 2041, averaging an annual growth rate of 3% from 2015–2031 (VIF) and within a range of 2.2–3.5% from 2031–2041 (Spatial Economics, 2015). This unprecedented rate of growth is attributed to regional growth, an ageing population, increased migration, increased fertility and economic pressures. The *Bacchus Marsh Housing Strategy* identifies that Bacchus Marsh is an integrated component of the wider metropolitan housing market and is competing for growth with Melton and Wyndham.

Without management this growth will place a strain on local road systems, service delivery (schools, public transport, retail etc.) and the environment, with pressure for housing on steeper land or near agricultural uses. Managing growth, however, can create opportunities for the town and will be important in attracting new education and health investment, transport upgrades and expanded retail services.

The UGF seeks to address growth pressures by identifying growth investigation areas and facilitating clear policy direction on how to manage infill development within existing urban areas.

Community infrastructure provides essential services, programs and activities to support residents. The quality and quantity of services contributes significantly to the health and wellbeing of communities and lifestyle opportunities.

As the population grows, existing services will need to be assessed for upgrades and new services will need to be planned and delivered, as per standard provision ratios. This will include reviewing the existing residential areas of Bacchus Marsh to ensure that development in remote locations of the township are not isolated from community infrastructure. In new areas, infrastructure plans will guide this. Roles of the government and developers should be appropriately apportioned to ensure the coordinated delivery of infrastructure.

KEY ISSUES

The key housing policy issues concern neighbourhood character, housing supply and demand, housing diversity and affordability.

Neighbourhood character

Respecting and better managing neighbourhood character in existing areas of Bacchus Marsh remains a priority.

To address the inconsistencies and identified concerns, 'Neighbourhood Character' brochures have been prepared that identify the existing and preferred character of each Precinct. Additionally, a number of recommended strategies and actions are provided via Amendment C79 which is currently under consideration. Recent housing growth in Bacchus Marsh has been criticised for its lack of sympathy to neighbourhood character (Mesh, 2016), in particular:

- the loss of rural views due to inappropriate development on surrounding ridgelines, hills and plateaus;
- minimal landscaping, in particular a lack of street tree plantings. The lack of landscaping has a significant impact on the character of the town; and
- an expanding residential settlement boundary has resulted in development in more remote locations, including lots that have been developed too intensively for their location.

Presently there are no clear controls in place within Bacchus Marsh beyond limited heritage overlays and statewide Victoria Planning Provisions (VPPs). More comprehensive controls and guidance are needed for the future.

Housing supply and demand

Council modelled a number of growth scenarios for the development of Bacchus Marsh (see *Figure 3 Adequacy of broadhectare land stock*). Under the fastest growth scenario (scenario 4) there will be a shortage of land for greenfield development by around 2030, with infill housing remaining a modest component (under scenario 3 the timeline is 2041).

Given that Council should have 15 years supply of zoned residential land (Clause 11, *State Planning Policy Framework*) and the likelihood that any growth planning involving a precinct structure plan may take some time to complete (two to three years), it will be necessary to begin forward planning for future land releases in the medium term. Further discussion on new growth areas required for the medium term is in Chapter 10.

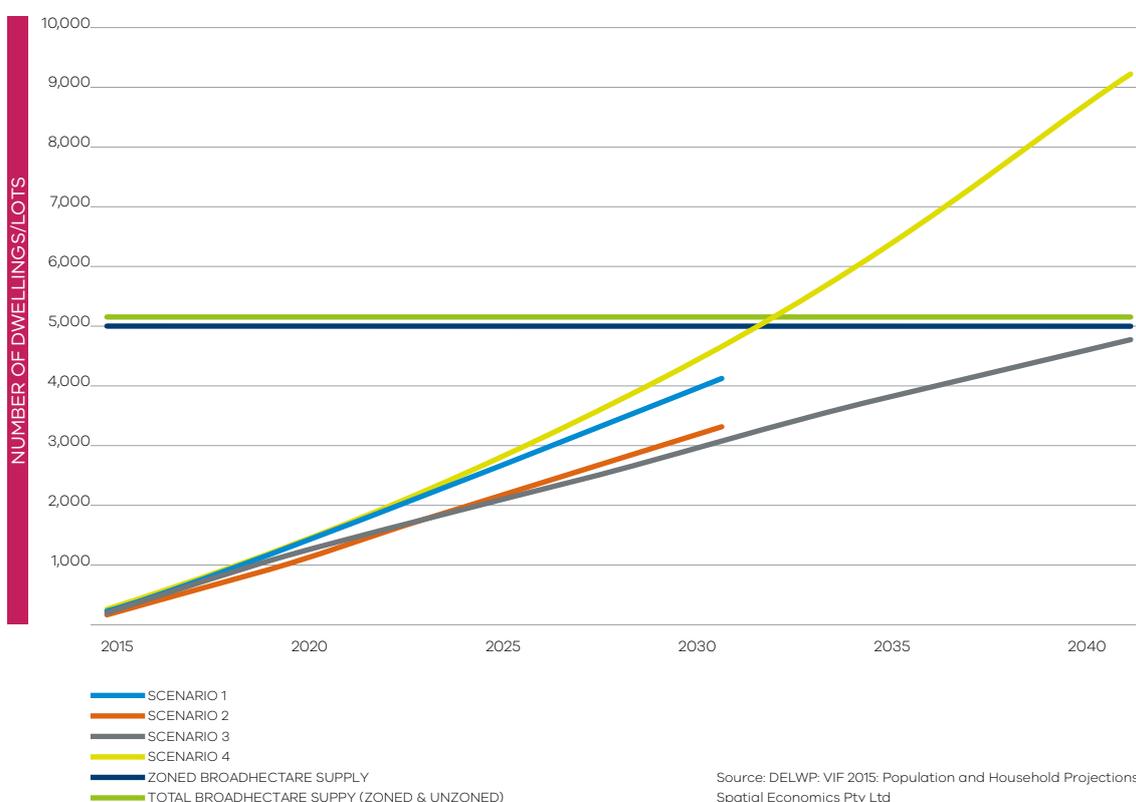


Figure 3 Adequacy of broadhectare land stock

There is currently sufficient zoned residential land to accommodate 15 to 20 years of growth, as required by state policy. Council should review this every five years to ensure Bacchus Marsh continues to meet this target. As greenfield sites become progressively exhausted in West Maddingley and Underbank (Bacchus Marsh) it is likely that by around 2030 onwards supply limits for new housing will become more apparent. With the time required to undertake studies, prepare masterplans and precinct structure plans or development plans (typically three to five years), new growth planning can reasonably commence in the short to medium term, especially if this assists in delivering the Eastern Link Road.

As a first principle for residential growth, consolidation of existing urban areas around Bacchus Marsh in nominated precincts should be encouraged. The larger lots that are typical in Bacchus Marsh can accommodate this. While preferred, this type of development accounts for only a small portion of overall residential growth because land tends to be fragmented and redevelopment occurs incrementally.

New growth areas will need to be nominated. Providing a number of growth fronts will allow flexibility to respond to influences and changes in supply and demand. Growth in these areas will be guided by precinct planning and will need to designate densities based on land serviceability, demographic needs and natural and built features.

The UGF identifies four Strategic Outcome Areas to support the growth of Bacchus Marsh: Parwan Employment, Merrimu, Parwan Station and Hopetoun Park North. The latter three areas are expected to accommodate significant new residential development. Detailed planning will be required for each of the Strategic Outcome Areas (including the preparation of PSPs, or other planning projects as appropriate), which will determine the extent and form of future residential development in each, and include more specific population projections. However, preliminary growth estimates for the three Strategic Outcome Areas are:

- **Merrimu** – between 13,400–20,000 people (4,800–7,200 households)
- **Parwan Station** – between 9,000–13,000 people (3,200–4,700 households)
- **Hopetoun Park North** – between 1,900–3,200 people (700–1,100 households)

Housing diversity

In outer parts of Melbourne over three-quarters of the housing stock is separate dwellings. In Bacchus Marsh, 92% (1,350) of the housing stock since 2001 has been separate dwellings, with an increase of 2.7% per annum. Townhouses and apartment-type dwellings make up only a small proportion of housing in Bacchus Marsh, and between 2001 and 2011 grew by just 110 dwellings.

These figures are consistent with comparable municipalities, but it nevertheless demonstrates a lack of housing diversity within Bacchus Marsh, although Bacchus Marsh has historically been more affordable than other locations. Of the 6,840 (Sept. 2015) residential dwellings within Bacchus Marsh, the majority (58%) are on lots of between 500 and 1,000m², with a further 22% on lots with an area greater than 1,000m². Less than one-fifth (18%) of dwellings are on lots less than 500m².

The larger percentage of lot sizes that are between 500m² and 1,000m², and those larger than 1,000m², is a defining characteristic of Bacchus Marsh, not typically found in areas this close to Melbourne. New residential estates, however, constructed in Maddingley and western Bacchus Marsh, typically comprise smaller lots more consistent with the patterns of metropolitan Melbourne. Striking a balance between these different housing remains a priority.

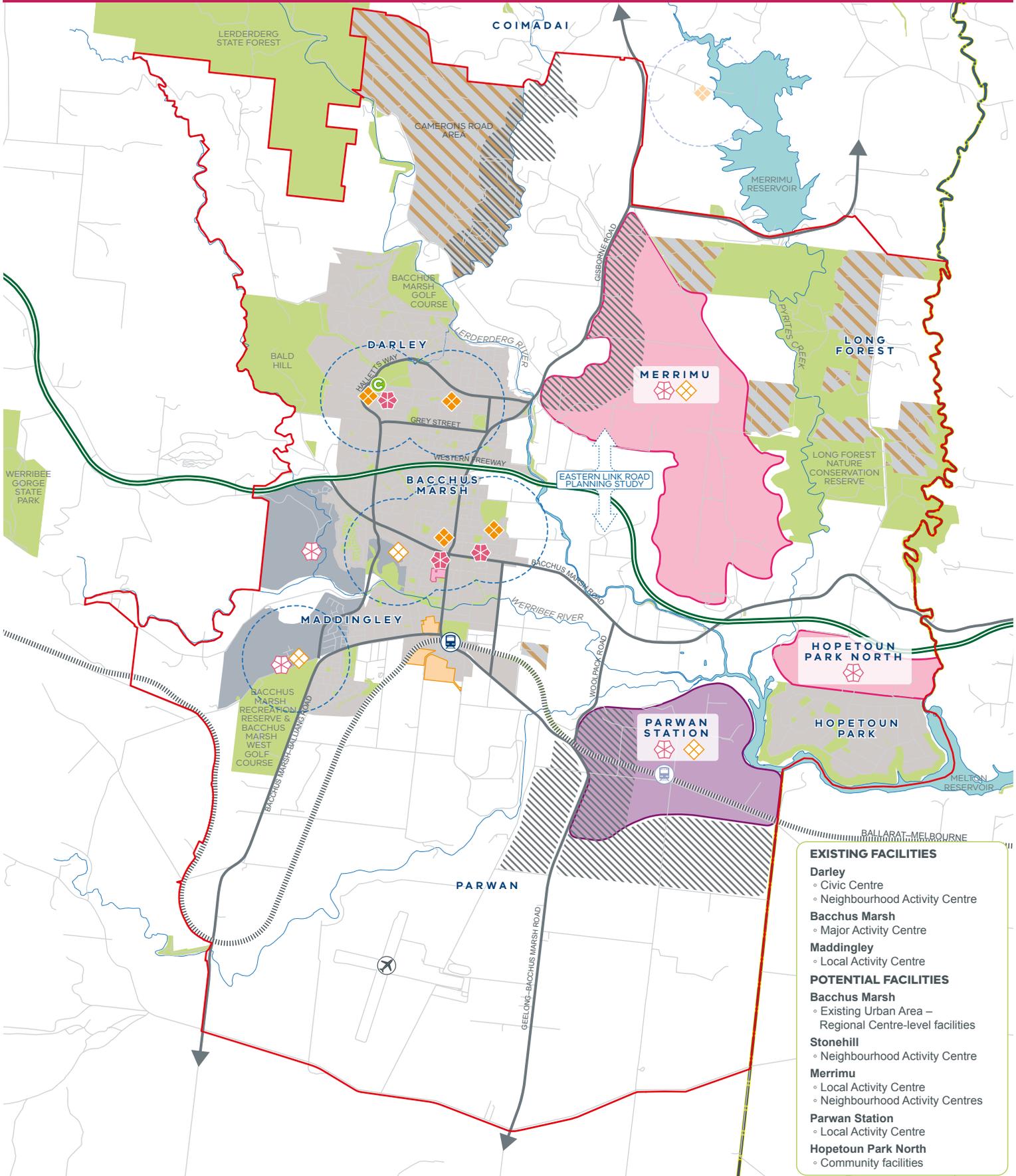
Affordable housing

Affordable housing can be defined as “that which does not cost (in rent or mortgage payments) more than 30% of gross household income for households in the bottom two quintiles of the area’s (i.e. Greater Melbourne) median income” (*Transforming Housing: Affordable Housing for All*, Whitzman, Newton, Sheko, 2015).

As identified in the *Bacchus Marsh Housing Strategy*, middle-income couples with children have a reasonable ability to purchase a home. However, for other family types on middle incomes (particularly single-person and single-parent households), home ownership remains difficult. Greater availability of units/villas/townhouses may help these households purchase a home or better meet more diverse housing needs; however, greenfield areas will also continue to play an important role in maintaining overall affordability levels.

Of the low-income households renting or purchasing a dwelling in Bacchus Marsh, nearly 1,200 are deemed to be experiencing housing stress (i.e. spending over 30% of their income on rent or mortgage payments). The percentage of low-income households in housing stress in Bacchus Marsh is slightly less than the Outer Western Region and the average for metropolitan Melbourne. The projected increase in single-person and single-parent households and the ageing population will likely worsen housing stress, making social housing an important option.

Social housing in Bacchus Marsh is provided by the State Government through the Department of Health and Human Service (DHHS). DHHS has only 218 dwellings in Bacchus Marsh, with a further 28 managed by the community housing sector. The provision of, and access to, social and special needs housing is limited by supply, not demand. Actions to address affordability, beyond supply and diversity of housing stock, are further explored in the *Bacchus Marsh Housing Strategy*.



- EXISTING FACILITIES**
- Darley**
 - Civic Centre
 - Neighbourhood Activity Centre
 - Bacchus Marsh**
 - Major Activity Centre
 - Maddingley**
 - Local Activity Centre
- POTENTIAL FACILITIES**
- Bacchus Marsh**
 - Existing Urban Area – Regional Centre-level facilities
 - Stonehill**
 - Neighbourhood Activity Centre
 - Merrimu**
 - Local Activity Centre
 - Neighbourhood Activity Centres
 - Parwan Station**
 - Local Activity Centre
 - Hopetoun Park North**
 - Community facilities

- settlement boundary
- municipal boundary
- existing urban area
- existing rural residential
- existing greenfield residential development
- public park
- college precinct
- health precinct
- watercourses
- future residential growth precinct
- residential/commercial precinct
- buffer interface required for sensitive uses
- railway lines/stations
- freeway
- arterial road
- Bacchus Marsh Aerodrome
- civic centre
- 800 metre primary school walkable catchment
- existing community facilities
- potential community facilities
- existing primary education
- potential primary education

COMMUNITY FACILITIES AND EDUCATION

Key community facilities in Bacchus Marsh largely consist of health centres, schools and recreational centres. Demand for community facilities is expected to increase, driven by an ageing population, in-migration of young families and the need for healthier lifestyles. Community facilities are most effective and accessible when co-located with activity centres, and should be distributed across these activity centres according to population catchments.

Existing urban area community needs

- Primary school provision – analysis suggests a fourth government primary school is required in the short term and a fifth may be necessary in the longer term. The locations of these will be led by consideration of 400m and 800m walkable catchments. To secure these sites, Council will need to share information and collaborate with the Department of Education and Training.
- Bacchus Marsh currently lacks a large enough function centre to address the needs of the community, and in particular larger educational institutions.

Future community facilities

Bacchus Marsh is identified in a range of strategic documents as an educational hub. Increasing educational outcomes through targeted investment in facilities is a key goal.

There are a range of key education providers that will need to be actively engaged in planning for new growth to ensure that a variety of future education needs can be met to support a growing population. This includes the Department of Education and the non-government sector, including Catholic Education Melbourne.

Future primary schools: With the growth in younger families in Bacchus Marsh, primary schools are a high priority. Precinct structure plans for new growth areas should identify suitable sites for government and non-government (including independent and Catholic) primary schools within reasonable walking distance of the communities they are planned to service.

Existing secondary schools (Bacchus Marsh College and Bacchus Marsh Grammar): Future planning of these precincts will be necessary to ensure that there is more effective access, scope for new parking, and better pedestrian and cycling access, as well as provision for future facilities.

Future secondary schools: Council will work with key education providers to identify suitable sites for new government and non-government (including independent and Catholic) secondary schools within the new residential growth precincts, wherever there is a demonstrated need.

Health: The State Government will need to investigate regional health service provision at Bacchus Marsh and Melton Regional Hospital as the major regional health service in the area. Council should also work closely with Djerriwarrh Health Services, an existing medical hub, on how it can evolve, deliver further allied services, and be reinforced as a major employer and health provider.

Community facilities and school requirements for future growth areas are outlined in *Section 9 Strategic Outcome Areas*.

Open space and parks

Open spaces facilitate the vital community activities of rest and leisure. The Bacchus Marsh open space network comprises a mix of active and passive recreational opportunities set within a unique landscape. Active recreation areas are planned in accordance with demographic needs and sport participation trends. Co-locating them with school facilities and shared sporting clubs allows for efficient use and management.

Informal recreation areas include parks and gardens through to walking and cycling trails along waterway corridors. The extensive areas of natural open space in and around Bacchus Marsh, and particularly Lerderderg State Park and Long Forest Nature Conservation Reserve, provide excellent opportunities for residents to engage in unstructured recreation. Methods to connect and improve access to these environmental resources and existing community assets is an ongoing strategic challenge. One such opportunity is to transform the now-redundant open irrigation channel through the existing urban area into a walking trail.

Recreational needs identified for 2041 include:

- cricket ovals – four
- AFL football ovals – five
- soccer fields – four (including a district-level facility)
- netball courts – five
- basketball courts – seven
- minor sports, e.g. table tennis, futsal and badminton.

An indoor aquatic facility will become a potential priority when the catchment population exceeds 50,000. This will be around the year 2025. A countering factor is that there is a regional facility at Melton within a 10–15 minute commute (Melton Waves).

Utilities

Communications, energy and water utilities are critical to supporting communities. For the most part, existing residential areas are already appropriately serviced, though these may require incremental upgrades in the future. New residential areas are either already connected or are large enough to justify precinct-scaled utility installation and management.

Any growth investigation area will require a full reticulation design to support urban growth. How existing housing upon larger lots is to be serviced will be considered as part of the precinct structure plan process.

HOUSING AND COMMUNITY OBJECTIVES

- » To plan for well-designed and well-serviced residential development to support projected growth to 2041 and beyond.
- » To encourage lot consolidation and increased dwelling density in locations close to transport, infrastructure and services.
- » To maintain existing rural living areas and manage interfaces with environmental assets and industry uses.
- » To plan for improved and new community infrastructure facilities that sufficiently support the existing and new residential areas of Bacchus Marsh.

HOUSING AND COMMUNITY STRATEGIES

- » Encourage infill growth in areas that are well-serviced and connected to activity centres, public transport hubs and community infrastructure.
- » Ensure that new residential development in Bacchus Marsh results in development with a distinct character, through use of landscaping and good design.
- » Ensure development staging includes delivery of activity centres and community facilities during early stages.
- » Use Precinct Structure Plans to plan for and guide growth in residential growth areas. In the case of Hopetoun Park, given its much smaller scale, a Development Plan process may be a more appropriate mechanism to guide growth.
- » Provide housing diversity by responding to land opportunities and constraints.
- » Develop minimum standards for landscaping and street design for new residential development throughout Bacchus Marsh.
- » Plan for and design distinct characters for new residential precincts, focusing on activity centres and open spaces.
- » Ensure that all residential developments adjacent to industry, rail corridors and major roads provide appropriate noise attenuation in dwellings.
- » Implement the *Bacchus Marsh Housing Strategy*.
- » Review community infrastructure in existing residential areas to ensure appropriate provision across the township.

ELEMENT 4

TRANSPORT

Transport is essential to creating sustainable neighbourhoods and prosperous towns. Bacchus Marsh needs a transport network that provides necessary arterial road linkages, capitalises on existing infrastructure, improves active and public transport connections in existing areas, plans for well-connected and multimodal connections in new areas, and integrates the existing network into new areas.

Investment in transport infrastructure is critical to the ability of residents to access essential medical services, education, local employment and other aspects of daily life.

The transport issues facing Bacchus Marsh relate to:

- Traffic congestion, which reduces liveability of urban areas and economic productivity.
- Population and economic growth, which provides many benefits to the town but also places pressure on the transport network.
- Social exclusion resulting from lack of access to transport due to limited physical mobility, financial constraints or the inadequacy of local transport infrastructure.
- Missing links that force trips through already congested areas as already seen in the constrained north–south connection through the township.
- The need for key infrastructure such as the Eastern Link Road and east-facing freeway ramps on Halletts Way (identified in the *Central Highlands Regional Transport Strategy 2014*).

As the holistic framework for the growth of Bacchus Marsh and the surrounding district, the UGF will play a critical role in establishing the key components of the future strategic transport network. It will be the primary mechanism for ensuring high level integration between transport and land use decisions for the Bacchus Marsh district.



KEY ISSUES

Arterial road network

As a regional centre with a relatively dispersed settlement pattern, Bacchus Marsh will continue to have a relatively high level of vehicle dependence. Neighbourhoods, activity centres and key destinations will need to be accessible by road, which in turn need to support public transport, cycling and walking.

An efficient road network for Bacchus Marsh would:

- facilitate efficient east–west and north–south connections through the district area; and
- use ring roads to permit internal cross-town movements.

The Western Freeway provides excellent east–west access through the settlement area, supplemented by Bacchus Marsh Road. However, Gisborne Road/Grant Street is the only north–south connection, and this places significant strain on the wider network. A growing population and planned employment growth will only worsen this. The future growth and liveability of Bacchus Marsh will be improved if the Eastern Link Road is delivered.

The existing urban areas in the west of town will be serviced with completion of the Halletts Way connection, providing the next section of an ultimate ring road. New growth areas in the east will provide opportunity to complete this circuit.

Delivery of a more effective and efficient arterial road network is also critical if pedestrian and cycle connections around Bacchus Marsh are to be delivered.

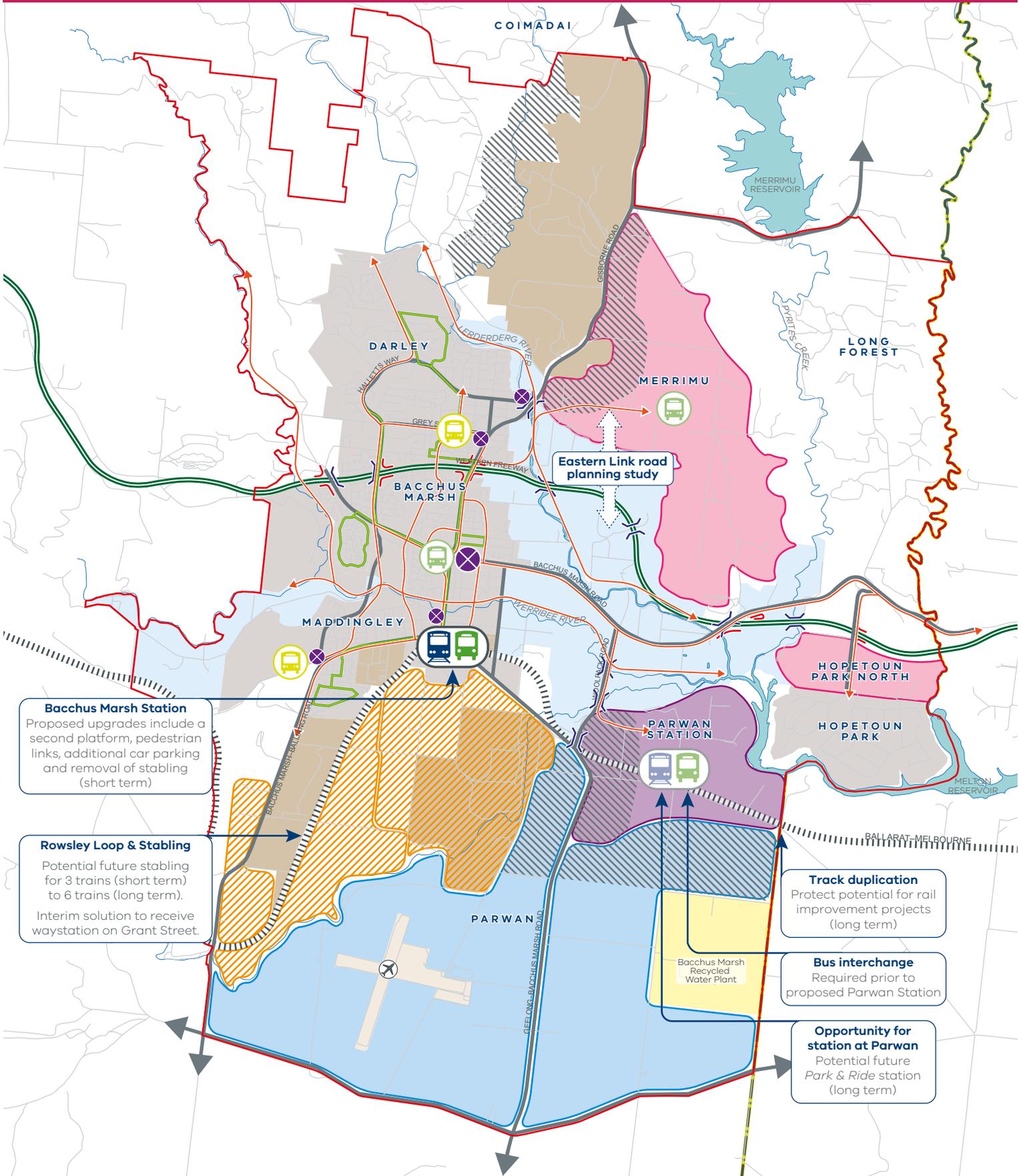
Western Freeway

The Western Freeway bisects Bacchus Marsh, extending east–west and providing excellent access to Ballarat and Melbourne and beyond. This connection will continue to play a vital role in the future growth of Bacchus Marsh. However, with just one north–south connection across the Western Freeway, the benefit of this significant infrastructure for Bacchus Marsh is not fully realised.

Eastern Link Road

The Eastern Link Road is vital to the future of Bacchus Marsh. There is a strong need for the road to service existing residents and businesses. It is also needed by industries located outside the Bacchus Marsh District, many of which require road freight access to Geelong Port, through the Bacchus Marsh District to agricultural areas further north. As a regionally important piece of transport infrastructure, the Eastern Link Road also provides an opportunity to establish a multi-modal transport corridor, incorporating important public transport, walking and cycling connections. The delivery of this road is fundamental to the success of future growth, particularly the potential PEP, which will rely on freight connections. Further development of the Bacchus Marsh town centre also depends on it, as negative congestion impacts are already a concern here. The State Government will need to consider seeking developer contributions from new growth areas to deliver this road. Sequencing of new growth areas should be tied to planning for funding and constructing the Eastern Link Road, in collaboration with VicRoads.

Whilst the Eastern Link Road represents a critical component of the future Bacchus Marsh transport network, given the scale of this project, it is likely that interim solutions to improve north–south connections (as well as the general capacity of the existing road network) will be required to support early development in the Strategic Outcome Areas. This could include improved connections along Gisborne Road and a potential interim connection with the Western Freeway and Bacchus Marsh–Geelong Road, although considerations of residential acquisition and disruption of the BMID will have to be navigated. This might also involve a series of smaller projects on key roads and intersections to improve the efficiency and capacity of the network.



Bacchus Marsh Station
Proposed upgrades include a second platform, pedestrian links, additional car parking and removal of stabling (short term)

Rowsley Loop & Stabling
Potential future stabling for 3 trains (short term) to 6 trains (long term).
Interim solution to receive waystation on Grant Street.

Eastern Link road planning study

Track duplication
Protect potential for rail improvement projects (long term)

Bus interchange
Required prior to proposed Parwan Station

Opportunity for station at Parwan
Potential future Park & Ride station (long term)

- | | | |
|--------------------------------------|--|---|
| — settlement boundary | ▨ future investigation / transition precinct | → potential/existing pedestrian & cycle network |
| — municipal boundary | ▨ buffer interface required for sensitive uses | — existing interchange |
| — existing urban area | — railway lines/stations | — bridge / overpass |
| — Bacchus Marsh Irrigation District | — existing bus route | — freeway |
| — existing industrial area | — existing bus interchange | — arterial road |
| — future residential growth precinct | — proposed bus interchange | — watercourse |
| — residential / commercial precinct | — key public transport nodes | — Bacchus Marsh Aerodrome |
| — future employment growth precinct | — existing activity centre or retail | |

Local ring road network

Construction of the Halletts Way connection completes one half of the ring road, facilitating cross-town movements within the existing urban area in the west. The growth front in the eastern portion will need to provide its own ring road and complete the circuit for the wider Bacchus Marsh District. At present, a combination of existing unsealed roads and local roads facilitate a circular movement in the east, but movements are made inefficient by indirect connections and intersections. Future planning will need to improve this, potentially with the contribution of the Eastern Link Road.

Rail

The district is currently serviced by one train station in Bacchus Marsh on the Melbourne–Ballarat railway line. The primary movement from Bacchus Marsh is to Melbourne City, travelling on a single track to the lines at Melton (duplication of lines is currently under construction from Melton to Deer Park). The line is currently serviced by V/Line trains.

Growing patronage has led to plans for a second platform at Bacchus Marsh for 2018/19. In time, it is anticipated that the existing stabling at Bacchus Marsh will be relocated to Rowsley. Increased population and subsequent increased patronage, particularly within the potential Parwan Station Residential Precinct, will likely create demand for a future second station at Parwan. This second station would aim to service the overall district. Long-term plans could include track duplication. Future development around Bacchus Marsh Train Station needs to allow for good walking and cycling connections and ensure easy accessibility for bus services. This would reduce the need for increased park and ride facilities.

Bus

Buses are essential to completing the public transport network in Bacchus Marsh. There are four bus routes currently servicing the existing residential settlements. Future planning will need to close the gaps on services within existing areas, improve bus stop facilities and ensure new communities are provided with sufficient bus services. Completion of the ring road and efficient road layouts in new growth areas will be an important contributor to the bus network. An expanded local bus network will connect existing and future communities to key destinations within Bacchus Marsh, focused on a series of hubs and bus interchanges at existing and planned activity centres.

Walking and cycling

Safe and efficient connections are key to encouraging walking and cycling as alternative travel modes. Gaps in existing areas should be closed to facilitate continuous movements between key destinations. New suburbs should provide fully integrated walking and cycling networks, particularly in and around open space and activity centres, and also connecting new growth areas to each other and to the existing Bacchus Marsh urban area.

Bacchus Marsh Aerodrome

The Bacchus Marsh Aerodrome is owned by Council but operated by a committee of management. It is situated away from residential land and largely unencumbered by natural features. It is well placed physically and strategically for wider regional access. Opportunities should be explored to examine ownership, management and infrastructure planning.

TRANSPORT OBJECTIVES

- » Provide a connected and efficient arterial road network.
- » Maintain the Western Freeway as the key east–west link across Bacchus Marsh and as a scenic route to be the Central Highland Region gateway.
- » Provide a second north–south arterial road.
- » Improve the accessibility and capacity of the train service.
- » Improve and expand bus coverage to key existing and future destinations.
- » Facilitate walking and cycling as viable transport modes.
- » Review optimal management and investment opportunities at the Bacchus Marsh Aerodrome.
- » Strengthen the potential for road networks to manage local traffic movement.

TRANSPORT STRATEGIES

Road network

- » Plan for a complete grid network that facilitates efficient through- and cross-town movements.
- » Ensure connections in existing areas are continuously assessed for improvement needs.
- » Plan for well-connected new growth areas that offer multimodal trips.
- » Use developer contributions to undertake necessary road improvements arising from new development.
- » Limit freight traffic movement through Bacchus Marsh.
- » Work with VicRoads and key stakeholders to deliver actions indicated in the Integrated Transport Strategy to manage existing road congestion and facilitate multimodal movement within Bacchus Marsh.

Western Freeway

- » Maximise the efficiency of existing connections to the Western Freeway to meet growth needs.
- » Manage built form impacts on escarpments, hill faces and other significant landscape features within key views and vistas from the Western Freeway.

Eastern Link Road

- » Work with VicRoads and relevant state agencies work to confirm the alignment, funding, delivery and construction of the Eastern Link Road.

Rail

- » Plan Bacchus Marsh as the key train station for settlement in the short term and the (potential future) station at Parwan as a second station in the medium to long term.
- » Actively seek improved rail services.
- » Investigate the need and plan for the potential need to upgrade rail crossings.

- » Work with Public Transport Victoria on the following actions:
 - Finalise and construct the proposed upgrades include a second platform, pedestrian links, additional car parking and removal of stabling (short term) at Bacchus Marsh.
 - Plan for the potential future stabling for three (short term) to six trains (long term) at Rowsley.
 - Plan for the potential future “Park and Ride” station (long term) at Parwan.
- » Plan and protect potential for rail improvement projects of track duplication and service electrification (long term).

Walking and cycling

- » Improve existing and provide new pedestrian and cycling connections to provide complete networks for movement, linking to key destinations such as Bacchus Marsh Main Street and other activity centres, the Bacchus Marsh train station, the future Parwan train station, new bus interchanges, schools, community facilities and open space.
- » Plan for integrated pedestrian and cycling networks within new growth areas, between growth areas, and between new growth areas and the existing Bacchus Marsh urban area.
- » Work with Southern Rural Water to explore opportunities to use the redundant irrigation channel for multipurpose trails.
- » Improve the safety of pedestrian and cycling networks, including through lighting, passive surveillance, signs and wayfinding.

Bus

- » Work with Public Transport Victoria on the following actions:
 - Plan for an interim ‘park and ride’ bus station within Parwan Station urban growth precinct, co-located with an activity centre and the future train station site.
 - Plan for one or more ‘park and ride’ bus stations within Merrimu urban growth precinct, co-located with activity centres.
 - Plan for a ‘park and ride’ bus station in close proximity to the Darley Plaza activity centre.
 - Plan for a bus stop/station at each existing/proposed activity centre, except for lower order centres.
 - Investigate shortfalls and improve cross-town movements in existing areas that also consider connections to new residential areas.
 - Plan for efficient and connected bus routes in new residential areas.
 - Ensure bus infrastructure provides for passenger amenity and comfortable access.
 - Review regional services accessed by bus outside of Bacchus Marsh, such as in Melton, and how these can best be accessed.

Bacchus Marsh Aerodrome

- » Resolve future governance arrangements at Bacchus Marsh Aerodrome, including whether Council wishes to retain ownership of the site.
- » Explore options to better utilise the Bacchus Marsh Aerodrome including attracting new investment and jobs.
- » Prepare and adopt a master plan to guide future development.

GROWTH AREAS

Designating new areas for growth allows planning to be aligned with investment and the character of Bacchus Marsh to be enhanced. Guiding development to areas capable of change and away from constraints provides certainty to the community and development industry.

Without designation of new growth areas, liveability and character could be compromised and opportunities for housing and job growth missed. Considered planning will enable sustainable and well-serviced residential growth and economic self-sufficiency for Bacchus Marsh.

To address future residential and economic needs, a clear growth framework needs to be established, built upon clear strategic directions and principles.

DEFINING AND ALLOCATING STRATEGIC GROWTH AREAS

Council and the VPA undertook the following tasks to define and allocate potential growth areas for Bacchus Marsh:

- Definition of the boundary of the overall Bacchus Marsh District
- Identification and assessment of constraints
- Identification of planning principles for the allocation of potential growth areas
- Nomination of potential areas for either residential and employment uses, or as a mixture of both.

COMPONENT 1: DISTRICT BOUNDARY

The basis of Bacchus Marsh's district boundary is detailed in *Introduction – How is Bacchus Marsh defined?*

COMPONENT 2: CONSTRAINTS

A number of physical and land use constraints were identified and assessed to determine areas with growth potential. These are listed below and also mapped in *Figure 3 Growth area investigations* (see also *Plan 4 Physical constraints*).

Physical constraints include:

- steep topography
- waterway corridors
- areas prone to flooding
- sites of natural and built environmental significance
- transport corridors
- gas transmission infrastructure.

Land use constraints include:

- existing urban areas
- sites of existing industrial uses and associated off-site amenity buffers
- sites of significant agriculture and particularly the BMID
- Bacchus Marsh Aerodrome and its environs
- bushfire-prone areas
- parks and open space.

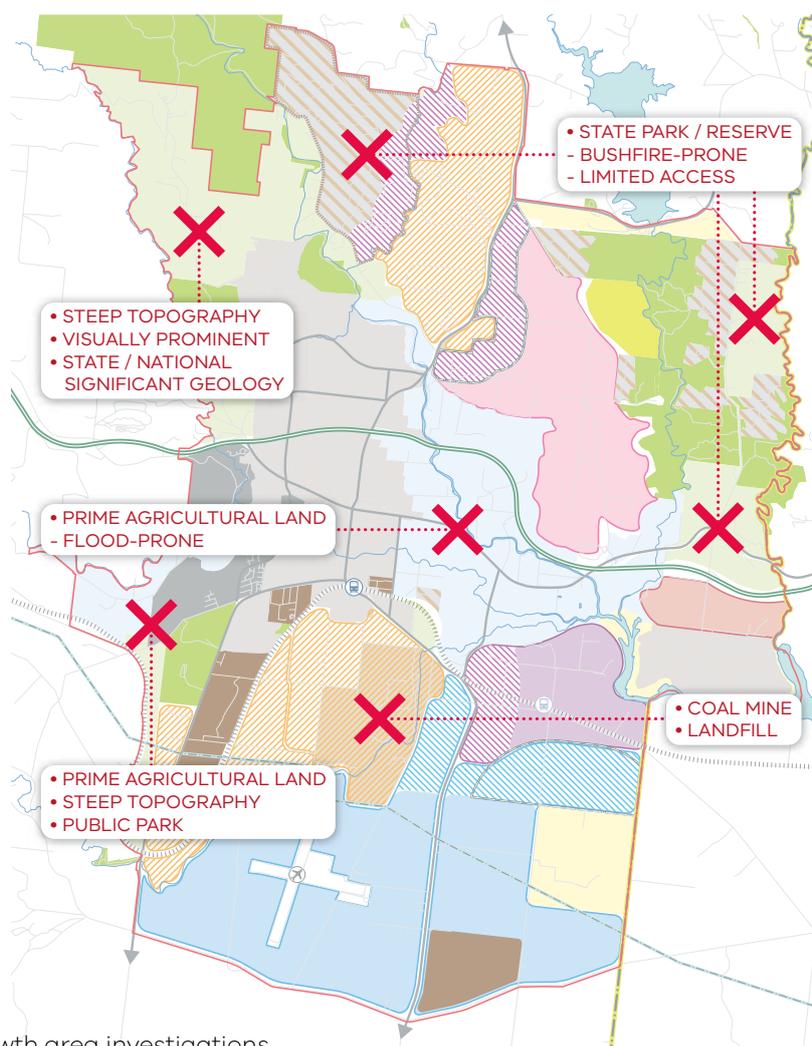


Figure 4 Growth area investigations

COMPONENT 3: PRINCIPLES FOR THE ALLOCATION OF GROWTH AREAS

The principles for allocation of growth are listed below (in a non-prioritised order):

- Nominate all growth areas within the settlement boundary.
- Plan for housing growth in the short, medium and long term and consider the ability for growth to deliver the Eastern Link Road.
- Encourage growth in existing areas that are capable of accommodating change.
- Focus increased growth in and around the Bacchus Marsh town centre.
- Nominate new growth areas according to serviceability (already serviced or of a scale to be self-sufficient).
- Locate new growth areas by ability to be serviced and managed for water supply.
- Allocate new growth area uses that offer co-location land efficiencies.
- Maximise opportunities for transit-oriented residential development.
- Maximise opportunities to improve public transport.
- Locate growth areas outside of declared water catchments, waterway corridors and state parks.
- Avoid ribbon development along the Western Freeway.
- Protect significant agricultural land.
- Define and protect highly productive agricultural land of the BMID.
- Protect mineral and earth resources and associated buffers.
- Minimise impact on and integrate natural and built environmental values.
- Maintain a green break between Bacchus Marsh and metropolitan Melbourne.
- Avoid development on escarpments and hill faces and manage built form on the escarpment edge.
- Protect the Bacchus Marsh Recycled Water Plan and associated buffers, at Parwan.
- Protect the Maddingley Waste and Resource Recovery Hub (including coal mining) and associated buffers.

COMPONENT 4: POTENTIAL RESIDENTIAL OR EMPLOYMENT GROWTH AREAS

Mapping the physical constraints of Bacchus Marsh reveals there are essentially two types of land available: land that is within existing amenity buffers and land that is not. This then leads to two logical principles for the designation of growth areas as either residential or employment:

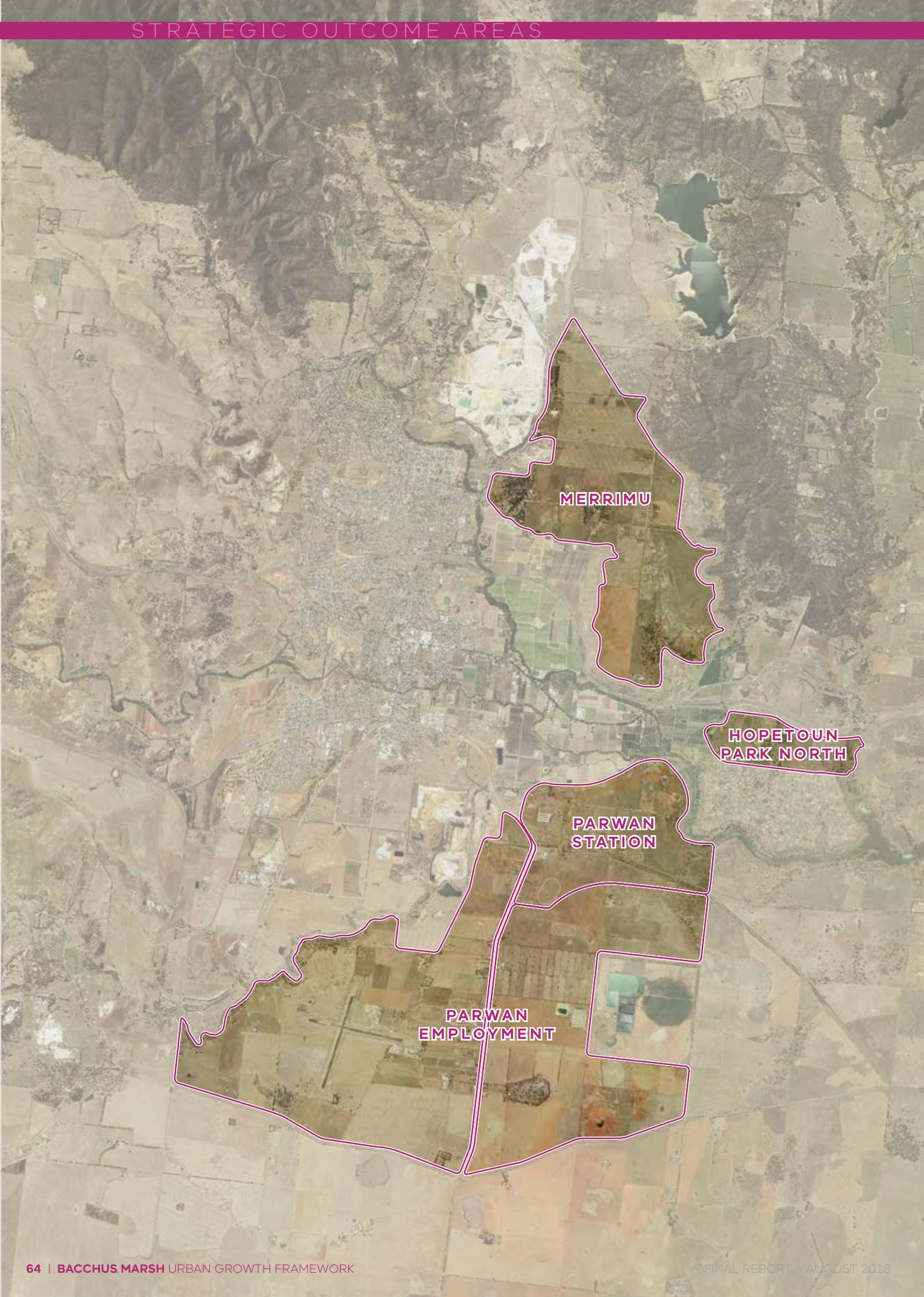
- » **Employment** is a non-sensitive use that can co-locate with existing employment sites and within amenity buffers.
- » **Residential** is a sensitive use that must be located outside amenity buffers.

The potential growth areas are mapped on *Plan 1* and are:

- Merrimu Residential Precinct
- Parwan Station Residential/Commercial Precinct
- Parwan Employment Precinct
- Hopetoun Park North Residential Expansion Area
- future employment investigation areas

The potential precincts have been mapped in response to land constraints and need for residential and employment growth. These areas have not been mapped based on particular land sizes as the purpose of the UGF is to identify growth potential more broadly. In this context, the growth potential of each area varies.

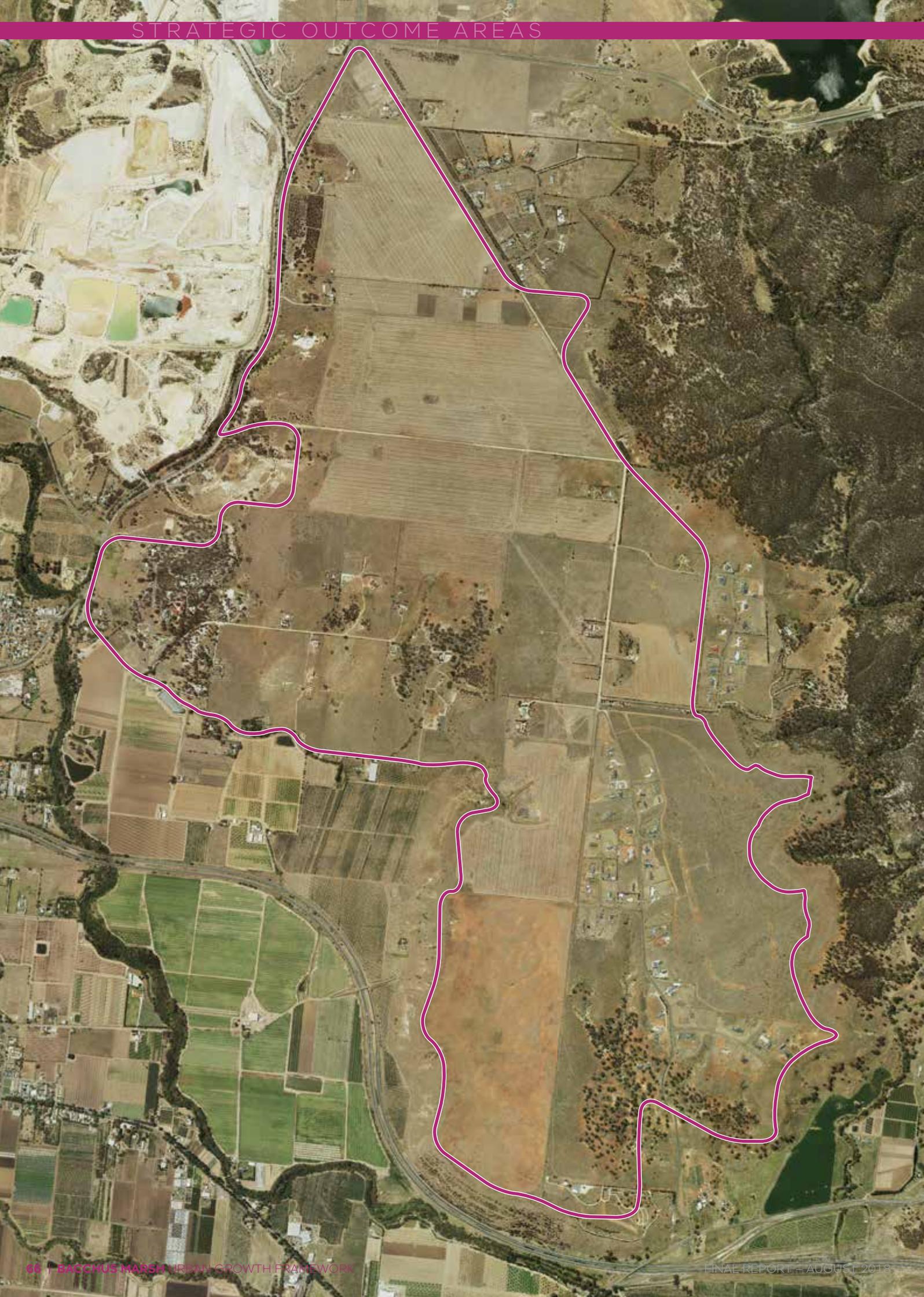
A detailed assessment of land constraints for the key precincts is provided at *Appendix 4*.



STRATEGIC OUTCOME AREAS

Council and the VPA identified four strategic outcome areas to support the growth of Bacchus Marsh. Having a number of growth fronts will create flexibility to respond to influences and changes in supply and demand.

Growth in these areas will be guided by precinct planning and will need to similarly designate densities based on land serviceability, demographic needs and natural and built features.



STRATEGIC OUTCOME AREA:

MERRIMU RESIDENTIAL GROWTH PRECINCT

Precinct description

The Merrimu precinct is the largest land ensemble within Bacchus Marsh (see Appendix 4 when considering land constraints). This area is capable of accommodating all of Bacchus Marsh's estimated growth to 2041. There is potential within Merrimu to create a number of smaller villages that provide different and complementary characters to suit a range of housing preferences. The projected population could support a number of activity centres. These will likely not only support the future Merrimu population, but also the Hopetoun Park and Long Forest communities.

Housing should be delivered at a range of densities, noting that some existing estates such as Dodemaide Court and Possum Tail Run are subject to covenants limiting future growth. These areas can be expected to remain as lifestyle lots. Elsewhere a mix of lot sizes will be appropriate, with transition in densities a key goal between older estates (such as Tucker Court, Streeton Drive) and newer housing estates.

Developer contributions from Merrimu's growth can be leveraged to deliver infrastructure that will benefit the wider district. Most prominently this will be the Eastern Link Road, but will also include essential community facilities and local roads. Merrimu should be developed in a progressive, continuous manner, moving from the existing urban areas (generally west to east and north to south, but ultimately guided by a precinct structure plan) and delivering an activity centre with each stage of development. An activity centre should be delivered in the early stages, to serve the existing Merrimu population.

Merrimu's anticipated population will create large-scale demand for activity centres and community facilities. This should be leveraged to deliver local jobs, including retail employment opportunities and jobs in health and community. A ratio of one job per housing lot would allow future residents the opportunity to live and work in the same neighbourhood.

Preconditions

The following strategic work will need to be undertaken by Council and/or other agencies for the whole Bacchus Marsh district, prior to the authorisation of any future planning scheme amendment for Merrimu growth precinct:

- **Integrated infrastructure delivery framework** which addresses all higher order infrastructure needs and means of delivery, and includes integrated water management principles.
- **District Open Space Framework**, to address key principles to ensure an integrated network of parks, open space and trails, protect escarpments, achieve biolinks, and integrate open space outcomes with waterway management etc.
- Update the **Bacchus Marsh Integrated Transport Strategy**, to include consideration of the Bacchus Marsh Urban Growth Framework.
- **Bacchus Marsh Irrigation District planning study**: review zones, overlays, policy statements and buffers to inform a set of principles to protect and facilitate investment in the agricultural sector and address opportunities to facilitate value adding enterprises.
- **Eastern Link Road corridor alignment study**, to ensure integration of transport networks and land use planning.

Precinct planning principles

- Plan for a self-contained town centre with community facilities and significant local employment opportunities.
- Nominate activity centres as per hierarchy and locate based on walkable catchments.
- Establish a multimodal road network that maximises connections to Gisborne–Bacchus Marsh road and the Western Freeway.
- Locate activity centres that support the delivery and role of the ring road.
- Aim for delivery of an employment ratio of one job per housing lot.
- Define smaller precincts with distinct characters.
- Ensure the sequencing of Merrimu responds to land supply and demand analysis and is able to deliver the Eastern Link Road.
- Consider interfaces between development and escarpments to ensure views are not lost to and from escarpments and natural edges of town.
- Consider interfaces with environmental assets such as Long Forest Nature Conservation Reserve and BMID, to protect and enhance biodiversity values and agricultural land uses, and to achieve attractive development for local residents.
- Undertake traffic modelling to identify the maximum number of lots which can be developed prior to the Eastern Link Road being constructed, and the local road network improvements necessary to facilitate such development.
- Prepare a precinct staging plan, to demonstrate how the maximum number of lots can be developed in the precinct prior to the ELR being constructed.
- Ensure that development is set back from the top of the escarpment, to minimise impacts on landscape based on appropriate landscape sensitivity analysis as well as to limit interface issues with agricultural land use (i.e. to avoid land use conflict).
- Ensure protection and appropriate management of any significant habitat values.
- Identify new public open space networks (incorporating environmental values/features, biolinks and cycling/walking trail networks), and show how these integrate with existing/proposed networks beyond the precinct.
- Avoid new sensitive land uses from establishing within relevant buffers to the Darley Sand Quarries.
- Respond to bushfire risk by undertaking a detailed assessment of bushfire risk, in Bushfire Prone Areas and Bushfire Management Overlay areas, in accordance with State Planning Policy Framework Clause 13.05.
- Provide for sustainable water management in accordance with an Integrated Water Management Plan.
- Undertake, as part of a land capability study, an assessment of land that has an interface with the Bacchus Marsh Irrigation District (BMID) to determine if there are any potential impacts on land within strategic outcome areas associated with the ongoing operations within the BMID, and likewise the impact of this future development on land within the BMID.

Detailed planning considerations

Define the western edge by Gisborne Road:

- Manage development along the escarpment edge.
- Use the existing escarpment within the non-sensitive use buffer as the precinct edge.

Define the south-western and southern border by the escarpment:

- Provide a perimeter road along the top edge of the escarpment with pedestrian and cycling trails on the outer edge of the road cross-section.
- Set development back from the perimeter to manage views from the Avenue of Honour walking trail.
- Prioritise development siting, as opposed to canopy trees, to manage visual impacts of development (due to unfavourable soil conditions for canopy trees).
- Establish building envelope limits along the southern escarpment to manage views from the Western Freeway and Avenue of Honour.

Define the south-eastern corner by the BMID and farming area:

- Avoid vegetation removal and development that reduces the landscape quality in gateway views.
- Ensure development responds to the topography and avoid using retaining walls.
- Density of development must consider impacts on gateway views and BMID and farming interface.

Define the eastern edge by the Long Forest Nature Conservation Reserve:

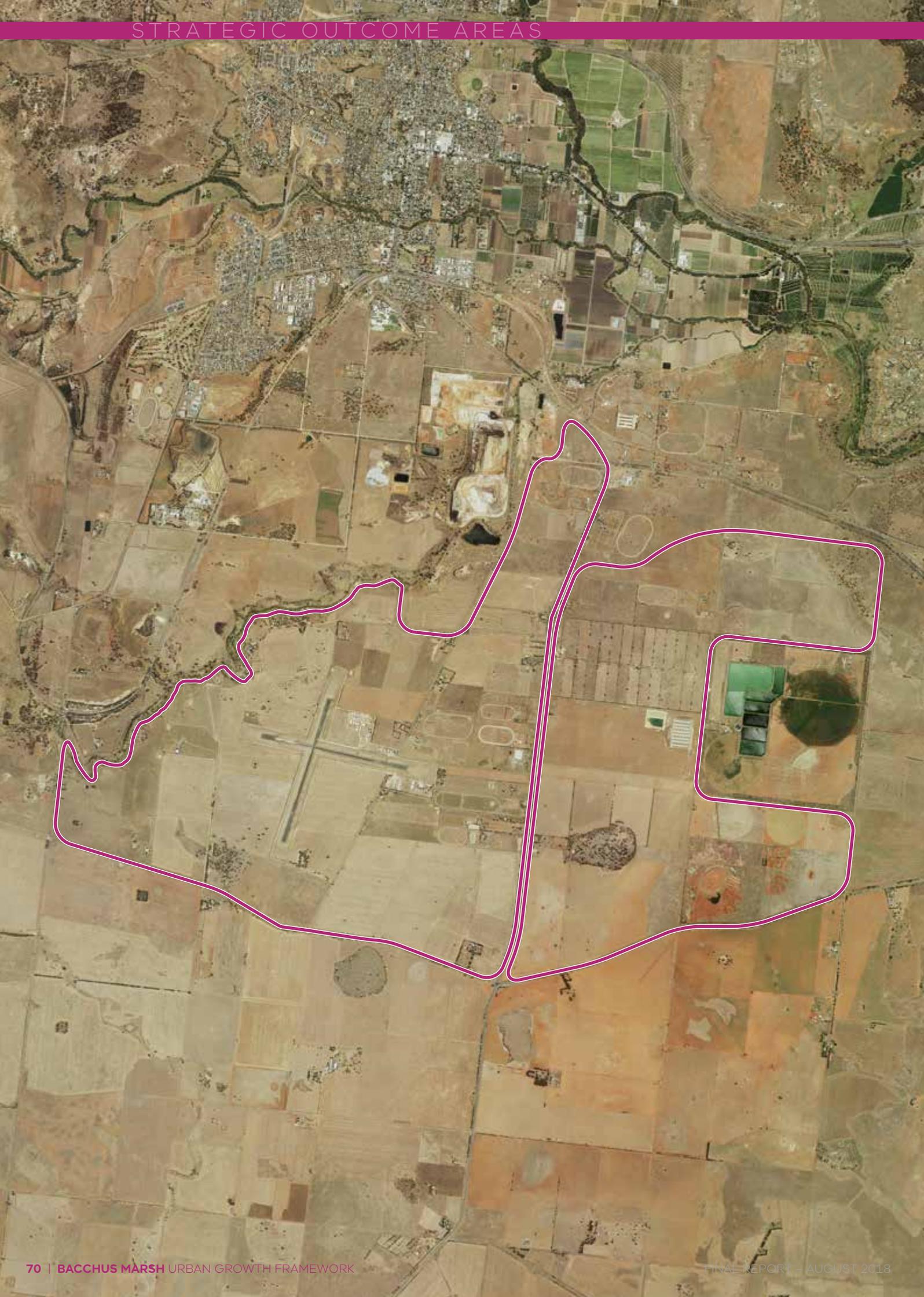
- Provide a perimeter road of at least 20 m along the top edge of the escarpment to provide a bushfire break and maintenance vehicle accessibility.
- Ensure residential densities, siting and design respond appropriately to bushfire risk and the principle of protecting and enhancing biodiversity values.
- Retain areas of significant vegetation and avoid development in these areas.

Define the northern boundary by Bences Road:

- Apply precinct planning principles of avoiding back fences facing onto this road.

Amenity buffer interface areas:

- Define the range of land uses that can occur within buffer interface areas.
- Apply a different zone control to these areas (i.e. different to the balance of the precinct), to ensure that sensitive uses, and uses with adverse amenity potential (i.e. intensive animal husbandry, saleyard, mineral extraction and uses listed under VPP Clause 52.10) are prohibited.



STRATEGIC OUTCOME AREA:

PARWAN EMPLOYMENT GROWTH PRECINCT

Precinct description

The Parwan Employment Precinct (PEP) is an area of approximately 2,480ha, incorporating over 80 separate properties (including the existing Bacchus Marsh aerodrome). Much of the land within the precinct is currently used for agriculture and rural residential uses, with a limited range of commercial, recreation and utility uses.

The Parwan Employment Precinct (PEP) is a major initiative. The PEP holds significant economic and employment growth potential for Bacchus Marsh, with the ability to attract high levels of new industrial investment. To achieve this, it must be serviced, protected against residential encroachment, and properly marketed. The PEP is beneficially located within the Bacchus Marsh food bowl, close to markets and away from residential land. It has the capacity to accommodate value-add and high amenity impact businesses, particularly those seeking to relocate to more affordable and unencumbered land close to the metropolitan. Sufficient supply of serviced and zoned land will attract these investment opportunities. This land is most suited to agriculture and related uses due to its soil quality, proximity to the BMID and ability to be serviced with potable or non-potable water depending on industry needs and availability of supply.

The importance and potential of the PEP is recognised at the state level and government will undertake planning work to develop this precinct in the short term. A business case for the development of the PEP has recently been prepared, which identifies some of the key infrastructure and investment priorities required to support development of the PEP. The business study has in turn informed the preparation of a planning study for the area, which establishes a conceptual land use framework for the area. Both the business case and planning study will be important inputs to the ultimate preparation of a PSP.

Paramount to the success of the PEP is the improvement of connections to the Western Freeway. Second to this is provision of the essential services of gas and water, including recycled water if available. The Bacchus Marsh Aerodrome, located within the precinct, should be utilised for its ability to support surrounding agricultural uses and tourism opportunities.

Precinct planning will be necessary to coordinate site planning and infrastructure. Transport planning will need to consider alignment for the Eastern Link Road and for this reason, Stage 1 (the land located east of Bacchus Marsh–Geelong Road where the Eastern Link Road could traverse), is a more immediate priority. That said, Stage 2 (land to the west of Bacchus Marsh–Geelong Road) could be planned concurrently, should future assessments support this.

Parwan is suited not to a single agribusiness, but rather a range of mainly vertically integrated businesses that will drive local prosperity and employment growth. Likely occupiers include meat processing, feed lot/saleyards, mushrooms, poultry, hydroponics and associated co-located industries. The agribusiness potential of the PEP is estimated at up to 1,200 jobs. While only indicative, these figures give a broad overview of employment capacity. Opportunities also exist for new industries with potential synergies with the operations at the Maddingley Waste and Resource Recovery Hub.

Beyond the PEP, no future employment investigation areas are currently identified. The extent of land available in the PEP makes it enough to fulfil the employment needs for Bacchus Marsh, at least in the short to medium term. The state policy focus is therefore on PEP rather than the future Maddingley investigation area to the west. Future use and development of this area should be led by appropriate technical assessments of environmental effects, environmental risks (e.g. bushfire, flood, erosion), cultural heritage (i.e. Aboriginal and European), economic impacts, integrated transport and other infrastructure.

Preconditions:

The following strategic work will need to be undertaken by Council and/or other agencies for the whole Bacchus Marsh district, prior to the authorisation of any future planning scheme amendment for Parwan Employment Precinct:

- **Eastern Link Road corridor alignment study**, to ensure integration of transport networks and land use planning.

Precinct planning principles

Precinct structure plans for the PEP should consider the precinct as a whole, but focus on the area east of the Bacchus Marsh–Geelong Road for the first stage of development – primarily due to its ability to support delivery of the Eastern Link Road, but also because it has less land fragmentation than land to the west. The eastern area does not include the Bacchus Marsh Aerodrome, which will be subject to a separate master plan in the future. The following actions should be undertaken to advance planning for the PEP, in collaboration with the relevant state agencies:

- Coordinate a Parwan Employment Cluster Governance Model to guide governance, funding and revenues, liaison with key stakeholders and attracting anchor tenants with Regional Development Victoria.
- Determine an appropriate road network that considers the Eastern Link Road in consultation with VicRoads.
- Secure gas and water supply and infrastructure in consultation with Regional Development Victoria.
- Prioritise the staged provision of infrastructure, outlining the benefits and costs and sequencing over the short, medium and long term.
- Consider NBN broadband service to enhance competitiveness.
- Ensure continued operation of Bacchus Marsh Aerodrome and investigate opportunities for private development.
- Attract vertically integrated businesses that complement the primary agriculture and farming uses.
- Encourage large lots of sufficient size to enable flexibility to accommodate new business.
- Prepare a land use amenity plan to provide appropriate buffers to sensitive uses and avoid incompatible land uses.
- Apply co-location, compatible industry and business analyses, which considers inter-industry separation, in siting new business.
- Consider precinct-based amenity forms, such as landscaping and bunds, fences and vegetation.
- Prepare design guidelines to create an identity for the PEP, provide a cohesive built form and landscaping theme and protect amenity. Incorporate the wetlands area into an open space network.
- Identify new public open space networks (incorporating environmental values/features, biolinks and cycling/walking trail networks), and show how these integrate with existing/proposed networks beyond the precinct.
- Respond to bushfire risk by undertaking a detailed assessment of bushfire risk, in Bushfire Prone Areas and Bushfire Management Overlay areas, in accordance with State Planning Policy Framework Clause 13.05.

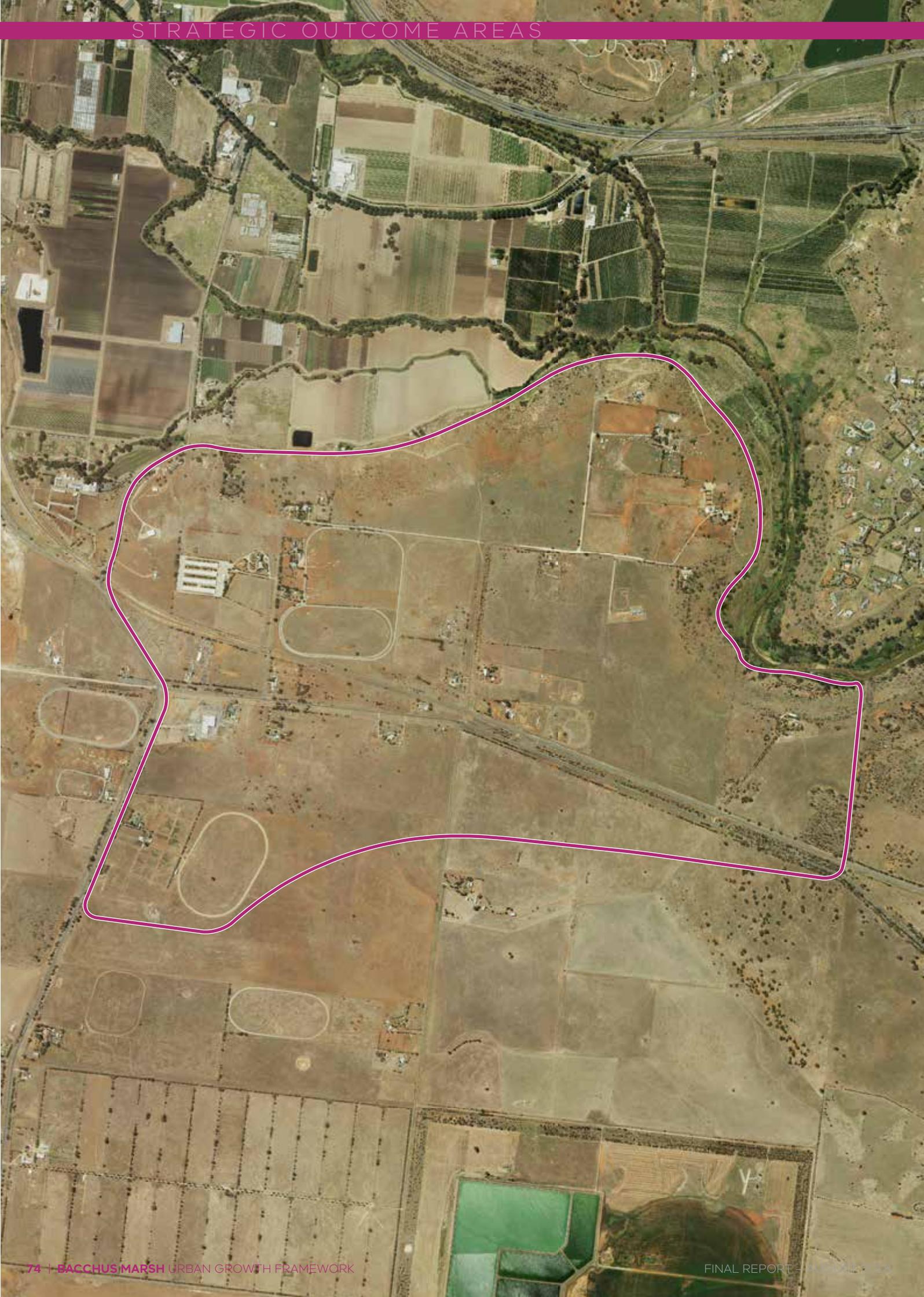
- Provide for sustainable water management in accordance with an Integrated Water Management Plan.
- Define the northern precinct boundary with applicable buffers.

Detailed planning considerations

- Apply planning controls to facilitate an appropriate mix of agribusiness, food processing and associated industries.
- Identify the obstacle limitation surface protection area (OLSPA) applicable to the environs of the Bacchus Marsh aerodrome.
- Consider the need for a Safety Management Study in relation to the Brooklyn–Ballan high pressure gas transmission pipeline, in consultation with APA.
- Determine any land uses which should be prohibited within 210m either side of the Brooklyn–Ballan high pressure gas transmission pipeline, in consultation with APA.
- Ensure protection and appropriate management of any remnant wetlands with identified habitat values.
- Prepare a landscape/amenity plan for the precinct.

Amenity buffer interface areas:

- Define the range of land uses that can occur within buffer interface areas.
- Apply a different zone control to these areas (different to the balance of the precinct), to ensure that sensitive uses and uses with adverse amenity potential (i.e. intensive animal husbandry, saleyard, mineral extraction and uses listed under VPP Clause 52.10) are prohibited.



STRATEGIC OUTCOME AREA:

PARWAN STATION RESIDENTIAL & COMMERCIAL GROWTH PRECINCT

Precinct description

The Parwan Station precinct comprises a mix of rural living and individual homesteads, as well as a range of rural activities, including dog boarding and some equestrian trotting tracks. The area generally comprises highly disturbed, poor quality former agricultural land with some remnant patches of native vegetation (Plains Grassy Woodland and Plains Grassland) which will require further assessment and potential offset as part of any future Precinct Structure Plan.

The precinct is generally well placed with regard to existing trunk services. Trunk water and sewer connections are currently available throughout much of the precinct. Trunk gas mains are nearby to the north west, off Fisken Street about 2km distant. It is expected that the trunk gas main is likely to be extended to the edge of Parwan Station as the Parwan Employment Precinct is developed.

Parwan Train Station, if delivered, will create opportunity to develop a transit-oriented residential and employment community around it. Other infrastructure and community facilities will be district-level, serving a largely local catchment. A neighbourhood activity centre has been nominated for this precinct, but this could feasibly be larger if it is required to service a larger catchment.

Within the precinct, a range of densities should be planned, with higher densities suited to the area around the potential future station, with lower densities in areas of natural and built environmental value. Growth should be sequenced to deliver the station precinct during early stages. Jobs within the activity centre and the adjacent PEP will offer employment opportunities for future residents, as will the Bacchus Marsh town centre. Any future retail centre should be complementary to and not compete with the existing Bacchus Marsh town centre. Improved road connections will be required to connect residents with these job opportunities.

The Parwan Station precinct should be planned and facilitated to deliver the Eastern Link Road as well as the second train station. Precinct planning should focus on transit-oriented development outcomes, with the station to be delivered first.

Preconditions

The following strategic work will need to be undertaken by Council and/or other agencies for the whole Bacchus Marsh district, prior to the authorisation of any future planning scheme amendment for Parwan Station growth precinct:

- **Integrated infrastructure delivery framework** which addresses all higher order infrastructure needs and means of delivery, and includes integrated water management principles.
- **District Open Space Framework**, to address key principles to ensure an integrated network of parks, open space and trails, protect escarpments, achieve biolinks, and integrate open space outcomes with waterway management.
- Update the **Bacchus Marsh Integrated Transport Strategy**, to include consideration of the Bacchus Marsh Urban Growth Framework.

- **Bacchus Marsh Irrigation District planning study:** review zones, overlays, policy statements and buffers to inform a set of principles to protect and facilitate investment in the agricultural sector and address opportunities to facilitate value adding enterprises.
- **Eastern Link Road corridor alignment study** to ensure integration of transport networks and land use planning.

Precinct planning principles

- Define the range of uses.
- Ensure that buffer interface areas are sufficient.
- Undertake traffic modelling to identify the maximum number of lots which can be developed prior to the Eastern Link Road being constructed, and the local road network improvements necessary to facilitate such development.
- Prepare a precinct staging plan, to demonstrate how the maximum number of lots can be developed in the precinct prior to the ELR being constructed.
- Ensure that development is set back from the top of the escarpment, to minimise impacts on landscape based on appropriate landscape sensitivity analysis as well as to limit interface issues with agricultural land use (i.e. to avoid land use conflict).
- Ensure protection and appropriate management of any significant habitat values.
- Locate activity centres based on walkable catchments, with the main activity centre located in close proximity to the future railway station, in consultation with TfV and V/Line.
- Identify appropriate locations for railway crossings, to cater for efficient movement of vehicles, cyclists and pedestrians, in consultation with Transport for Victoria and V/Line.
- Ensure that land zoned for sensitive uses is located beyond the buffer distance to Bacchus Marsh Recycled Water Plant as determined in Western Water's odour dispersion modelling project; or work with Western Water to deliver treatment plant upgrades to facilitate a reduced buffer distance. Any reduced buffer distance must be at least 1.4 km and will be subject to the proponents committing to a substantial financial contribution towards treatment plant upgrades.
- Avoid new sensitive land uses from establishing within relevant buffers to the Maddingley Waste Resource and Recovery Hub.
- Consider interfaces between development and escarpments, to ensure views are not lost to and from escarpments, and to protect and enhance biodiversity values.
- Consider interfaces with environmental assets such as Werribee River, Parwan Gorge and BMID, to protect and enhance biodiversity values and agricultural land uses, and to achieve attractive development for local residents.
- Ensure that sequencing of Parwan Station precinct protects the existing use rights of the broiler farm at 51 Browns Lane, by identifying an amenity buffer where no sensitive uses will be permitted until such time as the broiler farm use ceases.
- Identify new public open space networks (incorporating environmental values/features, biolinks and cycling/walking trail networks), and show how these integrate with existing/proposed networks beyond the precinct.
- Respond to bushfire risk by undertaking a detailed assessment of bushfire risk, in Bushfire Prone Areas and Bushfire Management Overlay areas, in accordance with State Planning Policy Framework Clause 13.05.
- Provide for sustainable water management in accordance with an Integrated Water Management Plan.

- Undertake, as part of a land capability study, an assessment of land that has an interface with the Bacchus Marsh Irrigation District (BMID) to determine if there are any potential impacts on land within strategic outcome areas associated with the ongoing operations within the BMID, and likewise the impact of this future development on land within the BMID.

Define the northern and eastern edge with the escarpment:

- Provide a perimeter road along the top edge of the escarpment with pedestrian and cycling trails on the outer edge of the road cross-section.
- Establish building envelope limits along the northern escarpment to manage views from the Western Freeway and Avenue of Honour.
- Plan for transit-oriented development around the Parwan station site.

Amenity buffer interface areas:

- Finalise the buffer distance to the Bacchus Marsh Recycled Water Plant, in consultation with Western Water.
- Provide appropriate interfaces to the employment precinct.
- Define the range of land uses that can occur within buffer interface areas.
- Apply a different zone control to these areas (i.e. different to the balance of the precinct), to ensure that sensitive uses and uses with adverse amenity potential (i.e. intensive animal husbandry, saleyard, mineral extraction and uses listed under VPP Clause 52.10) are prohibited.
- Consider opportunities for commercial land uses which support either the employment precinct or the residential precinct. Any such uses must not generate a need for buffers from sensitive uses.



STRATEGIC OUTCOME AREA:

HOPETOUN PARK NORTH RESIDENTIAL GROWTH PRECINCT

Precinct description

Hopetoun Park is an existing low-density residential community. The area to the north has potential for a greenfield expansion at more conventional (i.e. smaller) lot sizes than the existing lots to the south. This would create three to five years' land supply.

Hopetoun Park is located at the eastern edge of the Bacchus Marsh District, in a relatively isolated area with limited local community facilities. Residential expansion can be leveraged to deliver new local-level community facilities. Future development applications will need to consider improving the existing road connection from Hopetoun Park to the arterial network.

The development of the potential Hopetoun Park expansion area is primarily expected to deliver local level infrastructure and its timing is therefore not dependent on sequencing within the wider Bacchus Marsh District. When planned, early precinct development should deliver the local centre. Built form considerations during precinct planning will need to protect the green break between Melton and Bacchus Marsh that contributes to gateway views to the centre and wider Central Highlands region.

Preconditions

The following strategic work will need to be undertaken by Council and/or other agencies for the whole Bacchus Marsh district, prior to the authorisation of any future planning scheme amendment for Hopetoun Park North precinct:

- **Integrated infrastructure delivery framework** which addresses all higher order infrastructure needs and means of delivery, and includes integrated water management principles.
- **District Open Space Framework**, to address key principles to ensure an integrated network of parks, open space and trails, protect escarpments, achieve biolinks, and integrate open space outcomes with waterway management.
- **Bacchus Marsh Irrigation District planning study**: review zones, overlays, policy statements and buffers to inform a set of principles to protect and facilitate investment in the agricultural sector and address opportunities to facilitate value adding enterprises.

Precinct planning principles

- Plan for a small town expansion integrated with the established neighbourhood that provides new local-level community infrastructure.
- Consider opportunities to improve road connectivity with the Western Freeway to and from the west, and with the Old Western Highway from Hopetoun Park Road.
- Identify and define the existing character of Hopetoun Park and establish principles for a preferred character.
- Ensure that development is set back from the top of the escarpment, to minimise impacts on landscape based on appropriate landscape sensitivity analysis as well as to limit interface issues with agricultural land use (i.e. to avoid land use conflict).

- Ensure protection and appropriate management of any significant habitat values.
- Identify new public open space networks (incorporating environmental values/features, biolinks and cycling/walking trail networks), and show how these integrate with existing/proposed networks beyond the precinct.
- Respond to bushfire risk by undertaking a detailed assessment of bushfire risk, in Bushfire Prone Areas and Bushfire Management Overlay areas, in accordance with State Planning Policy Framework Clause 13.05.
- Provide for sustainable water management in accordance with an Integrated Water Management Plan.
- Undertake, as part of a land capability study, an assessment of land that has an interface with the Bacchus Marsh Irrigation District (BMID) to determine if there are any potential impacts on land within strategic outcome areas associated with the ongoing operations within the BMID, and likewise the impact of this future development on land within the BMID.

Detailed planning considerations

- Consider applying the Low Density Residential Zone to the periphery of the precinct, at the interface with the existing LDRZ and the surrounding rural landscape and freeway
- Consider applying the Neighbourhood Residential Zone to the inner core of the precinct, in order to support a small activity centre or community facilities.
- Ensure that development is set back from the top of the escarpment, to minimise landscape and environmental impacts.
- Investigate the extractive industry potential of the sand and gravel resources located within Extractive Industry Interest Area 884023 to the north of the Western Freeway, in consultation with the Resources Division of DEDJTR, and establish an appropriate non sensitive use buffer to protect the resources.
- Consider interfaces with environmental assets such as Djerriwarrh Creek and BMID, to protect and enhance biodiversity values and agricultural land uses, and to achieve attractive development for local residents.

Define the eastern and western edges with the escarpment:

- Provide a perimeter road along the top edge of the escarpment with pedestrian and cycling trails on the outer edge of the road cross-section.
- Establish building envelope limits to manage gateway views when arriving in Bacchus Marsh.

Define the northern edge with the Western Freeway:

- Establish building envelope limits to manage views from the Western Freeway and Avenue of Honour.

INVESTIGATION AND TRANSITION AREAS

The UGF identifies two areas for further investigation and potential transition to other uses in the long term. These areas will be investigated for new land uses compatible with existing buffers and site locational attributes.

Darley Sand Quarries Investigation Area

Protection of this resource in the short-medium term is critical for Melbourne. However, as the resource is exhausted (and following rehabilitation), there may be opportunities for this area to transition towards other land uses. Following an investigation into the quarry and future land use (see project reference 24) a range of potential land use outcomes may be considered subject to a range of considerations. This investigation will include the full extent of the Darley Sand Quarries (including the land to the north of the Bacchus Marsh District Boundary as defined on Plan 1).

Maddingley Employment Investigation Area

This investigation area is located between the Maddingley Waste and Resource Recovery Hub (including coal mining) and the existing urban area and also extends to the south and west of the existing Maddingley industrial area. The future of this area is guided by existing residential interfaces and future development of PEP. This area is mostly comprised of farming and lifestyle properties.

This area should be investigated for non-sensitive land uses compatible with existing sensitive use interfaces. There may also be opportunities to investigate uses that can leverage off the strategic relationship with activities at the Maddingley Waste and Resource Recovery Hub.

Investigation of future use and development in this area should have regard for the outcomes of any relevant priority actions outlined in the *Grampians Central West Waste and Resource Recovery Implementation Plan 2017*.

SUPPORTING PROJECTS

Eastern Link Road

The Eastern Link Road is an integral part of overall planning for growth in Bacchus Marsh and to growth of the overall district. Key objectives for future planning of this road:

- Provide a transport system for Bacchus Marsh that is sustainable, integrated with land use planning and delivered in a timely manner.
- Ensure Bacchus Marsh is supported by an accessible, connected and tiered road network that is appropriately matched to land use planning needs.
- Facilitate efficient arterial road movements in and around Bacchus Marsh that are well-connected to the Western Freeway and the Port of Geelong.
- Support growth with coordinated and reliable movements of people and goods within Bacchus Marsh and to other centres and regions.
- Improve safety and amenity along Grant Street and promote active transport modes.
- Minimise impacts of the Eastern Link Road on adjacent land uses, natural and built environmental values and protect the Avenue of Honour.
- Ensure that the road can function as a truly multi-modal corridor, with strong provision for public transport as well as active transport (walking and cycling) options as part of the design.
- Manage impacts of road infrastructure on identified cultural heritage and landscape values and on the Avenue of Honour in particular.

The Eastern Link Road is essential for Bacchus Marsh in its current state and is even more vital to any future growth. Delivery will depend on growth and associated developer contributions. The Eastern Link Road alignment will likely traverse new growth areas, and will provide benefits that will allow for the development of new areas that may not necessarily align with current demand. This primarily refers to the potential Merrimu and Parwan Station Residential Precincts, while current demand is for development of the PEP. The multi-modal character of the Eastern Link Road corridor will be an important consideration in setting the urban structure for future growth in the Strategic Outcome Areas (particularly Merrimu, Parwan Employment and Parwan Station), and the opportunities this presents will need to be carefully considered as part of future PSPs.

Bacchus Marsh town centre urban design framework

The Bacchus Marsh town centre is the prime commercial core of the shire, and as such, planning that facilitates its future development is a short-term priority. Preparation of an UDF is needed to plan for public realm improvements, coordinate development of strategic sites, and provide suitable built form parameters to encourage redevelopment. Although the UDF is important, improvements to the town centre are reliant on delivery of the Eastern Link Road, which will provide an alternative north-south connection to remove congestion from Grant Street.

Key objectives for this UDF:

- Ensure adequate supply of suitably zoned land to accommodate anticipated and currently needed commercial growth.
- Focus retail and commercial development in the commercial core.
- Reinforce the primacy of the Main Street through intensification of uses.
- Maintain Grant Street as a service precinct.
- Reduce congestion on Grant Street by providing new north–south connections.
- Encourage better use of vacant and underutilised land, including consideration of applying higher levies to vacant land.
- Encourage infill residential development around the town centre core.
- Harness the potential for Bacchus Marsh as a retail tourism destination.
- Minimise out-of-centre development that will compete with the town centre, with the exception of bulky goods retailing, which should be strategically located to meet longer term needs and avoid fragmented offer.

Other initiatives

- A range of other employment initiatives should also be undertaken, from facilitating growth and redevelopment of the Darley Plaza, through to construction of the West Maddingley Neighbourhood Activity Centre. Initiatives that clarify the role and attraction of existing retail and industrial estates around Bacchus Marsh will contribute to economic growth.
- Expansion of education and health services within Bacchus Marsh will build on existing investments and further consolidate the role of the town as a regional growth centre and service hub.

Community infrastructure

Table 3 Residential growth area settlement types summarises the community infrastructure that would likely be provided in each growth investigation area. The existing Bacchus Marsh urban area provides facilities that service the overall population of the Shire. Municipal-level facilities will support the precinct in which they are located but are also likely to serve a wider catchment. District and local-level facilities are focused on servicing their own catchments.

Table 2 Residential growth areas settlement types

AREA	YEARS OF SUPPLY (INDICATIVE)	SCALE OF AREA	FACILITIES TYPE (PER PERSON)
Bacchus Marsh existing (including Darley and Maddingley)	10–15	Large regional centre	Centre-level facilities (1 per 30,000)
Merrimu Residential Growth Precinct	15–20	Regional centre	Municipal-level facilities (1 per 20,000)
Parwan Station Residential/ Commercial Growth Precinct (including potential future railway station)	5–10	District town	District-level facilities (1 per 10,000)
Hopetoun Park and the Hopetoun Park North Residential Growth Precinct	3–5	District town	Local-level facilities (1 per 5,000)

*Depending on final extent of buffers to nearby uses.

IMPLEMENTATION

Council and the VPA have identified a number of actions to support implementation of the UGF. The UGF plans for a long timeframe for which it is difficult to make precise growth projections. Therefore, sequencing of new growth fronts should be continuously reviewed based on supply and demand analysis and equally on the ability to deliver needed infrastructure, particularly the Eastern Link Road. The following tables identify responsibility, timing and description for the projects:

UGF ACTIONS

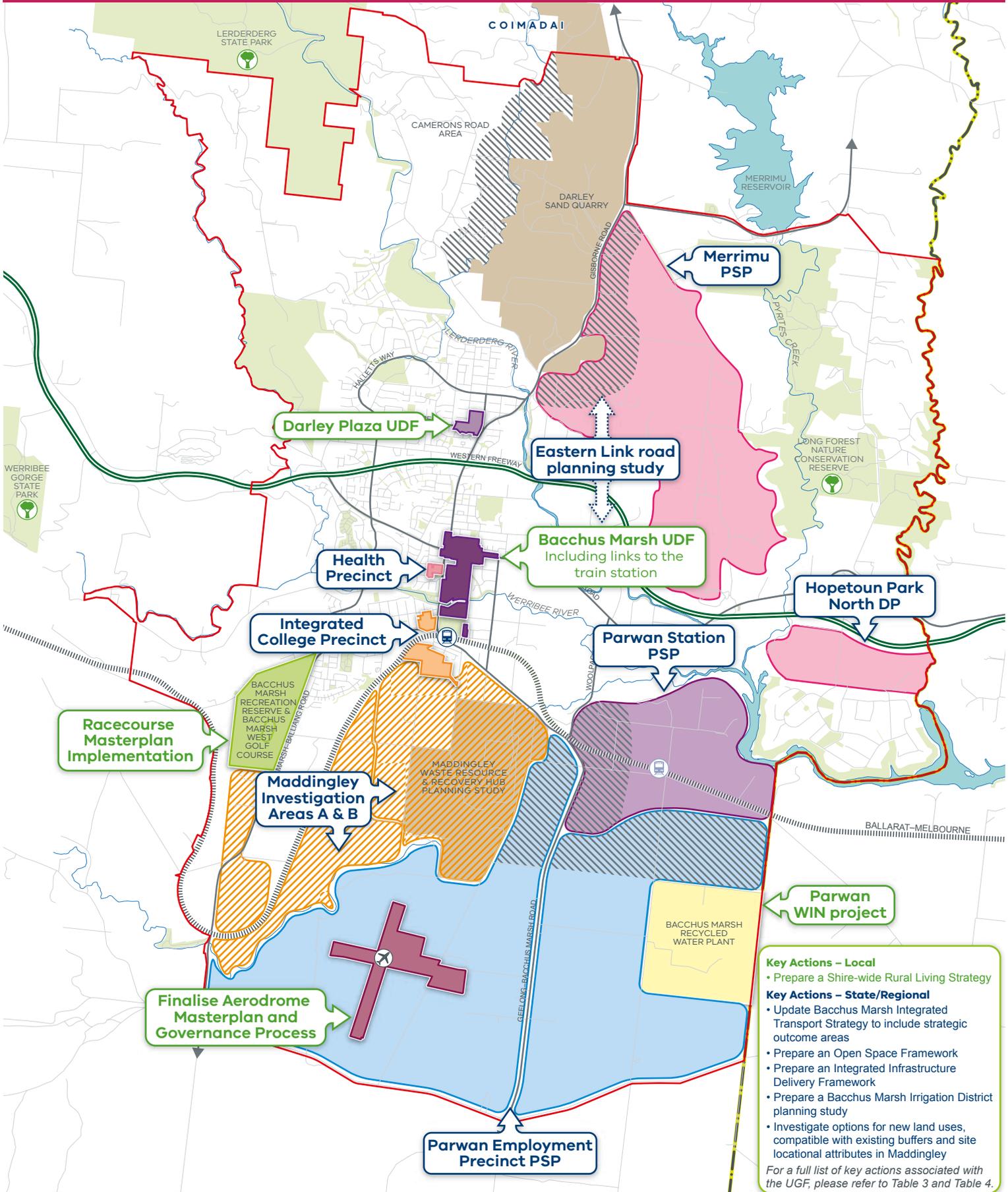
Table 3 Key growth actions – state/regional

REF #	PROJECT	TIMING ¹	RESPONSIBILITY
1	District Open Space Framework to address key principles to ensure an integrated network of parks, open space and trails, protect escarpments, achieve biolinks, and integrate open space outcomes with waterway management.	Immediate	Council
2	Eastern Link corridor alignment study to ensure integration of transport networks and land use planning.	Short term	VicRoads
3	Water and gas supply for the Parwan Employment Precinct.	Short term	Council/RDV
4	Bacchus Marsh Irrigation District planning study to review zones, overlays, policy statements and buffers to inform a set of principles to protect and facilitate investment in the agricultural sector, and address opportunities to facilitate value-adding enterprises.	Short term	Council/VPA
5	Maddingley Waste and Resource Recovery (WRR) Hub planning study to determine appropriate zone and overlay controls for the WRR hub site and surrounds (including amenity buffer). Bacchus Marsh Grammar and other key stakeholders need to be engaged in this process.	Short term	Council
6	Maddingley Investigation Areas A and B: Investigate options for new land uses, compatible with existing buffers and site locational attributes.	Short term	Council
7	Primary school needs: Determine the need for additional government primary schools in existing communities at Bacchus Marsh and Maddingley; identify the location/s and rezone land.	Short term	Council/ Department of Education and Training
8	Update the Bacchus Marsh Integrated Transport Strategy to include consideration of the Bacchus Marsh Urban Growth Framework	Short term	Council/ VicRoads
9	Integrated Infrastructure Delivery Framework: Address all higher order infrastructure needs and means of delivery including integrated water management principles.	Short term	Council/VPA

REF #	PROJECT	TIMING ¹	RESPONSIBILITY
10	Parwan Employment Precinct: <ul style="list-style-type: none"> • Planning scheme amendment to implement a Precinct Structure Plan (PSP) and Infrastructure Contributions Plan (ICP). • Prepare a land use amenity plan to provide appropriate buffers to sensitive uses and avoid incompatible land uses. • Prepare an Integrated Water Management Plan, to demonstrate how sustainable whole-of-water cycle management will be provided. 	Short to medium term	VPA
11	Maddingley integrated college precinct: planning and access study for Bacchus Marsh Grammar and Bacchus Marsh College.	Short to medium term	Council/ Department of Education & Training/ Independent Education Sector
12	Health services precinct in Bacchus Marsh: plan and advocate for a precinct that responds to the community needs of a rural city.	Medium term	Council/ Department of Health and Human Services
13	Merrimu Residential Growth Precinct: planning scheme amendment to implement a PSP and ICP.	Medium to long term ²	Proponent
14	Parwan Station Residential/Commercial Growth Precinct (including future railway station): planning scheme amendment to implement a PSP and ICP.	Medium to long term ³	Proponent
15	Hopetoun Park North Residential Growth Precinct: planning scheme amendment to rezone land and apply a Development Plan Overlay.	Medium to long term ⁴	Proponent

Notes:

- 1 Immediate/ongoing: next 12 months
Short term: 1–5 years
Medium term: 5–10 years
Long term: 10+ years.
- 2 Timing can be brought forward if the preconditions specified in Section 9 are met and if the precinct can demonstrably deliver the northern section of the Eastern Link Road (i.e. linking Gisborne Road to the Western Freeway).
- 3 Timing can be brought forward if the preconditions specified in Section 9 are met and if the precinct can demonstrably deliver the southern section of the Eastern Link Road (i.e. linking Geelong–Bacchus Marsh Road to the Western Freeway)
- 4 Timing can be brought forward if the preconditions specified in Section 9 are met and if the precinct can demonstrably deliver:
 - Improved connectivity with the Western Freeway to and from the west; and
 - An acceptable level of community facilities/amenities in accordance with Council's Community Infrastructure Framework.
- 5 'Timing' refers to the commencement of a planning 'project' or, in the case of a planning scheme amendment, a formal 'request for authorisation' of the amendment



- Key Actions – Local**
- Prepare a Shire-wide Rural Living Strategy
- Key Actions – State/Regional**
- Update Bacchus Marsh Integrated Transport Strategy to include strategic outcome areas
 - Prepare an Open Space Framework
 - Prepare an Integrated Infrastructure Delivery Framework
 - Prepare a Bacchus Marsh Irrigation District planning study
 - Investigate options for new land uses, compatible with existing buffers and site locational attributes in Maddingley
- For a full list of key actions associated with the UGF, please refer to Table 3 and Table 4.*

settlement boundary	Darley Plaza UDF	extractive industry
municipal boundary	aerodrome masterplan precinct	public park
key action: state/regional	future residential growth precinct	watercourse
key action: local	residential / commercial precinct	railway lines/stations
health precinct	potential employment growth precinct	freeway
college precinct	future investigation / transition precinct	arterial road
Bacchus Marsh UDF	buffer interface required for sensitive uses	

Table 4 Key growth actions – local

REF #	PROJECT	TIMING ¹	RESPONSIBILITY
16	Flood mapping for Bacchus Marsh	Immediate/ ongoing	Council/Melbourne Water
17	Update residential suite of zones (amendment C79)	Immediate/ ongoing	Council
18	Bacchus Marsh Aerodrome Masterplan and governance process, , and identification of obstacle limitation surface protection area. <ul style="list-style-type: none"> • Implement via appropriate overlays. • Review the AEO1 and revise the extent and provisions as appropriate. 	Immediate/ ongoing	Council
19	Implement Racecourse Masterplan	Immediate/ ongoing	Council
20	Community Infrastructure Framework	Short term/ ongoing	Council
21	Bulky goods precinct planning (including amendment)	Short term	Council
22	Urban Design Framework: <ul style="list-style-type: none"> • Bacchus Marsh Town Centre: Review existing DDO and incorporate into the recommendations of the UDF. Incorporate recommendations of the Bacchus Marsh housing strategy into the recommendations of the UDF. • Darley Plaza 	Short term	Council Council/ Private sector
23	Fourth government primary school for existing urban areas (Maddingley area)	Short term	Dept. of Education & Training
24	MSS update	Short term	Council
25	WIN (water re-use) project for PEP	Short term	Council/Western Water
26	Database to monitor supply and demand for housing	Short term	Council
27	Localised road upgrades (including State Roads) as per Bacchus Marsh Integrated Transport Strategy	Short to medium term	Council/VicRoads
28	Rural Residential Strategy – Investigate supply, demand and opportunities for rural residential land uses within Bacchus Marsh district, and in proximity to other towns within the shire	Short to medium term	Council

REF #	PROJECT	TIMING ¹	RESPONSIBILITY
29	<p>Darley Sand Quarries investigation, Maddingley Plateau (South Maddingley Road) investigation:</p> <ul style="list-style-type: none"> Working with Department of Economic Development, Jobs, Transport and Resources (DEDJTR), confirm the appropriate buffers to the extractive industries and apply an ESO. Investigate options for new land uses, compatible with existing buffers and site locational attributes. 	Medium term	Council
30	Update heritage study for Bacchus Marsh (including geo-heritage management)	Medium term	Council
31	Update Recreation and Leisure Strategy incorporating updated Hike and Bike Strategy. Examine Gorge Park, Parwan and sand quarries in assessment. Link to Action 1	Medium term	Council
32	Expanded independent, Catholic and/or shared use education sector investment north and south of Western Freeway	Medium term	Council/Independent Education Sector/ Catholic Education Office
33	Waterways/creek corridors study to determine rehabilitation, conservation and open space projects including active recreation and cycleway linkages. Link to Action 1	Medium term	Council/Melbourne Water
34	<p>Define a settlement boundary for Bacchus Marsh district and incorporate this into the Local Planning Policy Framework of the Moorabool Planning Scheme following the completion of the following actions:</p> <ul style="list-style-type: none"> Merrimu Precinct PSP Parwan Station Precinct PSP Hopetoun Park North Precinct rezoning Maddingley Employment Investigation Area – planning study 	Medium to long term	Council

REF #	PROJECT	TIMING ¹	RESPONSIBILITY
35	<p>Transitional local services industry areas:</p> <ul style="list-style-type: none"> Investigate rezoning the Park Street, Maddingley industrial precinct from Industrial 2 Zone to Industrial 3 Zone or Mixed Use Zone, to limit manufacturing and facilitate service industry and other compatible uses. Prepare and implement a management plan to transition existing uses that do not meet buffer requirements to relocate in the PEP, when it is developed, and implement the plan through an appropriate planning tool. Consider application of similar controls to DDO7 to manage all interfaces to sensitive uses. Investigate rezoning the Griffith Street, Maddingley industrial precinct from Industrial 2 Zone to Industrial 3 Zone. 	Medium to long term	Council
36	<p>Maddingley Investigation Area C: Investigate options for new land uses, compatible with existing buffers and site locational attributes.</p>	Long term	Council

APPENDICES



APPENDIX 1: BACKGROUND STUDIES

Moorabool Industrial Areas Strategy, June 2015 (SGS)

Moorabool Industrial Areas Strategy Update, January 2017 (SGS)

Parwan Precinct Agribusiness Analysis, 2014 (CBRE)

Parwan Servicing Plan, June 2015 (Parsons Brinckerhoff)

Moorabool Shire Council – Retail Strategy 2041, November 2015 (Macroplan)

Moorabool Shire Economic Development Strategy, March 2015 (Geographia)

Bacchus Marsh Integrated Transport Strategy, December 2015 (Moorabool Shire Council)

The Way Forward, 2015 (Moorabool Shire Council)

Housing Bacchus Marsh to 2041, June 2016 (Mesh)

Moorabool Shire Community Infrastructure Framework, 2016 (Moorabool Shire Council)

Recreation and Leisure Strategy 2015–2021, Draft, February 2015 (Simon Leisure)

Urban Growth Strategy Community Feedback, 2015 (Moorabool Shire Council)

Bacchus Marsh Agricultural Assessment, February 2017 (RMCG)

Desktop Heritage Survey & Review of Avenue of Honour, January 2017 (Context)

Desktop Cultural Heritage for Bacchus Marsh Future Growth Framework, 2017 (Biosis)

Buffer Assessment, 2017 (Pacific Environment)

Strategic Bulky Goods Retail Assessment, January 2017 (Essential Economics)

Victoria in Future 2016 – Population and household projections to 2051,
2016 (DELWP)

Bacchus Marsh Housing Demand & Supply – Background Paper, April 2016, (Spatial Economics)

APPENDIX 2: CONSULTATION PROCESS

The UGF is underpinned by significant and ongoing consultation. Between November 2014 and January 2015 Council undertook extensive consultation with the local community, state agencies and representatives of the development industry (project managers, bank lenders, real estate agents).

Targeted questionnaires were distributed at the Bacchus Marsh Train Station, Strawberries and Cherries Weekend and local schools (primary and secondary colleges). Two community consultation sessions were conducted. Surveys were conducted with landowners, financial institutions, real estate agents, and building designers and architects in January 2015 (15 completed surveys). Internal Council surveys were also conducted (35 completed surveys).

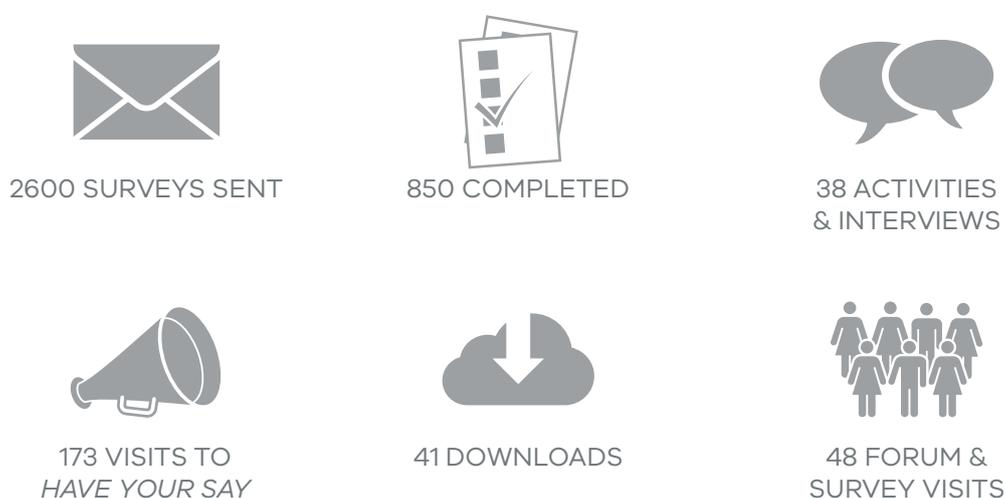


Figure 5 Consultation outcomes

From this work, Council prepared a consolidated report and placed it online for one month. No critical feedback was received. Within that report was a summary of findings and vision statements prepared for the UGF. This summary is as follows.

The community defines Bacchus Marsh in the following ways:

Currently a transit town	Bacchus Marsh is linked to metropolitan Melbourne by significant road and rail services. These are critical to the town, even though the ongoing goal is to provide more local jobs and opportunities.
Bacchus Marsh's character is defined by country landscape	The heritage fabric, treed landscape and centrally located facilities are key elements to maintain and enhance.
Being part of Melbourne but physically separate	Metropolitan Melbourne is visible from many parts of Bacchus Marsh. To retain identity, Bacchus Marsh must avoid becoming a physical urban extension of western Melbourne.
Change is inevitable but it must be managed	Growth should be supported by appropriate infrastructure and master planning.
Sense of community is strong	Residents and visitors alike are strongly conscious of a 'sense of community', that people will support each other.
Better urban growth outcomes wanted	There is general consensus that it would be beneficial to facilitate lower-density housing on the outer edges of Bacchus Marsh and direct infill development where services are more appropriate, such as around activity centres.
Greater retail choice is required	Residents see more whitegoods retail and more diverse small shopping specialties (local specific businesses) as potential improvements to the current retail offering in Bacchus Marsh.
Expanded education and health priorities	Bacchus Marsh already benefits from significant education and health investment with the regional hospital and educational establishments. Further investment will be needed in time to meet new demands and enhance education and health outcomes.
Ongoing investment in public transport and non-vehicle movement	Residents are great advocates of the enhanced V/Line rail services between Melbourne and Ballarat. Integrated pedestrian and cycleway access ways are a priority for greater attention in Bacchus Marsh.
The Irrigation District is important for many reasons	A resilient Bacchus Marsh Irrigation District (BMID) is pivotal to the notion of place, tourism, employment and economic production.
Support residents to stay in their local area	A focus on service delivery within local neighbourhoods is seen as increasingly important for all households.

A wide range of recreational opportunities will be needed in the future

Well-managed, affordable and appropriate recreational facilities are needed to meet community needs across all age categories.

Riverfronts and parks

In Bacchus Marsh the key waterways are the Lerderderg and Werribee Rivers. The community values linear passive open space connecting parks and reserves.

Consultation process – ongoing phase

In February and March 2017, Council supported by the VPA made presentations to landowners potentially affected by growth investigation areas as well as the wider community. Sessions were held as follows:

- » 14 February 4–8pm (landowners)
- » 21 February 6–8pm (landowners)
- » 28 February 4–8pm (landowners)
- » 7 March 4–8pm (community)
- » 14 March 4–8pm (community).

Some 150 attendees registered and several attended multiple sessions. Council received 41 submissions were and a number of site inspections were carried out between Council staff and affected landowners. Feedback was incorporated into the UGF. A copy of submissions is in *Report 2 – Technical Findings*. For the most part, attendees recognised that growth pressures exist and must be managed respectfully in terms of protecting significant landscapes, environmental values and sense of place.

Key landowners (i.e. owners of larger land parcels within growth areas) were supportive of ongoing consultation and growth investigation, especially in the identified residential growth investigation areas.

Residents with concerns, limited geographically to the Merrimu area, identified issues with managing habitat values, ensuring appropriate diversity of lot sizes and transition from existing de facto low-density residential settlement to urban growth as conventionally understood. Road network planning and the alignment of the future Eastern Link Road connecting Gisborne Road with Geelong–Bacchus Marsh Road were core issues that require a timeline for resolution, noting that the planning scheme has flagged this road project for the past 10 years.

APPENDIX 3: AGENCY CONSULTATION

Government reference group

There have been two government reference group meetings held to date:

- » 21 June 2016
- » 10 February 2017.

In addition, during June–July 2017 a draft copy of the UGF was provided to all agencies and their feedback was incorporated.

The following agencies attended the agency consultation meetings:

- Country Fire Authority;
- Department of Economic Development, Jobs, Transport and Resources;
- Department of Environment, Land, Water and Planning;
- Department of Education and Training;
- Department of Health and Human Services;
- Environmental Protection Authority;
- Heritage Victoria;
- Metropolitan Planning Authority (now Victorian Planning Authority);
- Melbourne Water;
- MSC;
- Parks Vic;
- Sport & Recreation Victoria;
- Regional Development Victoria;
- Southern Rural Water;
- VicRoads;
- Western Water;
- Public Transport Victoria.

Key focus areas were then developed into themes as below:

AUTHORITY	LAND	TRANSPORT	AGRICULTURE	INDUSTRY	ENVIRONMENT	WATER	EMPLOYMENT
RDV							
DELWP							
VR							
PTV							
DHHS							
AV							
DET							
EPA							
SRW							
WW							
MW							
PV							
SV							
CFA							

As a significant ‘scene setter’ for work to follow, the meeting summary of the first reference group offers useful insights. Key issues are summarised below:

- Employment in Bacchus Marsh is a key issue. Where are the opportunities?
- Need one report that consolidates all the studies undertaken to date.
- What infrastructure is needed to make Parwan a stronger job cluster location? DEDJTR identifies Parwan as a key focus.
- Integrated transport strategy now completed. VicRoads wants developers to contribute to road infrastructure.
- Extended discussion over water supply, use of recycled water for urban development and irrigation expansion.
- DEDJTR recognised the role of Bacchus Marsh Irrigation District and the need for further protection of key agricultural land.
- SRW identified opportunity for irrigation channel to become a key pedestrian link when it is upgraded (piped?)
- DHHS is preparing a 20 year health and services plan.
- Western Water is examining household water recycling and is keen on less piecemeal development occurring.
- Stabling facilities for trains discussed – appropriate location in Rowsley or elsewhere.
- Parks Vic flagged the environmental significance of Long Forest Nature Conservation Reserve and Lerderberg State Park as key resources to protect and manage.
- Biodiversity and recreation are two of the key priorities for Parks Vic in land management.

- EPA and SV note the role of Maddingley Waste and Resource Recovery Hub and protecting this and other industrial sites from sensitive use encroachment.
- Department of Education and Training recognise a short to medium term need for a new primary school in Maddingley.

Additional meetings/workshops included:

- Eastern Link Road Principles (involving VPA, MSC, VicRoads, Heritage Vic) – three meetings (2/9/16, 25/10/16, 2/3/17). Broad and specific review of issues attached to planning, constraints, funding and design of Eastern Link Road.
- Water infrastructure (DELWP, SRW, WW, MW, MSC, VPA) – one meeting (22/7/16).
- PTV Infrastructure Confirmations (PTV, VPA, MSC) – one meeting (12/8/16).
- DET on educational needs:
 - 9 December 2015 with Jeff Tait and Lynne Sutton
 - 26 April 2016 with Jeff & Lynne
 - 21 December 2016 with MPA, Jeff and Lynne.

APPENDIX 4: ASSESSMENT OF LAND CONSTRAINTS, BACCHUS MARSH GROWTH AREAS

CONSTRAINT: EXISTING URBAN AREA

Zones & Overlays:	Timing:	Growth potential:
GRZ	Ongoing constraint	Limited
NRZ		
LDRZ		

Existing urban areas comprise precincts where increased, incremental and minimal change is encouraged, dependent on land considerations and guided by local housing policy. The existing urban area includes the recently rezoned residential greenfield sites (Stonehill and Underbank). Growth will be focused in precincts identified as capable of increased growth. These precincts contribute to a small portion of the overall growth potential of Bacchus Marsh.

CONSTRAINT: COALMINE AND LANDFILL

Zones & Overlays:	Timing:	Growth potential:
SUZ1	Ongoing constraint	Restricted within the site
ESO (required)	Coalmining licensed until 2033 and coal is identified as state resource. Landfill is licensed in perpetuity and includes composting use.	Limited within off-site amenity buffer areas that restrict uses to non-sensitive

The site has dual use for coal extraction and waste refuse. Coalmining uses are permitted to continue until 2032, after which ongoing use will be determined by the state body governing mineral resources. Buffers for coalmining will be applied as per directions from DEDJTR, indicated at 1,000 m from the title boundary, which will guide future application of an ESO. The landfill uses are permitted to continue in perpetuity. The landfill receives various types of waste, including solid industrial waste (this component being state significant) and green waste that is processed for composting. Buffers for the landfill (and most significantly the composting use component) require assessment and will guide future application of an ESO.

Buffers for coalmining will be applied as per directions from DEDJTR and EPA. Sensitive uses will be restricted within the buffer/ESO areas.

CONSTRAINT: SIGNIFICANT LANDSCAPE

Zones & Overlays:	Timing:	Growth potential:
SLO1 – Scenic Hilltops and Ridgeline Areas	Ongoing constraint	Limited development potential that varies according to area

There are three areas of SLO1 located on or above escarpment edges. Development in these areas will need to consider visual impacts.

CONSTRAINT: SAND QUARRIES

Zones & Overlays: SUZ2 ESO (required)	Timing: Ongoing constraint Multiple quarry licences apply and the site is identified as a state resource.	Growth potential: Restricted within the site Limited within off-site amenity buffer areas that restrict uses to non-sensitive
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There are multiple sand quarries licences operating within the SUZ2 land. These operations are anticipated to continue until at least the medium term when sand resources are depleted.

This sand-quarrying area is identified as being state significant.

CONSTRAINT: PARWAN WASTEWATER TREATMENT PLANT

Zones & Overlays: PUZ1 ESO (required)	Timing: Ongoing constraint Operations will continue and likely expand with population growth.	Growth potential: Restricted within the site Limited within off-site amenity buffer areas that restrict uses to non-sensitive
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The Parwan wastewater treatment plant is zoned PUZ1. It services the Bacchus Marsh population and will need to expand to accommodate growth.

A buffer assessment is required and will guide future application of an ESO.

Sensitive uses will be restricted within the buffer/ESO areas.

CONSTRAINT: STEEP TOPOGRAPHY

Zones & Overlays: SLO1 – Scenic Hilltops and Ridgeline Areas ESO3 – Long Forest and Werribee Gorge	Timing: Ongoing constraint	Growth potential: Limited development potential that varies according to area
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Steep topography below Lerderderg State Park is protected by SLO1. This area contributes to significant views and limits development potential to manage aesthetic impacts.

Long Forest Nature Conservation Reserve and Werribee Gorge are both zoned PCRZ and subject to ESO3, which restricts uses to those undertaken by the Public Land Manager or Parks Victoria.

CONSTRAINT: FARMING AND PARK

Zones & Overlays: FZ PCRZ PPRZ	Timing: Ongoing constraint	Growth potential: Limited development potential
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This category identifies land that is set aside for farming or public park uses. These generally correlate to steep topography, contribute to gateway view quality (eastern approach on Western Freeway), or are used for recreational purposes.

CONSTRAINT: FLOOD PLAINS

Zones & Overlays:	Timing:	Growth potential:
FZ FO (required)	Ongoing constraint	

The Bacchus Marsh Valley is prone to flooding. This area forms part of the BMID, which is significant agricultural land.

Flood mapping is required, will be undertaken by Melbourne Water, and will guide future application of an FO. Development will be limited in the FO.

CONSTRAINT: BACCHUS MARSH AERODROME

Zones & Overlays:	Timing:	Growth potential:
FZ AEO1 (to be revised)	Ongoing constraint	Restricted within the site. Limited within off-site AEO1 buffer areas that restrict certain sensitive uses

The Bacchus Marsh Aerodrome is an asset for the area and could be better used to support growth.

The AEO1 prohibits the following sensitive uses: accommodation (other than backpackers lodge, dwelling, dependent persons unit, host farm and residential hotel), child care centre, drive-in theatre, education centre and hospital. The extent of AEO1 requires assessment and revision. It is likely the above sensitive uses will remain prohibited.

CONSTRAINT: LIMITED SERVICES AREAS

Zones & Overlays:	Timing:	Growth potential:
RLZ BMO	Ongoing constraint	Limited development potential

Long Forest and Camerons Road are rural living areas with limited services. The low population numbers do not justify additional service connection. Population growth is also limited by bushfire risk (see below).

CONSTRAINT: BUSHFIRE AREAS

Zones & Overlays:	Timing:	Growth potential:
BMO	Ongoing constraint	Limited development potential

New development in BMO will need to be managed to respond to assessed level of risk and will likely include siting and building form control.

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URBAN GROWTH FRAMEWORK

FINAL REPORT AUGUST 2018