



Regional Bushfire Planning Assessment

BARWON SOUTH-WEST REGION

April 2012

CONTENTS

| | | |
|------|---|----|
| 1.0 | INTRODUCTION | 3 |
| 2.0 | BARWON SOUTH-WEST REGIONAL OVERVIEW | 5 |
| 3.0 | MUNICIPAL OVERVIEW – COLAC OTWAY SHIRE..... | 7 |
| 4.0 | MUNICIPAL OVERVIEW – CORANGAMITE SHIRE | 13 |
| 5.0 | MUNICIPAL OVERVIEW – GLENELG SHIRE..... | 16 |
| 6.0 | MUNICIPAL OVERVIEW – CITY OF GREATER GEELONG..... | 20 |
| 7.0 | MUNICIPAL OVERVIEW – MOYNE SHIRE | 24 |
| 8.0 | MUNICIPAL OVERVIEW – BOROUGH OF QUEENSCLIFFE | 28 |
| 9.0 | MUNICIPAL OVERVIEW – SOUTHERN GRAMPIANS SHIRE | 30 |
| 10.0 | MUNICIPAL OVERVIEW – SURF COAST SHIRE | 32 |
| 11.0 | MUNICIPAL OVERVIEW – WARRNAMBOOL CITY..... | 36 |

RECOMMENDATION 38 of the Victorian Bushfires Royal Commission states...

“The State implement a regional settlement policy that:

- takes account of the management of bushfire risk, including that associated with small, undeveloped rural lots*
- includes a process for responding to bushfire risk at the planning stage ... ”*

1.0 INTRODUCTION

The 2009 Victorian Bushfires Royal Commission (VBRC) emphasised the importance of considering bushfire matters at all stages of the planning process, including through regional settlement planning and in the Local Planning Policy Framework. The State Planning Policy for Bushfire also identifies that strategic and settlement planning should assist to strengthen community resilience to bushfire.

The Regional Bushfire Planning Assessment (RBPA) supports this approach and is part of the Government's response to Recommendation 38 of the VBRC relating to the development of regional settlement policy in Victoria.

1.1 What is the RBPA?

The RBPA provides extra information about areas (referred to in this document as 'identified areas') where a range of land use planning matters intersect with a bushfire hazard to influence the level of risk to life and property from bushfire. This information should be addressed as part of strategic land use and settlement planning at the regional, municipal and local levels.

The RBPA will inform the Regional Growth Plans currently being prepared by the Department of Planning and Community Development in conjunction with councils. It provides a basis to initiate further detailed analysis as part of other planning processes such as settlement planning and preparing planning scheme amendments.

The RBPA is not a statutory planning provision and does not directly translate into planning schemes. However, it complements planning scheme provisions such as the Bushfire Management Overlay (BMO) by providing spatial and qualitative information from a variety of sources which together can inform considerations about where bushfire should be assessed early in the strategic planning process.

1.2 What information is contained in the RBPA?

The RBPA provides information on matters which may be relevant to strategic and settlement planning and focuses on the factors considered particularly important by the VBRC, including:

- areas where smaller sized lots (less than 0.4ha) which may be used for residential purposes are in or close to a bushfire hazard
- areas where medium sized lots (between 0.4-4ha) which may be used for residential purposes are in or close to a bushfire hazard
- areas where there is a settlement or urban interface with the bushfire hazard
- locations which may have limited access and egress, indicated by a single access road to and from a settlement in addition to roads which connect a number of settlements in areas with a bushfire hazard
- areas where future strategic directions contained in planning schemes may conflict with the bushfire hazard
- areas where the broader landscape is particularly affected by a bushfire hazard
- areas identified from local information provided by either the relevant fire authority or the council that may need to be considered in planning decision making
- areas where multiple issues occur in a single area.

This information is shown spatially on maps at a strategic scale. It is supported by a table that gives a brief explanation for each identified area.

1.3 How is the RBPA different to the BMO?

The BMO is applied to areas where there is potential for bushfire behaviour such as a crown fire, extreme ember attack and radiant heat. The application of the overlay is based on a technical evaluation of the bushfire hazard validated with relevant fire authorities and councils. The key purpose of the BMO is to identify areas where a planning permit is specifically required to consider the bushfire matters prior to development occurring.

The RBPA informs a broader consideration of bushfire issues by recognising that, in specific locations, the bushfire hazard increases the potential bushfire risk to life and property in very specific ways, for example, due to access constraints. Addressing these factors is an important way that strategic and settlement planning can respond to bushfire issues before specific development proposals are considered. This provides an opportunity to resolve issues and implement mitigation measures early in the planning process and at a strategic level.

1.4 How is an RBPA prepared?

The information in the RBPA has been identified through a two-step process:

Step 1 – Base data on planning zones and overlays, vegetation quality, lot location, sizes and patterns and single roads into settlements was collected and correlated against the latest information on the bushfire hazard. For the RBPA a bushfire hazard was generally considered to be a significant extent of vegetation and the area of reference for identified areas was land in or in close proximity (200 metres) to the vegetation. Step 1 provided the initial identified areas.

Step 2 – A qualitative review of the initial identified areas was undertaken with councils, the relevant fire authority and the Department of Sustainability and Environment and any further information based on local knowledge was included as identified areas.

1.0 INTRODUCTION cont..

The development of the RBPA was supported by a reference group of representatives from the Department of Planning and Community Development, Municipal Association of Victoria, councils, the Country Fire Authority, the Metropolitan Fire and Emergency Services Board, and the Growth Areas Authority.

1.5 How should an identified area be treated?

The bushfire risk in identified areas should be assessed as part of strategic and settlement planning and where land use issues are a factor in strengthening community resilience to bushfire (for example, where development and growth is occurring or planned).

Minister's Direction No. 11 - Strategic assessment of amendments requires a planning authority to evaluate and discuss how an amendment addresses bushfire risk. The RBPA will assist planning authorities in determining when bushfire risk should be addressed.

Not every identified area shown in the RBPA requires a specific planning response because:

- there are limited land-use planning responses that can be implemented where an area is not experiencing any change or development pressure
- the anticipated nature and extent of development in specific areas, including areas already zoned for particular uses, can be appropriately managed through the planning permit process where the BMO applies
- planning schemes cannot prevent the continuation of a lawful existing use where Clause 63 of planning schemes protects existing use rights
- bushfire issues may be best managed through non-planning responses such as Integrated Fire Management Planning.

1.6 Important things to note

The RBPA complements other information that can also inform planning decisions. This includes the Victorian Fire Risk Register, Integrated Fire Management Planning and its associated plans and strategies and the operations and workings of fire authorities, councils and communities. Investigation of an identified area should be informed by these and other activities that together support community resilience to bushfire.

The RBPA therefore does not include all information captured by other processes.

The RBPA is not a bushfire risk assessment of any of the identified areas. Identified areas are based on where the bushfire **hazard** correlates with land use planning considerations that may influence the bushfire risk. The RBPA has not sought to replicate bushfire risk assessments undertaken through other processes, particularly the Victorian Fire Risk Register.

2.0 BARWON SOUTH-WEST REGIONAL OVERVIEW

The Barwon South-West region is located in the south-west of Victoria and has an area of about 32 340 square kilometres. The region has 800 kilometres of southern coastline which stretches from Queenscliff Heads in the east to the South Australian border in the west.

The region has a population of about 378 700 stretching across nine municipalities – Greater Geelong, Queenscliffe, Surf Coast, Colac-Otway, Corangamite, Moyne, Warrnambool, Southern Grampians and Glenelg. It contains the main centres of Geelong, Colac, Hamilton, Warrnambool and Portland. The Great Ocean Road extends through coastal townships and scattered rural settlements.

The Barwon south-west coastline and hinterland area is characterised by beaches, rivers and estuaries, dramatic cliffs, undulating hillsides and expansive areas of public parks and forests. The Great Otway, Port Campbell and Grampians National Parks contain large areas of remnant vegetation and significant biodiversity values. Settlements in these areas have interfaces with bushfire hazard.

The hinterland areas extend north of the southern coastline into relatively flat and expansive volcanic plains. This area contains highly productive agricultural land, natural lakes, wetlands and waterways. Plantations are located throughout the area including in close proximity to rural settlements. Native vegetation is generally limited to roadsides, river corridors and scattered conservation reserves.

The Shires of Colac-Otway, Moyne and Southern Grampians were affected by the 1983 Ash Wednesday bushfires. Southern Grampians and Corangamite were affected by the Black Saturday bushfires in 2009.

2.1 The Bellarine Peninsula

The Bellarine Peninsula contains the regional centre of Geelong, coastal settlements and small inland rural settlements. Rural land uses cover large parts of the Bellarine Peninsula, which also provides an attractive coastal lifestyle in commuting distance to Melbourne.

The Brisbane Ranges National Park, Lerderberg State Park, Enfield State Park, Wombat State Forest and a range of smaller reserves are located in this area of the region. Townships and settlements are dispersed across the region with direct interfaces with bushfire hazard areas. Coastal scrubland is also a known bushfire hazard to some small coastal settlements.

2.2 The coastal ranges

The Great Otway National Park is located along the eastern area of the coastline and contains ancient rainforests, woodlands and significant heath environments. The park is surrounded by large scale plantations interspersed with rural lots. The area contains numerous coastal settlements established among heavily vegetated areas and in varying topographies including flat foreshores, rolling hills, steep slopes and rugged cliffs. Settlements in these areas contain small residential and rural-residential lots which adjoin bushfire hazard. Interface areas in some settlements are identified for future rural-residential development. Dwellings in some areas are serviced by single access roads with access and egress constraints.

Scrubland and grassland areas also provide an interface between the bushfire hazard areas and coastal settlements in some locations.

2.3 The southern coastline and hinterland

The southern coastline and hinterland area includes the Port Campbell National Park and numerous linear coastal parks and reserves. These areas are dominated by coastal scrubland,

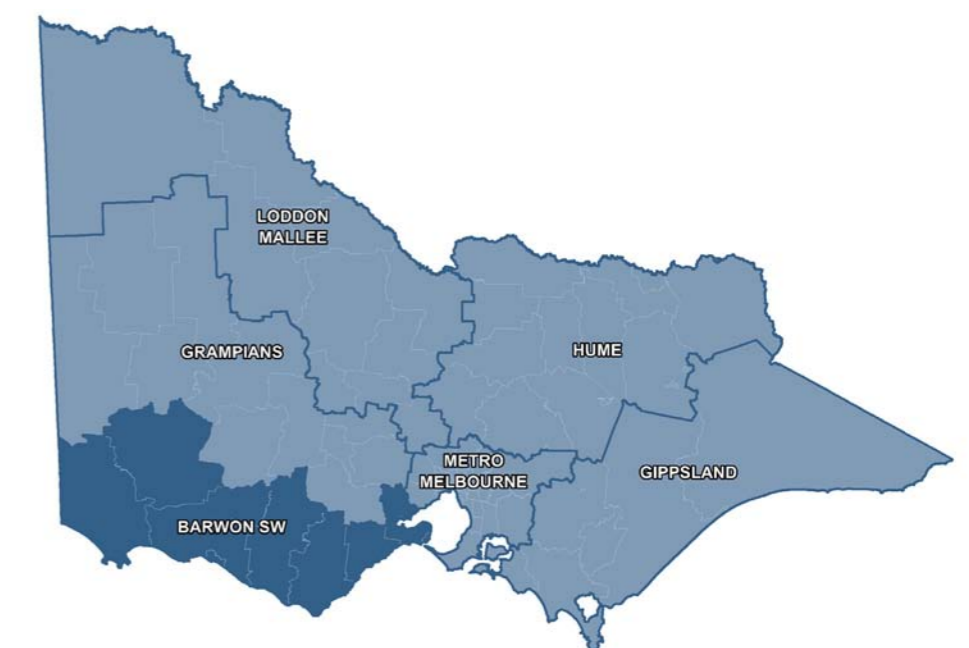
wetland and riparian corridors identified as susceptible to fire events. Adjoining settlements with small developed lots are within, or in proximity to, the bushfire hazard area. Other small and rural-residential lots are located in proximity to pockets of native vegetation or plantations.

2.4 The central plains

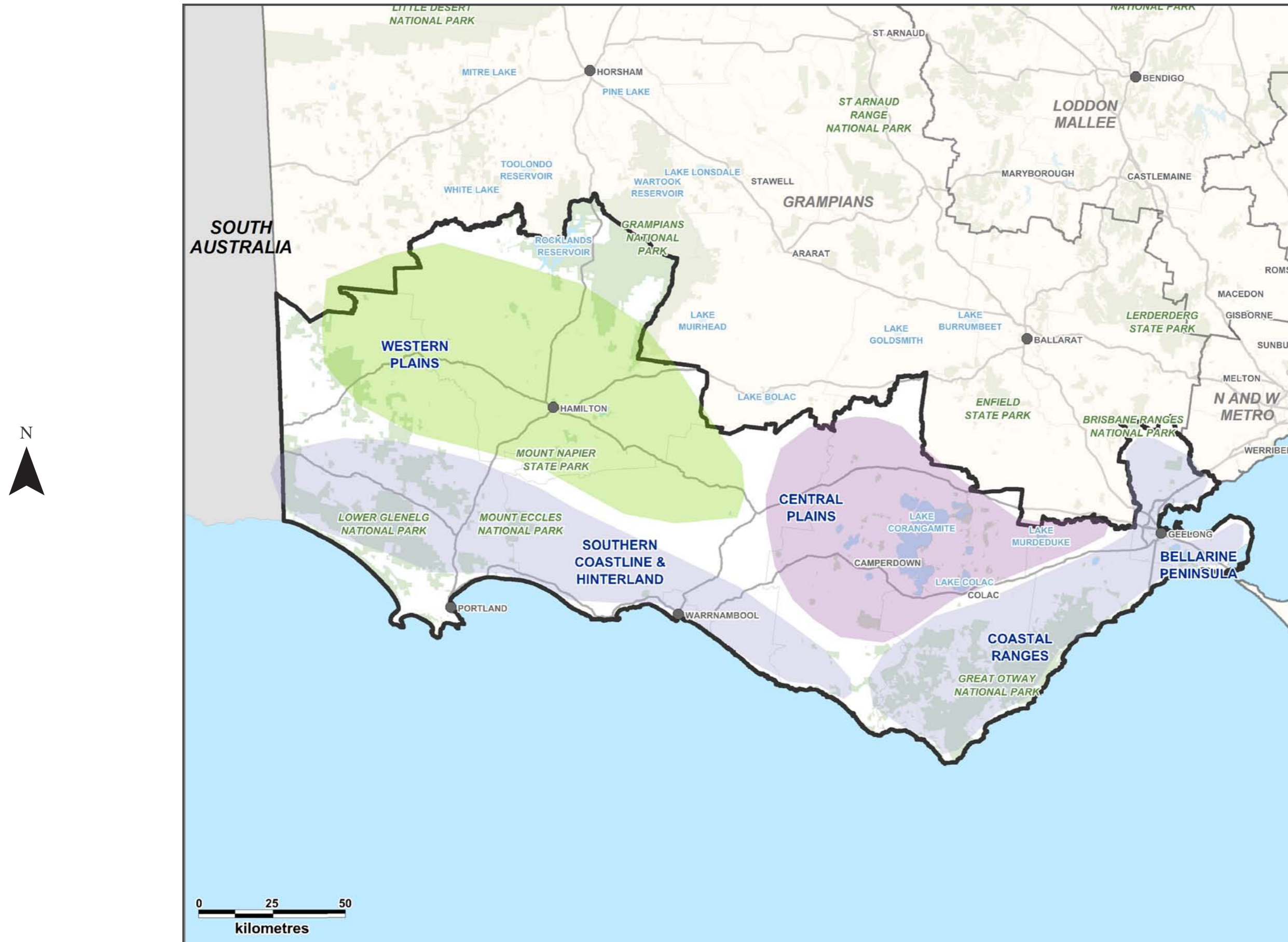
The central plains contain large rural lots generally devoid of woodland or forest vegetation. The aesthetic and natural values of these areas attract development pressure for rural-residential lots in bushfire hazard areas.

2.5 The western plains

The western plains area contains undulating vegetated landscapes, numerous waterways, natural lakes and wetlands, significant areas of state forest and adjacent isolated settlements. It also contains grassland environments which provide an interface between more significant bushfire hazard areas and settlements with rural-residential lots.



BARWON SOUTH-WEST REGIONAL MAP



3.0 MUNICIPAL OVERVIEW – COLAC OTWAY SHIRE

Colac Otway Shire is located in the south of the region and has an area of about 3500 square kilometres and a population of approximately 22 100. The Shire's main urban centre is Colac, which has a population in excess of 11 400. The remaining population resides across a myriad of smaller rural and coastal settlements.

Agriculture and forestry are the dominant land uses in the municipality, with the associated dairy, beef and manufacturing industries being the most significant in terms of economic contribution to the Shire. The Otway Ranges, temperate climate and southern coastline support a strong tourism sector.

The Shire incorporates expansive areas of significant biodiversity, water catchments and aquifers, wetlands and significant coastal landscapes with 90 kilometres of coastline served by the Great Ocean Road. The deeply dissected ridges and valleys of the Otway Ranges in the south contrast substantially with the open northern plains and natural lakes. The majority of native vegetation is found on public land in the Shire, with small remnants on private land.

Landslides are a significant hazard in parts of the Shire making vegetation retention important to stabilising soil structure and minimising landslip. A range of environmental land management overlays are used to protect vegetation across the municipality.

3.1 Northern area

The northern region of the municipality generally contains large scale lots which are devoid of woodland or forested areas. However, the region also contains multiple small and large vegetated lakes and wetlands including Lakes Colac, Beeac, Cundare and Weering. Waterways pass through small vegetated reserves. The lakes, wetlands, waterways and reserves contain riparian vegetation and grassland which are known bushfire hazards.

3.2 Southern and central areas

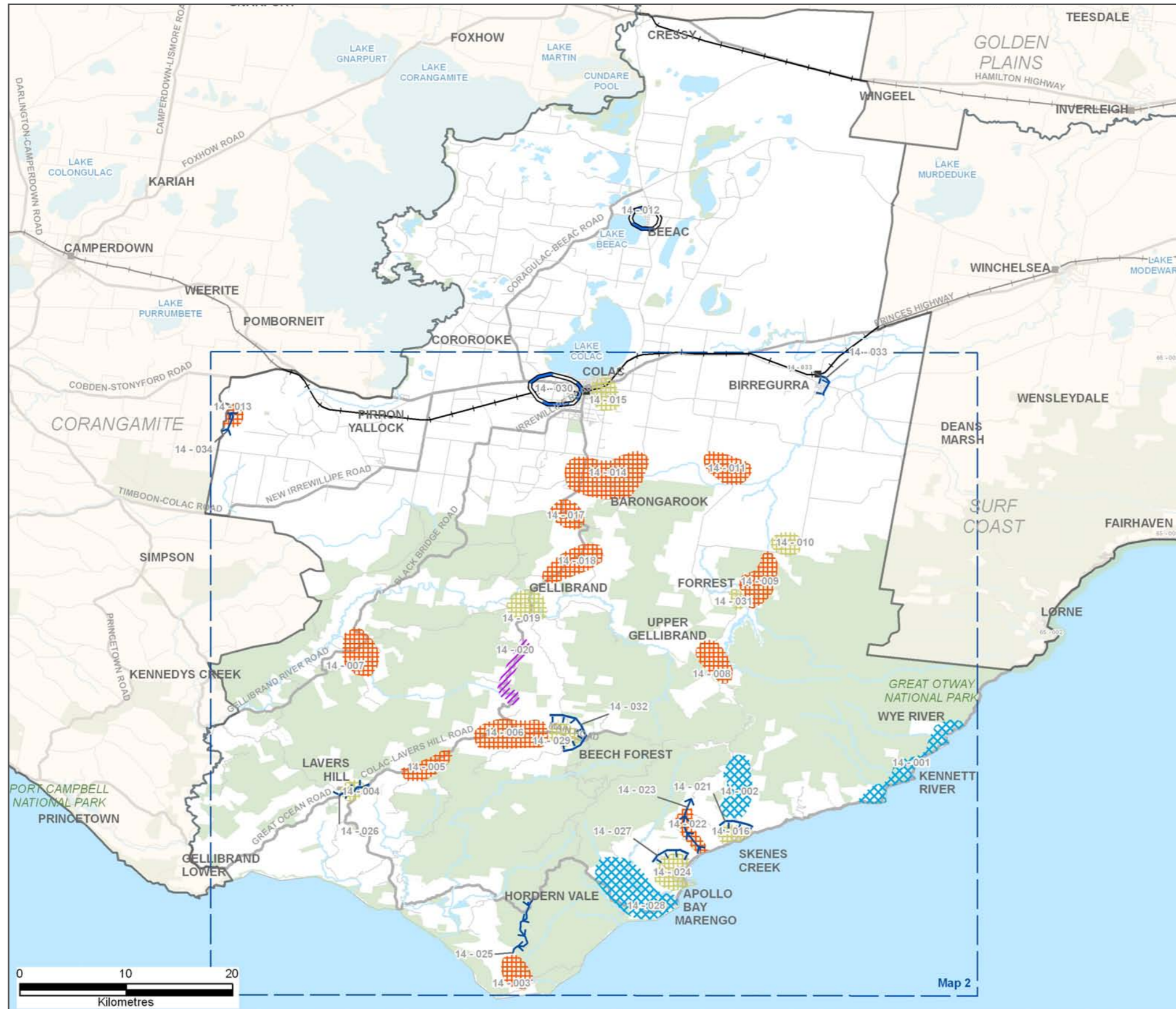
The southern and central areas of the municipality exhibit rolling hills of grassland surrounded by extensive areas of heavily vegetated state parks and plantations. This area contains the Carlisle State Park, Melba Gully Park and other flora and fauna reserves containing vegetation of high or very high conservation significance. Settlements are dotted throughout this region and contain small residential or rural-residential lots which directly interface with bushfire hazards. The Forrest-Apollo Bay, Colac-Lavers Hill and Carlisle-Colac Roads are sealed roads providing north and south access between Colac and the Great Ocean Road.

3.3 Coastal environs

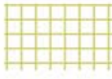







The Great Otway National Park is located along the southern coastline and incorporates the former Otway National Park and Angahook-Lorne, Carlisle and Melba Gully State Parks, as well as areas of state forest and other Crown land. It extends between Marengo in the east and Princetown in the west (Corangamite Shire) and is approximately 103,000 hectares (across municipalities). It contains the tall wet forests, ancient rainforests, the drier forests of the inland slopes and the very diverse heathlands and woodlands, fringed by a spectacularly rugged coastline accessed by the Great Ocean Road.

Coastal settlements are established among heavily vegetated areas and in varying topographies including flat foreshores, rolling hills, steep slopes and rugged cliffs. These settlements contain small residential or rural-residential lots. Subdivisions contain developed and undeveloped lots with vegetation of high or very high conservation significance. Some areas contain single constructed or unsealed access roads.







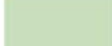
COLAC OTWAY MUNICIPAL MAP - MAP 1



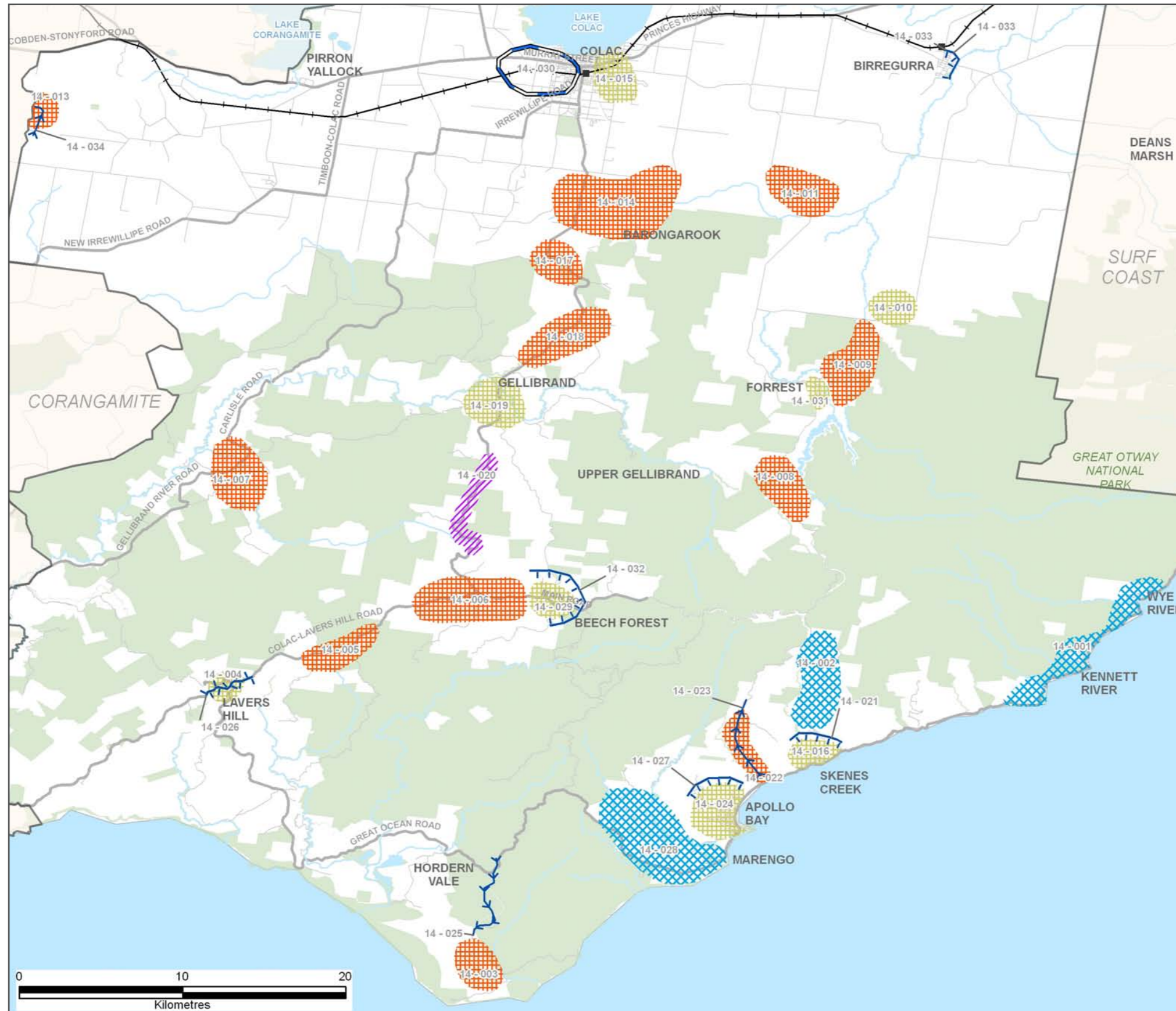
Identified Areas

-  Small lots in or close to hazard (0 - 0.4 hectares)
-  Medium lots in or close to hazard (0.4 - 4 hectares)
-  Specific local knowledge
-  Other information of interest to planning
-  Multiple matters
-  Limited access and egress
-  Urban/bushfire hazard interface
-  Future strategic directions and bushfire hazard conflict

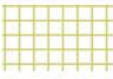
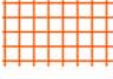






Features

-  Major road
-  Road
-  Railway
-  Railway station
-  Watercourse
-  Waterbody
-  Public land








COLAC OTWAY MUNICIPAL MAP - MAP 2



Identified Areas

-  Small lots in or close to hazard (0 - 0.4 hectares)
-  Medium lots in or close to hazard (0.4 - 4 hectares)
-  Specific local knowledge
-  Other information of interest to planning
-  Multiple matters
-  Limited access and egress
-  Urban/bushfire hazard interface
-  Future strategic directions and bushfire hazard conflict

Features

-  Major road
-  Road
-  Railway
-  Railway station
-  Watercourse
-  Waterbody
-  Public land

COLAC OTWAY – IDENTIFIED AREA DESCRIPTION TABLE

| IDENTIFIED AREA CODE | LOCATION | IDENTIFIED AREA DESCRIPTION |
|----------------------|---|---|
| 14-001 | Grey River / Kennett River / Wye River / Separation Creek | Multiple bushfire matters including: <ul style="list-style-type: none"> clusters of small and medium rural-residential lots along the Great Ocean Road in bushfire hazard areas settlements have a direct interface with the Great Otway National Park, vegetated hinterland, coastal areas and associated bushfire hazards settlements developed with cul-de-sac environments in bushfire hazard areas and rely on the Great Ocean Road egress extensive areas contain vegetation of high and very high conservation significance. |
| 14-002 | Tanybryn / Skenes Creek North | Multiple bushfire matters including: <ul style="list-style-type: none"> presence of small and medium size lots set in a rural landscape in close proximity to bushfire hazard areas Tanybryn and Skenes Creek North are surrounded by state forest and associated bushfire hazard single dirt and constructed access roads servicing clusters of dwellings in Skenes Creek North and Tanybryn extensive areas contain vegetation of high and very high conservation significance. |
| 14-003 | Cape Otway | Cluster of developed and undeveloped rural-residential lots in excess of 0.4 hectares in a bushfire hazard area. The eastern boundary of the settlement interfaces with the Great Otway National Park and the western boundary interfaces with coastal scrublands. |
| 14-004 | Lavers Hill | Township of Lavers Hill which includes a cluster of small lots interface with a bushfire hazard area. State forest abuts the northern boundary of the settlement. Includes vegetation of high and very high conservation significance. |
| 14-005 | Wyelangta | Cluster of rural-residential lots in excess of 0.4 hectares with a direct interface to a bushfire hazard area. Wyelangta is surrounded by state forest. Includes vegetation of high and very high conservation significance. |
| 14-006 | Weeaprounah / Ferguson | Cluster of rural-residential lots and small lots located in a vegetated and rural landscape. The perimeters of these settlements are heavily vegetated with direct interfaces with state forest and associated bushfire hazard. Includes vegetation of high and very high conservation significance. |
| 14-007 | Carlisle River | Cluster of medium size lots in excess of 0.4 hectares in a rural setting with vegetated and modified landscapes. Settlement contains lots directly interfacing with Carlisle State Park and associated bushfire hazard areas. Includes vegetation of high and very high conservation significance. |
| 14-008 | Barramunga | Cluster of rural-residential lots with direct interfaces to bushfire hazard areas. The settlement is surrounded by state forest and heavily vegetated areas. Includes vegetation of high and very high conservation significance. |
| 14-009 | Forrest | Area generally north of the Forrest township which includes a mixture of developed and undeveloped rural lots serviced by Birregurra - Forrest Road. Lots interface with surrounding state forest and associated bushfire hazard areas. Includes vegetation of high and very high conservation significance. |
| 14-010 | Barwon Downs | Clusters of small rural lots in an open rural landscape. Grassland provides an interface between the settlement and more significant bushfire hazard in the state forest located to the immediate south. Includes vegetation of high and very high conservation significance. |
| 14-011 | Yeodene | Cluster of rural-residential lots with a direct interface to a bushfire hazard area. Includes lots which contain vegetation of high and very high conservation significance. |
| 14-012 | Beeac | Local conditions surrounding Lake Beeac are a known bushfire hazard. |

COLAC OTWAY – IDENTIFIED AREA DESCRIPTION TABLE cont...

| IDENTIFIED AREA CODE | LOCATION | IDENTIFIED AREA DESCRIPTION |
|----------------------|--------------------------------|--|
| 14-013 | Carpendeit | Cluster of rural-residential lots in excess of 0.4 hectares located in an area containing bushfire hazard associated with the surrounding vegetated environment. Lots are serviced by single road access (Clifton Road). |
| 14-014 | Barongarook | Cluster of rural-residential lots in a bushfire hazard area. Scattered vegetation and grasslands provide a direct interface to the state forest located immediately south of the settlement. Includes vegetation of high and very high conservation significance. Large undeveloped lots in excess of four hectares also exist in the general area surrounding Barramunga and occupy areas surrounded by the Great Otway National Park. |
| 14-015 | Colac | Cluster of small rural lots with interface to bushfire hazard areas associated with Barongarook Creek, Hugh Murray Reserve, Sculpture Park and Eastern Reserve. |
| 14-016 | Skenes Creek / Petticoat Creek | Small lots located in the township of Skenes Creek. The settlement is adjacent to the Great Otway National Park and associated bushfire hazard. Vegetated lots exist along Skenes Creek Road and permeate into the urban settlement. |
| 14-017 | Barongarook / Barongarook West | Cluster of developed and undeveloped rural-residential lots with a direct interface to a bushfire hazard area. Includes vegetation of high and very high conservation significance which exists around Colac-Lavers Hill Road and Beech Forest Road and associated with the Great Otway National Park. |
| 14-018 | Kawarren | Clusters of lots generally in excess of 0.4 hectares located in areas interfacing with bushfire hazard. The area surrounding Kawarren extends into state forest and includes vegetation of high and very high conservation significance. |
| 14-019 | Gellibrand | Cluster of rural-residential lots with direct interfaces to bushfire hazard areas associated with Carlisle State Park. Grassland and riparian corridors provide an interface between these areas and the township. Includes vegetation of high and very high conservation significance. |
| 14-020 | Gellibrand / Ferguson | Area contains a combination of lots sizes in excess of four hectares including developed and undeveloped land. Where development exists it is generally located along Colac-Lavers Hill Road with the balance of the land containing significant vegetation interfacing with Great Otway National Park. Area includes vegetation of high and very high conservation significance. |
| 14-021 | Skenes Creek | Skenes Creek interface generally located to the north towards the the Great Otway National Park and along Skenes Creek Road. Settlement interfaces with areas of high conservation significance. |
| 14-022 | Apollo Bay (Wild Dog Creek) | Presence of medium size lots in excess of 0.4 hectares in proximity to bushfire hazard associated with riparian vegetation located in Wild Dog Creek enviorns and the Great Otway National Park to the north-west. |
| 14-023 | Apollo Bay (Wild Dog Creek) | Presence of curvilinear single access roads servicing lots in the area including Busty Road. Single access roads meander through vegetated areas. |
| 14-024 | Apollo Bay | Small lots located in the township of Apollo Bay. The settlement is surrounded by vegetation adjacent to the Great Otway National Park. |
| 14-025 | Cape Otway | Single dirt road extending south from the Great Ocean Road which services a cluster of dwellings in a bushfire hazard area. |
| 14-026 | Lavers Hill | The township of Lavers Hill is primarily developed and concentrated in a linear settlement pattern along Colac-Lavers Hill Road. Development interfaces with bushfire hazard area both north and south of Lavers Hill. |

COLAC OTWAY – IDENTIFIED AREA DESCRIPTION TABLE cont...

| IDENTIFIED AREA CODE | LOCATION | IDENTIFIED AREA DESCRIPTION |
|----------------------|--------------|---|
| 14-027 | Apollo Bay | Urban bushfire hazard interface to the north of Apollo Bay at the foothills to Great Otway National Park. Grassland environments located at the interface between forested environments and the established urban settlement of Apollo Bay. |
| 14-028 | Marengo | Multiple bushfire matters including: <ul style="list-style-type: none"> • Presence of small and medium size lots set in a rural landscape in close proximity to bushfire hazard areas. Small lots are generally concentrated in the urban township of Marengo, • Hinterland areas of Marengo to the west and north-west are surrounded by state forest and associated bushfire hazard. • Single dirt and constructed access roads are located across the non-urban environment of Marengo servicing dwellings north and south of the Great Ocean Road. • Extensive areas are known to contain vegetation of high and very high conservation significance. |
| 14-029 | Beech Forest | Township of Beech Forest including a cluster of small lots located in proximity to the Great Otway National Park. |
| 14-030 | Colac West | General area in Colac West generally west of Deans Creek. Area includes a grassland bushfire hazard interface to existing development. |
| 14-031 | Forrest | Township of Forrest located in an area containing significant vegetation associated with the West Barwon Reservoir catchment area. |
| 14-032 | Beech Forest | The township of Beech Forest is located in an area surrounded by vegetation with a key interface towards the north, east and south of the township. |
| 14-033 | Birregurra | Bushfire hazard interface with the township of Birregurra associated with the riparian vegetation along the Barwon River corridor. |
| 14-034 | Carpentait | Single access road servicing a cluster of developed and undeveloped lots in an area containing bushfire hazard. |

4.0 MUNICIPAL OVERVIEW – CORANGAMITE SHIRE

Corangamite Shire is located in the centre of the region and has an area of approximately 4600 square kilometres. It has a population of approximately 17 500. The majority of the population resides in the main townships of Camperdown, Terang and Cobden, and the smaller coastal settlements of Princetown and Port Campbell.

The Shire has large areas of highly productive agricultural land. The northern areas are used for grazing and limited broad acre cropping. In the south the land is mainly used for dairying, including the Heytesbury dairy settlement area.

Three distinct topographies exist in the Shire. The north is characterised by relatively flat plains while the centre is characterised by rocky outcrops and volcanic crater lakes, including the internationally significant Lake Gnotuk and Lake Bullen Merri, located to the east of Camperdown. The south comprises undulating hills and coastal hinterland, including the Port Campbell National Park and the Bay of Islands Coastal Park. These two parks combine to form a linear reserve along 65 kilometres of the coastline accessed by the Great Ocean Road.

4.1 Northern area

The north of the municipality generally contains large lots which are devoid of woodland or forested areas and associated bushfire hazard.

4.2 Eastern area

The Corangamite Lake forms part of the eastern border of the municipality. Vegetated areas extend south-west and west from Corangamite Lake towards the undulating hills of the central and southern areas of the municipality. These areas are of high and very high conservation significance. Clusters of small rural lots in these areas are located in close proximity to bushfire hazard areas. The valued aesthetic and natural environment of these areas attract development pressure for rural-residential lots which are vulnerable to bushfire.

4.3 Southern area

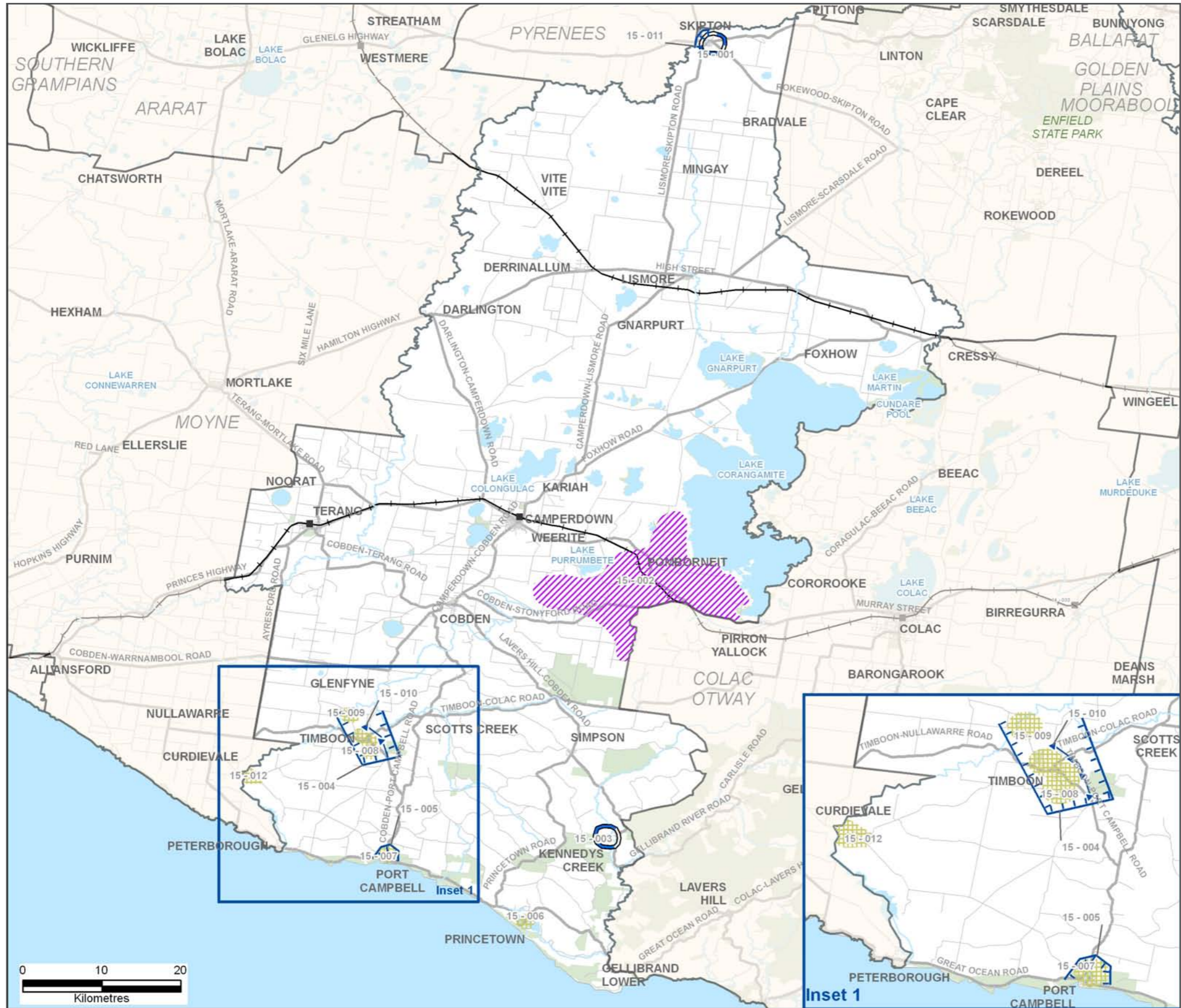
The southern region extends into undulating hills, scattered plantations and patches of remnant vegetation along road reserves, watercourses and in flora and fauna reserves. Some small and rural-residential lots clustered around watercourse and riparian vegetation are located in or in close proximity to bushfire hazard areas. The bushfire hazard interface areas are identified for long-term potential rural-residential growth. Vegetation in these areas is of high and very high conservation significance.

Other rural settlements containing clusters of rural and rural-residential lots are located in proximity to large areas of native vegetation and state forest. The surrounding grassland provides an interface between more significant bushfire hazard areas and the settlements. Vegetation in these areas is of high and very high conservation significance









4.4 Coastal area

The Port Campbell National Park and the Bay of Islands Coastal Park are located along the dramatic cliffs, native heathlands and estuaries of the southern boundary of the municipality. This coastline and hinterland contains a number of small townships and settlements in vegetated areas of high and very high conservation significance. These settlements include clusters of rural-residential lots in or in close proximity to corresponding bushfire hazard areas.








CORANGAMITE MUNICIPAL MAP



Identified Areas

-  Small lots in or close to hazard (0 - 0.4 hectares)
-  Medium lots in or close to hazard (0.4 - 4 hectares)
-  Specific local knowledge
-  Other information of interest to planning
-  Multiple matters
-  Limited access and egress
-  Urban/bushfire hazard interface
-  Future strategic directions and bushfire hazard conflict

Features

-  Major road
-  Road
-  Railway
-  Railway station
-  Watercourse
-  Waterbody
-  Public land

CORANGAMITE – IDENTIFIED AREA DESCRIPTION TABLE

| IDENTIFIED AREA CODE | LOCATION | IDENTIFIED AREA DESCRIPTION |
|----------------------|--|--|
| 15-001 | Skipton | Grassland environment surrounding Skipton is a known bushfire hazard and specific local condition. |
| 15-002 | South-east of Camperdown to Lake Corangamite / Pomborneit / area east of Stonyford / area north-east of Carpendeit | Development pressure is being experienced south-east of Camperdown towards Corangamite Lake in proximity to a bushfire hazard area. The wider areas contain small undeveloped rural lots in the Farming Zone in close proximity to bushfire hazard area associated with state forest and scattered remnant vegetation. Includes vegetation of high and very high conservation significance. |
| 15-003 | Great Otway National Park, near Kennedy's Creek | Grasslands are a known bushfire hazard area between rural-residential properties and the surrounding national park. |
| 15-004 | Timboon | Eastern, southern and western boundaries of Timboon township interface with bushfire hazard associated with state forest and scattered remnant vegetation. |
| 15-005 | Port Campbell | North-western and south-eastern boundaries of Port Campbell interface with bushfire hazard associated with Port Campbell National Park and scattered remnant vegetation. |
| 15-006 | Princetown | Cluster of lots at Princetown near Point Ronald in or in close proximity to bushfire hazard area associated with Port Campbell National Park / Otway National Park and scattered remnant vegetation. Includes vegetation of high and very high conservation significance. North-western and south-eastern boundaries of Princetown interface with bushfire hazard. |
| 15-007 | Port Campbell | Township of Port Campbell which includes small lots and medium size lots at its periphery in close proximity to bushfire hazard area associated with Port Campbell National Park and scattered remnant vegetation. Includes vegetation of high and very high conservation significance. |
| 15-008 | Timboon | Cluster of small rural-residential lots in or in close proximity to bushfire hazard area. |
| 15-009 | North of Timboon | Cluster of small rural lots in close proximity to bushfire hazard area associated with riparian vegetation. |
| 15-010 | Timboon | Timboon Township Structure Plan provides for future residential development into areas proximate to bushfire hazard associated with state forest and scattered remnant vegetation. |
| 15-011 | Skipton | Western boundary of Skipton interfaces with bushfire hazard associated with scattered remnant vegetation. |
| 15-012 | Boggy Creek | Presence of small lots in Boggy Creek located along a vegetation riparian corridor and in proximity to bushfire hazard. |

5.0 MUNICIPAL OVERVIEW – GLENELG SHIRE

Glenelg Shire is located in the west of the region and has an area of approximately 6212 square kilometres and 134 kilometres of vegetated coastline fronting the Southern Ocean. It has a population of approximately 22 100, with the majority of the population residing in Portland, Casterton and Heywood.

The municipality contains productive rural land north and west of Portland, primarily supporting agricultural and horticultural sectors. Extensive areas of pine and eucalyptus plantations exist around Dartmoor, Casterton and Branxholme known as the Greater Green Triangle. The residual areas north of the coastline have been cleared of remnant vegetation and are dominated by broad acre cropping, forestry and timber production (eucalyptus and pine plantations).

Approximately one third of the municipality is public land covering vast areas of reserved forest, Crown land, coastal reserves and national parks, including the Lower Glenelg, Mount Richmond and Cobboboonee National Parks in the south-west. Significant biodiversity values are located along the southern coastline, national parks and flora and fauna reserves. The removal of vegetation is managed through the Environmental Significance Overlay which applies to these parks and the numerous watercourses, wetlands and significant habitat areas of the municipality.

5.1 Northern area

The northern area of the municipality contains heavily vegetated, undulating areas, numerous natural lakes and wetlands, significant areas of state forest and scattered areas of plantations. Settlements are generally located in valley areas and consist of large lot subdivisions primarily devoid of woodland or forest vegetation. Some settlements are located in close proximity to plantation areas and contain clusters of undeveloped small rural lots in bushfire hazard areas. Grassland environments provide an additional interface between more significant bushfire hazard areas and surrounding settlements with small rural lots.

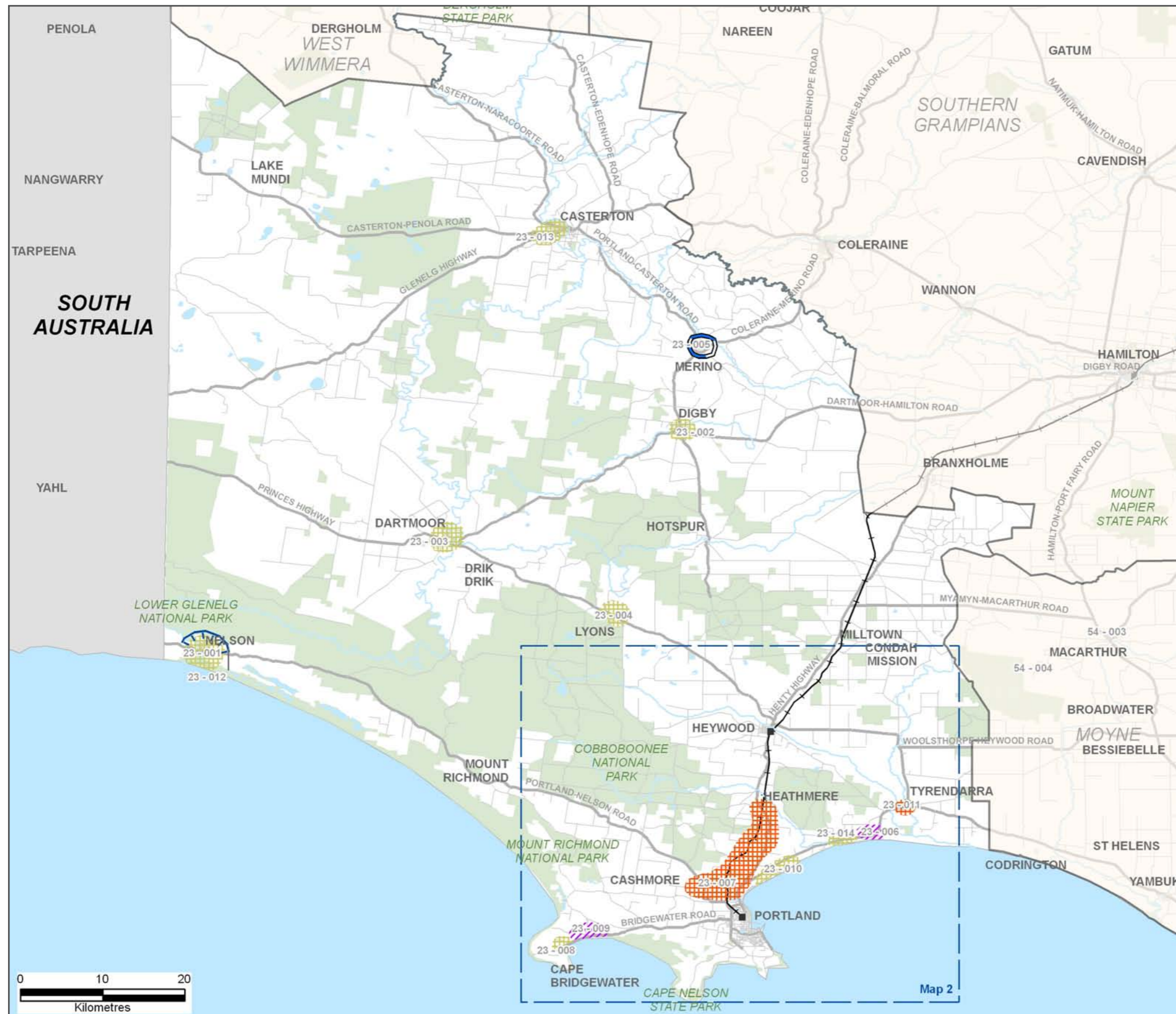
5.2 South-eastern area

The main urban centre of the municipality, Portland, is located in the south-eastern area. The southern coastline extends east and west of the township and contains heath and grassland environments. Several watercourses which descend through the area contain linear and connecting corridors of riparian vegetation. The coastal hinterland areas provide a bushfire hazard for surrounding settlements which contain small and rural-residential lots in or in proximity to bushfire hazard areas. The aesthetic and natural values of these areas attract development pressure for rural-residential settlement.

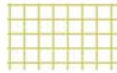
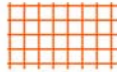






5.3 South-western area

The south-western area includes the Lower Glenelg, Mount Richmond and Cobboboonee National Parks and large stands of plantations. Settlements located between the national parks and coastline reserves contain small and undeveloped rural-residential lots in bushfire hazard areas. The interface between these areas contains vegetation of high and very high conservation significance. Other settlements are surrounded by plantations and contain clusters of small and rural-residential lots in or in close proximity to bushfire hazard areas.







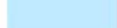
GLENELG MUNICIPAL MAP - MAP 1



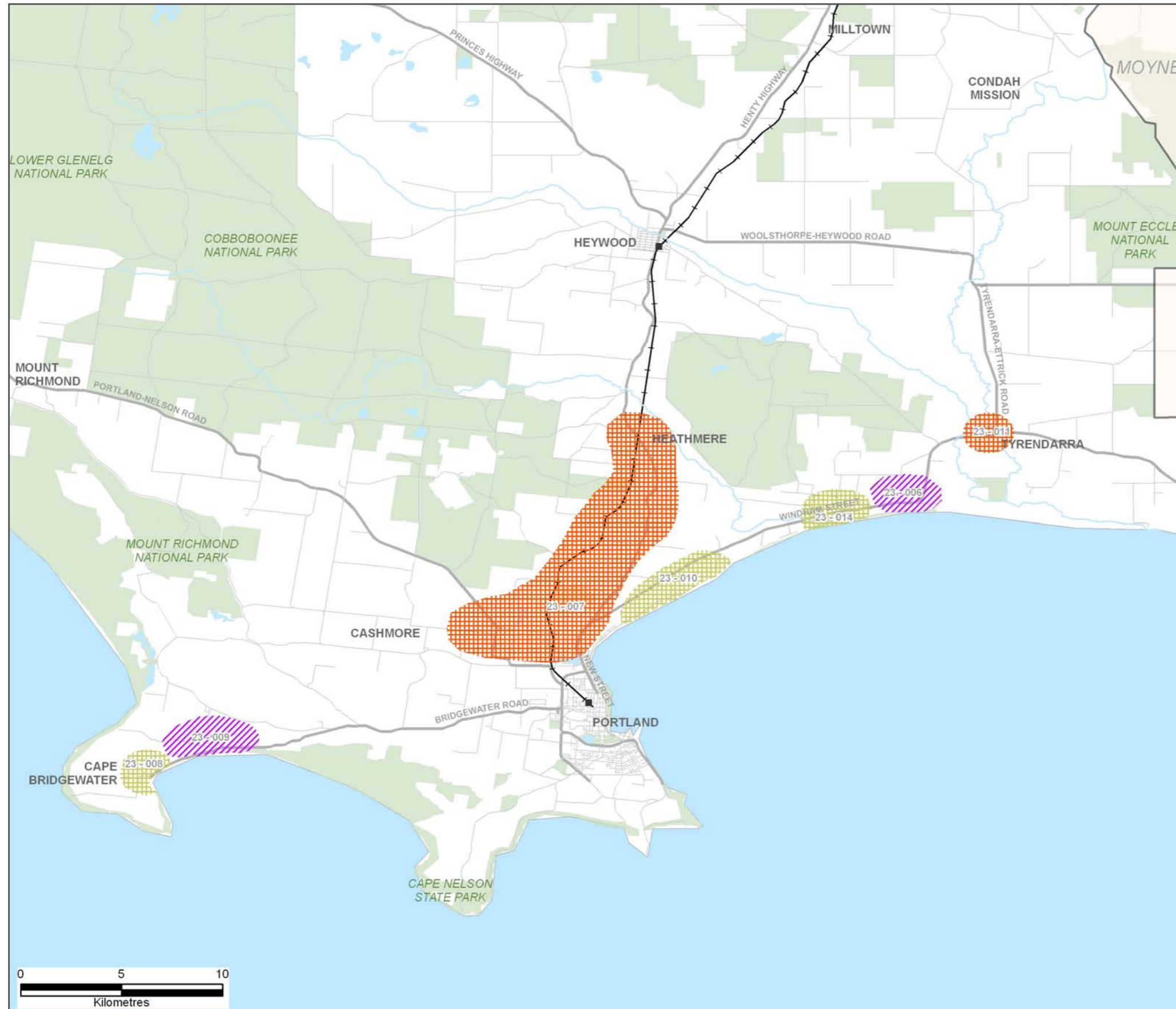
Identified Areas

-  Small lots in or close to hazard (0 - 0.4 hectares)
-  Medium lots in or close to hazard (0.4 - 4 hectares)
-  Specific local knowledge
-  Other information of interest to planning
-  Multiple matters
-  Limited access and egress
-  Urban/bushfire hazard interface
-  Future strategic directions and bushfire hazard conflict

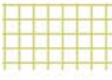
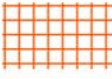






Features

-  Major road
-  Road
-  Railway
-  Railway station
-  Watercourse
-  Waterbody
-  Public land







GLENELG MUNICIPAL MAP - MAP 2

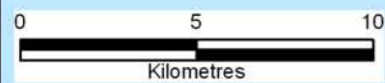


Identified Areas

-  Small lots in or close to hazard (0 - 0.4 hectares)
-  Medium lots in or close to hazard (0.4 - 4 hectares)
-  Specific local knowledge
-  Other information of interest to planning
-  Multiple matters
-  Limited access and egress
-  Urban/bushfire hazard interface
-  Future strategic directions and bushfire hazard conflict

Features

-  Major road
-  Road
-  Railway
-  Railway station
-  Watercourse
-  Waterbody
-  Public land



GLENELG – IDENTIFIED AREA DESCRIPTION TABLE

| IDENTIFIED AREA CODE | LOCATION | IDENTIFIED AREA DESCRIPTION |
|----------------------|---|---|
| 23-001 | Nelson | The settlement of Nelson is made up of small lots with larger lots located at the periphery of the township. Area surrounding Nelson contains vegetation of high and very high conservation significance established bushfire hazard in the northern, central and southern portions of the area. |
| 23-002 | Digby | Cluster of small lots, surrounded by an area that is largely undeveloped. Larger undeveloped lots exist around the periphery of Digby. |
| 23-003 | Dartmoor | Cluster of small residential lots in the township of Dartmoor in proximity to bushfire hazard area. Dartmoor is surrounded by plantations. North-western, eastern and southern boundaries interface with bushfire hazard. Includes vegetation of high and very high conservation significance in north-south corridor of area. |
| 23-004 | Lyons | Cluster of small rural lots near Cobboboonee National Park in bushfire hazard area. Includes vegetation of high and very high conservation significance. |
| 23-005 | Merino | Grasslands surrounding Merino are a known bushfire hazard. |
| 23-006 | Princes Highway and Orchard Road, near Narrawong | Development pressure is being experienced east of the Narrawong settlement in proximity to a bushfire hazard area. |
| 23-007 | Portland north to Heathmere | Clusters of small and medium size lots in or in close proximity to bushfire hazard area between Portland north, Bolwarra to the East and Heathmere to the north. Eastern boundary of Portland north to Heathmere interfaces with bushfire hazard associated with scattered remnant vegetation. |
| 23-008 | Cape Bridgewater | Cluster of small lots at Cape Bridgewater in bushfire hazard area. Includes vegetation of high and very high conservation significance. |
| 23-009 | East of Cape Bridgewater | Presence of large rural lots, both developed and undeveloped, to the east of Cape Bridgewater in or in close proximity to bushfire hazard area along coastal environment and in hinterland areas. Area is of rural conservation significance. |
| 23-010 | Coastal area to the north-east of Bollwarra / Allestree | Cluster of lots located in a coastal scrubland environment in proximity to bushfire hazard area north-east of Bollwarra. Area contains scattered remnant vegetation. |
| 23-011 | Tyrendarra | Cluster of rural-residential lots at Tyrendarra in a bushfire hazard area associated with scattered remnant vegetation. North-western boundary of Tyrendarra interfaces with bushfire hazard associated with scattered remnant vegetation. Includes vegetation of high and very high conservation significance. |
| 23-012 | Nelson | Northern, eastern and western boundaries of Nelson interface with bushfire hazards associated with Discovery Bay Park and Lower Glenelg National Park. |
| 23-013 | Casterton | Township of Casterton contains small lots in vegetated areas associated with riparian corridors generally developed west of the Glenelg river towards vegetated public land to the west. |
| 23-014 | Narrawong | Cluster of small lots at Narrawong in close proximity to bushfire hazard area associated with scattered remnant vegetation. |

6.0 MUNICIPAL OVERVIEW – CITY OF GREATER GEELONG

The City of Greater Geelong is located in the south of the state and has an area of about 1247 square kilometres with approximately one third of its boundary abutting the coast. It includes the major population and commercial centre of Geelong. With a population of approximately 220 100, it is the largest regional city in Victoria and is located about 75 kilometres south-west of Melbourne. The remainder of the population reside in coastal and small inland rural settlements.

Farming and agricultural activities are primarily located in the north of the municipality particularly around the Anakie area at the foothills of the Brisbane Ranges. Low density rural-residential lots are dispersed throughout this area. Rural land uses also cover large parts of the Bellarine Peninsula, which also provides an attractive coastal lifestyle location, particularly for retirees. Rural and coastal settlements are scattered across this area including the towns of Ocean Grove and Drysdale, offering potential for further urban growth on undeveloped parcels of land.

The municipality's major urban growth area of Armstrong Creek, located to the south of Geelong, is planned to provide for significant future growth. The Geelong Ring Road will assist in facilitating further growth in this region as well as creating a boundary to the western edge of the Geelong urban area.

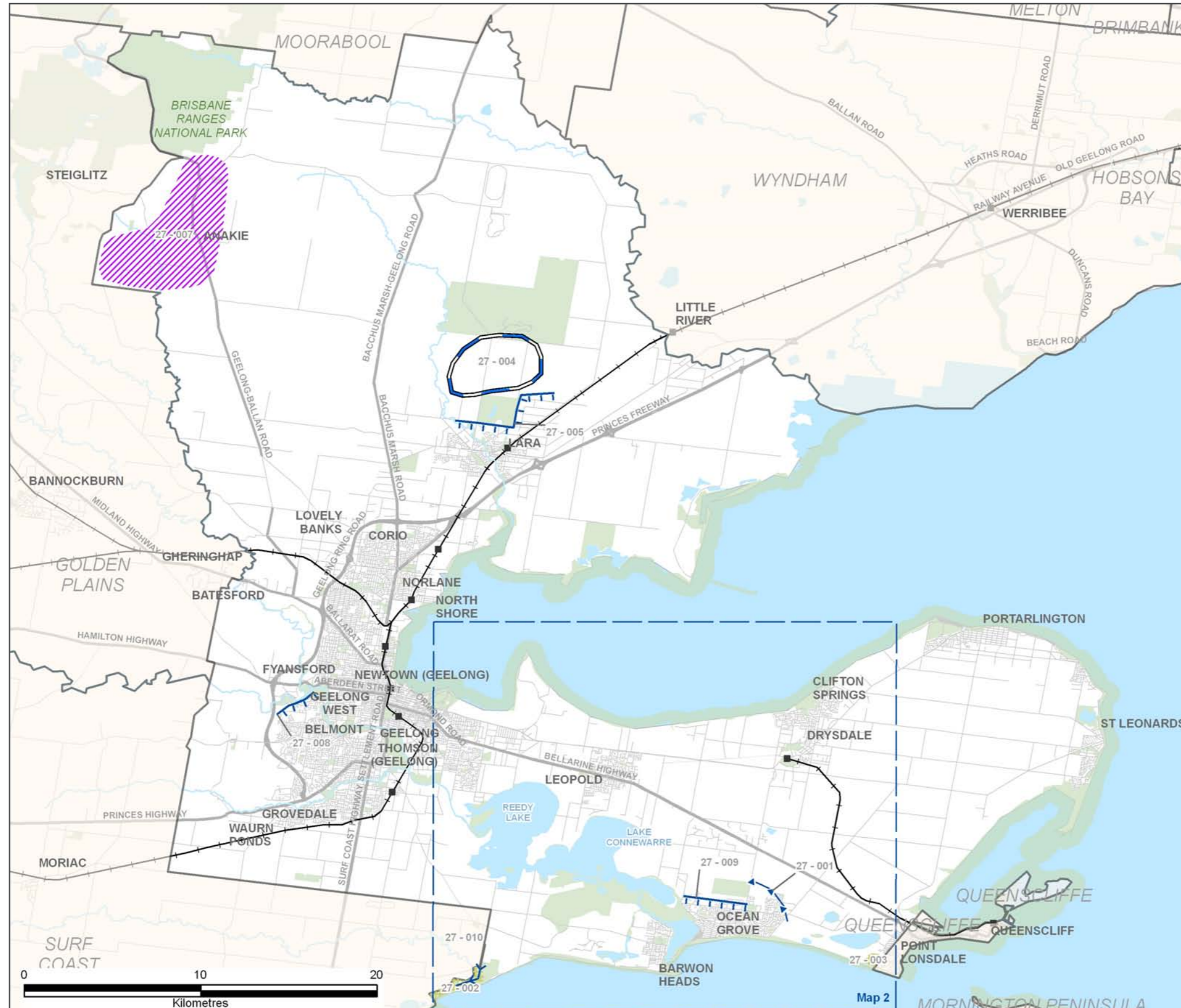
6.1 Northern area

The Brisbane Ranges National Park, You Yangs Regional Park and Serendip Sanctuary are located in this area of the municipality and are also prominent geographical landmarks in the region. Settlements of small and rural-residential lots are located in surrounding vegetated bushfire hazard areas. Grassland environments provide an additional interface between more significant forested bushfire hazards and urban areas.

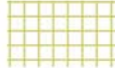
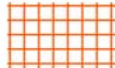






6.2 Southern area

The southern area includes the main centre of Greater Geelong, Bellarine Peninsula and scattered urban, rural and coastal settlements. Sites of biodiversity significance include the Barwon River environs, Ocean Grove Nature Reserve and the Breamlea Flora and Fauna Reserve. Clusters of small and rural-residential lots are located in this area. Coastal scrublands are a known bushfire hazard to some small coastal settlements.







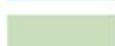
GREATER GEELONG MUNICIPAL MAP - MAP 1



Identified Areas

-  Small lots in or close to hazard (0 - 0.4 hectares)
-  Medium lots in or close to hazard (0.4 - 4 hectares)
-  Specific local knowledge
-  Other information of interest to planning
-  Multiple matters
-  Limited access and egress
-  Urban/bushfire hazard interface
-  Future strategic directions and bushfire hazard conflict

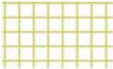







Features

-  Major road
-  Road
-  Railway
-  Railway station
-  Watercourse
-  Waterbody
-  Public land






GREATER GEELONG MUNICIPAL MAP – MAP 2



Identified Areas

-  Small lots in or close to hazard (0 - 0.4 hectares)
-  Medium lots in or close to hazard (0.4 - 4 hectares)
-  Specific local knowledge
-  Other information of interest to planning
-  Multiple matters
-  Limited access and egress
-  Urban/bushfire hazard interface
-  Future strategic directions and bushfire hazard conflict

Features

-  Major road
-  Road
-  Railway
-  Railway station
-  Watercourse
-  Waterbody
-  Public land

GREATER GEELONG – IDENTIFIED AREA DESCRIPTION TABLE

| IDENTIFIED AREA CODE | LOCATION | IDENTIFIED AREA DESCRIPTION |
|----------------------|----------------|---|
| 27-001 | Ocean Grove | The Ocean Grove Structure Plan provides for urban growth expansion north-east in proximity to a bushfire hazard. |
| 27-002 | Breamlea | Coastal scrubland surrounding the Breamlea settlement is a known bushfire hazard. Presence of a cluster of small lots located in bushfire hazard area. |
| 27-003 | Point Lonsdale | Existing urban area in proximity to Point Lonsdale foreshore containing small lots in bushfire hazard area. |
| 27-004 | Lara | Grasslands are a known bushfire hazard in the areas around the You Yangs Regional Park, Serendip Sanctuary and the north-eastern Lara settlement boundary. |
| 27-005 | Lara | Northern boundary of Lara interfaces with Serendip Sanctuary and associated bushfire hazard. |
| 27-007 | Anakie | The township of Anakie and surrounding rural hinterland is located at the foothills of the Brisbane Ranges National Park and contains a mixture of lot sizes which contain vegetation and adjoin bushfire hazard areas. |
| 27-008 | Fyansford | Area of Fyansford south of the Barwon River interfaces with bushfire hazard associated with riparian vegetation corridor in proximity to golf course and Billabong Wildlife Park. |
| 27-009 | Ocean Grove | Northern area of Ocean Grove settlement interfaces with vegetated areas and associated bushfire hazard. |
| 27-010 | Breamlea | Development is serviced by single road access in a vegetated foreshore environment set in a bushfire hazard area. |

7.0 MUNICIPAL OVERVIEW – MOYNE SHIRE

Moyne Shire is located in the centre of the region and has an area of approximately 5600 square kilometres and a 90 kilometre long coastline. Excluding Warrnambool City, it extends between Peterborough and Tyrendarra East. It has a population of approximately 16 850 the majority of which reside in the three main urban centres of Port Fairy, Koroit and Mortlake. Port Fairy is an historic and well-serviced coastal town and popular tourist destination.

The Shire is predominantly rural based with a focus on agricultural activities. Intensive dairying and crop production activity are significant land uses along the coastal areas, while large cattle and sheep farms occupy northern portions of the Shire. There are a number of wind farms in the coastal hinterland. Plantations exist around Macarthur and Hawkesdale.

The Shire is generally flat. Its topography is characterised by the expansive coastline, fertile undulating to hilly coastal hinterland in the south, large volcanic plains north of Mortlake and rocky outcrops in the north-west (including the Mount Eccles National Park). The Moyne and Hopkins Rivers flow through the municipality from north to south. A number of rivers connect with the coastline and create estuaries and associated wetlands which contain a large majority of the Shire's significant biodiversity values.

A combination of Environmental Significance and Significant Landscape Overlays manage the protection of native vegetation surrounding the coastline, estuaries, watercourses and landmark townships.

7.1 North-eastern area

The south-eastern area is dominated by large scale lots devoid of expansive areas of woodland or forest vegetation and corresponding bushfire hazard.

7.2 Western area

The western area of the municipality contains the Mount Eccles National Park, numerous plantations and a small number of rural settlements across a largely agricultural landscape. Settlements adjoining Mount Eccles National Park are surrounded by vegetation mapped as being of high and very high conservation significance. These settlements contain small undeveloped rural lots with single access road arrangements located in or in proximity to bushfire hazard areas.

Other isolated settlements are surrounded by plantation areas. These settlements contain small rural lots in bushfire hazard areas. Grassland environments provide additional interfaces between more significant bushfire hazard areas and settlements with small undeveloped rural-residential lots.

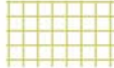







7.3 South-eastern area

The south-eastern area of the municipality is dominated by large scale rural lots generally devoid of woodland or forest vegetation and corresponding bushfire hazard. However, this area contains the Framlingham Forest and Mount Emu Creek. A nearby settlement contains clusters of small rural lots located in or in close proximity to bushfire hazard areas.







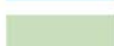
MOYNE MUNICIPAL MAP – MAP 1



Identified Areas

-  Small lots in or close to hazard (0 - 0.4 hectares)
-  Medium lots in or close to hazard (0.4 - 4 hectares)
-  Specific local knowledge
-  Other information of interest to planning
-  Multiple matters
-  Limited access and egress
-  Urban/bushfire hazard interface
-  Future strategic directions and bushfire hazard conflict

Features

-  Major road
-  Road
-  Railway
-  Railway station
-  Watercourse
-  Waterbody
-  Public land

MOYNE MUNICIPAL MAP – MAP 2



MOYNE – IDENTIFIED AREA DESCRIPTION TABLE

| IDENTIFIED AREA CODE | LOCATION | IDENTIFIED AREA DESCRIPTION |
|----------------------|---------------------------------------|--|
| 54-001 | Peterborough | Cluster of small rural lots at Peterborough and to the north-west in close proximity to bushfire hazard area. |
| 54-002 | Hopkins Highway to the east of Purnim | Cluster of small rural lots in close proximity to bushfire hazard area. |
| 54-003 | Macarthur | Small lots in the township of Macarthur in surrounding grasslands. |
| 54-004 | Mt Eccles National Park | Presence of largely undeveloped rural lots, in or in close proximity to bushfire hazard area associated with the north of Mt Eccles National Park. Includes vegetation of high and very high conservation significance. |
| 54-005 | Mt Eccles National Park | Lots in the area serviced by single access road. |
| 54-006 | Orford | Cluster of small rural lots at Orford in bushfire hazard area associated with scattered remnant vegetation. |
| 54-007 | Macarthur | South-western, eastern and northern boundaries of Macarthur interface with bushfire hazard associated with scattered remnant vegetation and associated grasslands. |
| 54-008 | Hopkins Highway to the east of Purnim | South-eastern boundary of rural-residential lots interfaces with bushfire hazard associated with scattered remnant vegetation. |

8.0 MUNICIPAL OVERVIEW – BOROUGH OF QUEENSCLIFFE

The Borough of Queenscliffe is located on the Bellarine Peninsula. It has an area of about 13 square kilometres and a population of approximately 3300. Considerable fluctuations are experienced with non-permanent residents and tourists entering the municipality during holiday periods.

Approximately 50% of its boundary abuts the sensitive coastal environments of Port Phillip and Swan Bays. The Borough is predominantly developed for housing, divided between the townships of Queenscliff and Point Lonsdale. The township of Queenscliff contains heritage buildings that are an important tourism feature for the borough. Point Lonsdale, located to the west and connected to Queenscliff by a narrow sand dune isthmus, is characterised by more extensive vegetation.

The foreshore reserves surrounding the urban areas are of high ecological value. They form an important part of the landscape and are densely vegetated in some areas. Housing has been developed close to, or in vegetated areas.

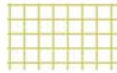
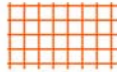






QUEENSCLIFFE – IDENTIFIED AREA DESCRIPTION TABLE

| IDENTIFIED AREA CODE | LOCATION | IDENTIFIED AREA DESCRIPTION |
|----------------------|----------------|--|
| 60-001 | Queenscliff | Western boundary of Queenscliff interfaces with bushfire hazard associated with foreshore reserve and scattered remnant vegetation. |
| 60-002 | Point Lonsdale | South-eastern boundary of Point Lonsdale abutting Lonsdale Bay interfaces with bushfire hazard associated with foreshore reserve and scattered remnant vegetation. |
| 60-003 | Point Lonsdale | Southern boundary of Point Lonsdale towards Surf Coast interfaces with bushfire hazard associated with foreshore reserve and scattered remnant vegetation. The vegetation penetrates into the settlement of Point Lonsdale extending from the foreshore reserve areas and is contained in lots. |







QUEENSCLIFFE MUNICIPAL MAP



Identified Areas

-  Small lots in or close to hazard (0 - 0.4 hectares)
-  Medium lots in or close to hazard (0.4 - 4 hectares)
-  Specific local knowledge
-  Other information of interest to planning
-  Multiple matters
-  Limited access and egress
-  Urban/bushfire hazard interface
-  Future strategic directions and bushfire hazard conflict

Features

-  Major road
-  Road
-  Railway
-  Railway station
-  Watercourse
-  Waterbody
-  Public land

9.0 MUNICIPAL OVERVIEW – SOUTHERN GRAMPIANS SHIRE

Southern Grampians Shire is located in the north-east of the region and has an area of about 6807 square kilometres. It has a population of approximately 17 550 which largely resides in the regional centre of Hamilton and smaller settlements of Coleraine, Dunkeld, Balmoral and Penshurst.

The fertile and arable soils of the region support agricultural activities including wool production, cattle and sheep grazing, and primary production of dryland pasture and broad acre cropping. Pine and hardwood plantations occupy areas south-west of Hamilton and Penshurst.

The Shire has three distinct landscapes; the undulating Dundas Tablelands in central and southern areas, the Volcanic Plains in the west and the steep rocky ridges of the Great Dividing Range. A large number of lakes and wetlands have developed throughout the Dundas Tablelands area.

The Grampians National Park in the north-east, Mount Napier State Park in the southern areas and scattered reserves contain large volumes of the municipality’s remnant vegetation, biodiversity and significant habitat. The protection of native vegetation in and surrounding the municipality’s flora and fauna reserves is partly managed through the Significant Landscape Overlay.

9.1 North-eastern area

The north-eastern area contains the Grampians National Park, Mount Abrupt and Wannon River. Vegetated areas extend south of these areas into the agricultural landscape and nearby settlements. These areas are mapped as being of high or very high conservation significance. The settlements contain clusters of small lots located in or in close proximity to bushfire hazard areas.

Towards the centre of the region large scale lots contain timber plantations, watercourses, scattered pockets of remnant vegetation and isolated settlements. Grassland environments provide an interface between more significant potential forested bushfire hazard areas and settlements which contain undeveloped small and rural-residential lots.

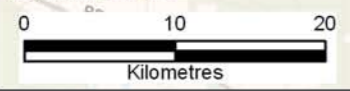
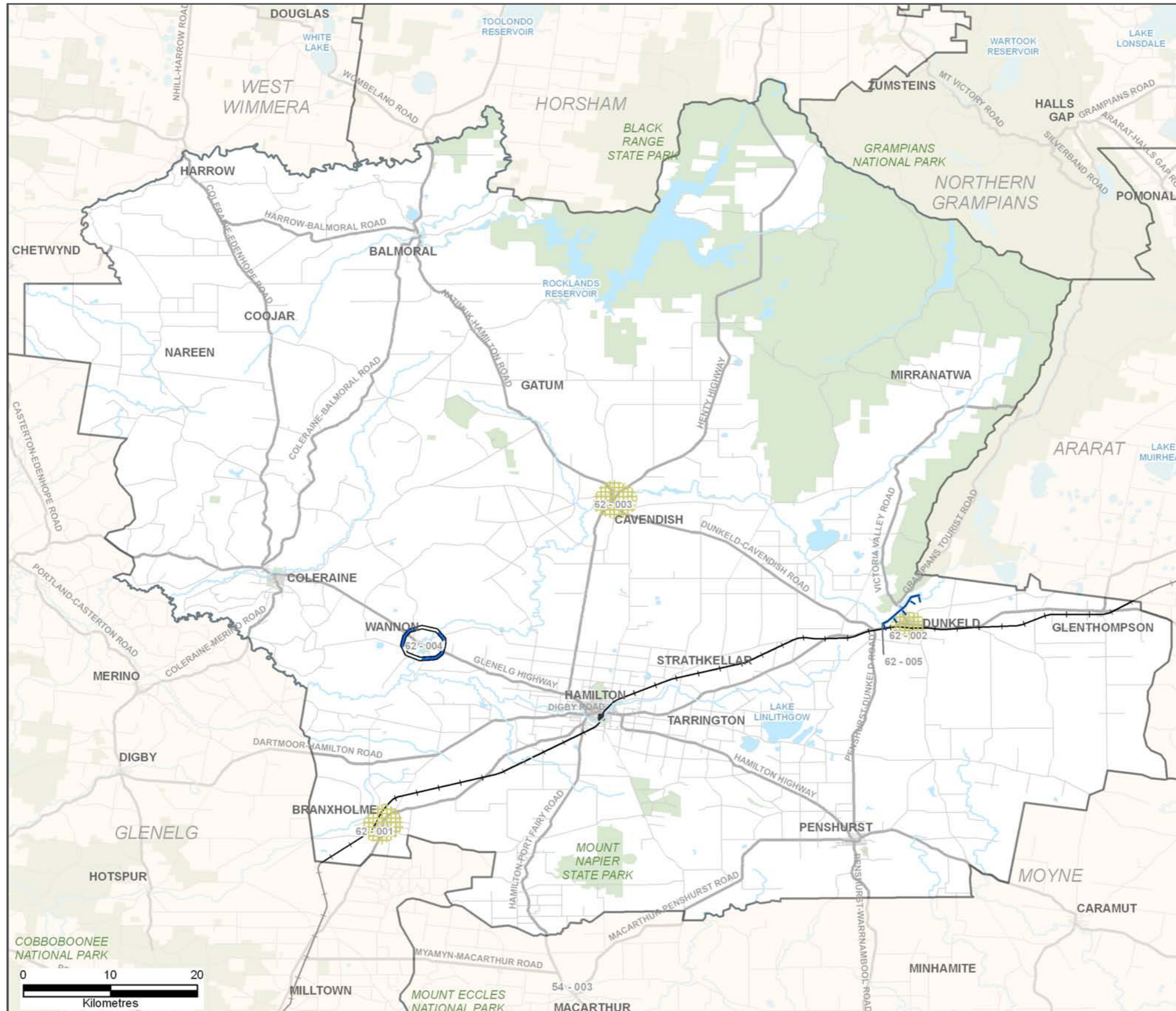
9.2 South-western area

The south-western area of the municipality is dominated by large lots generally devoid of woodland or forest vegetation. Scattered isolated settlements are located throughout plantation areas. Similar to other parts of the Shire grassland environments provide an interface between more significant forested bushfire hazard areas and settlements which contain undeveloped rural-residential lots.









SOUTHERN GRAMPIANS – IDENTIFIED AREA DESCRIPTION TABLE

| IDENTIFIED AREA CODE | LOCATION | IDENTIFIED AREA DESCRIPTION |
|----------------------|------------|---|
| 62-001 | Branxholme | Township of Branxholme contains small lots interfacing with a grassland bushfire hazard environment. Eastern part of Branxholme interfaces with bushfire hazard associated with scattered remnant vegetation and grasslands. |
| 62-002 | Dunkeld | Cluster of small rural lots in or in close proximity to bushfire hazard area associated with scattered remnant vegetation. Includes vegetation of high and very high conservation significance. |
| 62-003 | Cavendish | Small lots in the township of Cavendish interfacing with grassland bushfire hazard. |
| 62-004 | Wannon | Presence of scattered and dispersed lots in a low density residential environment. Grasslands surrounding Wannon are a known bushfire hazard. |
| 62-005 | Dunkeld | North-western boundary of Dunkeld interfaces with bushfire hazard associated with scattered remnant vegetation and grasslands. |








SOUTHERN GRAMPIANS MUNICIPAL MAP



Identified Areas

-  Small lots in or close to hazard (0 - 0.4 hectares)
-  Medium lots in or close to hazard (0.4 - 4 hectares)
-  Specific local knowledge
-  Other information of interest to planning
-  Multiple matters
-  Limited access and egress
-  Urban/bushfire hazard interface
-  Future strategic directions and bushfire hazard conflict

Features

-  Major road
-  Road
-  Railway
-  Railway station
-  Watercourse
-  Waterbody
-  Public land

10.0 MUNICIPAL OVERVIEW – SURF COAST SHIRE

Surf Coast Shire is located in the east of the region and has an area of about 1552 square kilometres, with some 55 kilometres of coastline defining its south-eastern boundary. It has a population of 26 200 of which the majority reside in the main centre of Torquay with a population of approximately 9500. Torquay is located about 20 kilometres and 100 kilometres south- west of Geelong and Melbourne respectively. The southern part of the Shire contains coastal townships dotted along the Great Ocean Road.

The rural areas of the Shire are not only important for agriculture, but are valuable in terms of environment, landscape, tourism and recreation. Grazing and some broad acre agricultural land uses dominate the central, north-western and eastern areas. The coastal landscape contains a range of urban and rural land uses including agricultural, horticultural, commercial and industrial precincts. Plantations exist in Bambra and Pennyroyal.

The Shire contains rich and diverse biodiversity and scenic landscapes, including rugged coastlines, native forests along the coastal hinterland rolling to flat rural plains in the north and north-west, and many rivers, lakes and wetlands. These landscapes contain heathlands, grassy woodlands, and linear remnant bushland areas and ecologically significant habitats. The protection of native vegetation in these areas is managed through a range of specific environmental, landscape and vegetation overlays.

10.1 Northern and eastern areas

The northern and eastern areas include the Winchelsea Plains, Central Valleys, Thompsons Creek and Barrabool Hills. Large lots dominate these areas which are generally devoid of densely wooded or forested landscapes.

10.2 Central and western areas

The central and western areas of the municipality contain open agricultural landscapes and undulating hills which extend south into the hilly and rugged coastline. This region contains limited settlements vulnerable to or at risk of bushfire. However, some clusters of rural-residential lots are located in close proximity to state parks and vegetated bushfire hazard areas.

10.3 Coastal area

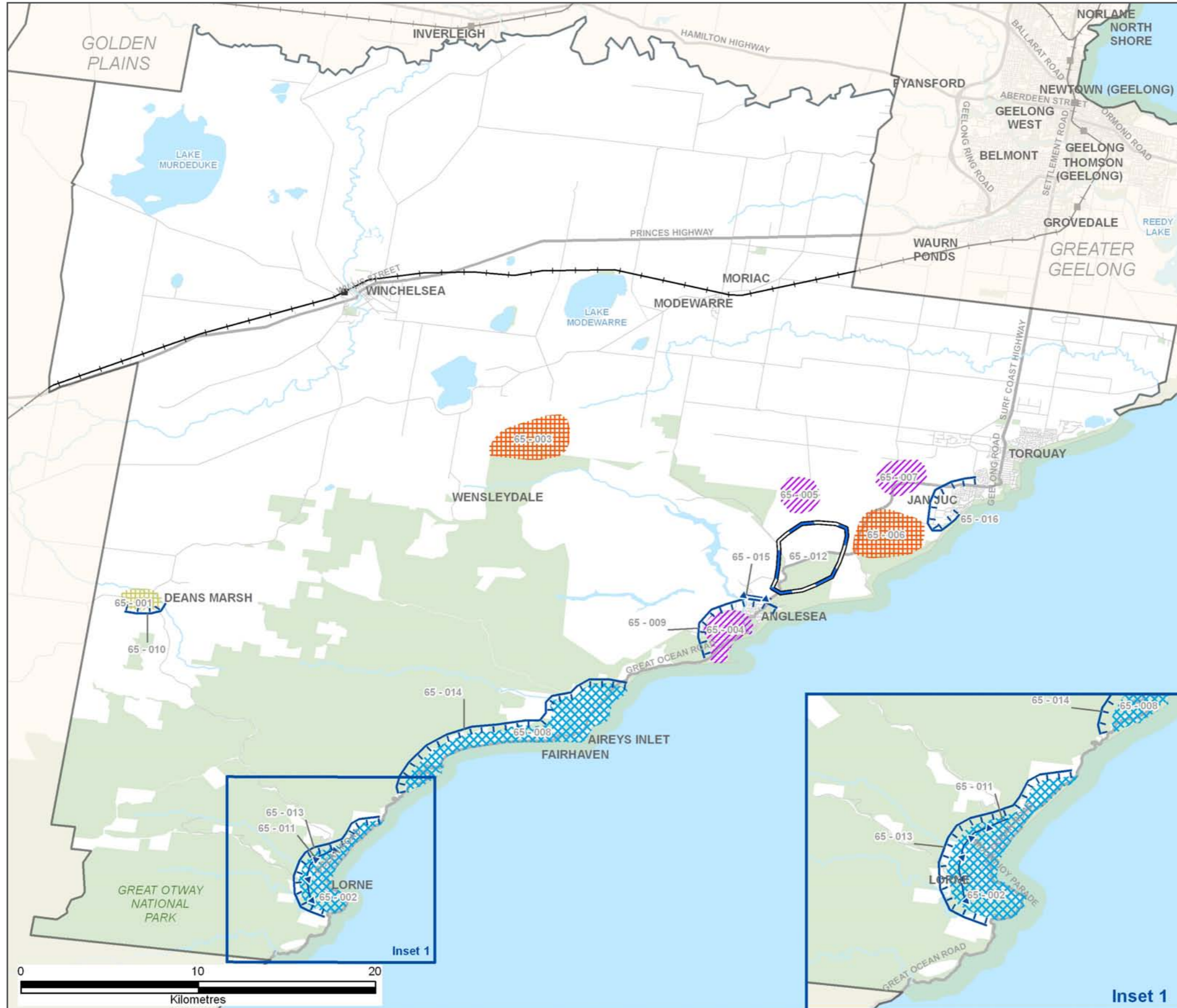
The Great Otway National Park is located along the southern coastline and incorporates the former Otway National Park and Angahook-Lorne, Carlisle and Melba Gully State Parks, as well as areas of state forest and other Crown land. Extending between Lorne and Airey's Inlet, the national park is approximately 103,000 hectares (across municipalities). It contains the tall wet forests, ancient rainforests, the drier forests of the inland slopes and the very diverse heathlands and woodlands fringed by a spectacularly rugged coastline accessed by the Great Ocean Road.

Coastal settlements are located among heavily vegetated areas and in varying topographies including flat foreshores and wetlands, rolling hills and steep slopes or cliffs. These settlements contain small residential or rural-residential lots which directly interface with bushfire hazard areas. Subdivisions with developed and undeveloped lots contain vegetation mapped as being of high or very high conservation significance. Some areas contain single constructed or unsealed access roads in bushfire hazard areas.


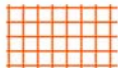






Other rural settlements, containing clusters of rural and rural-residential lots are located in proximity to large areas of native vegetation and state forest. The surrounding grassland provides an interface between more significant forested bushfire hazard environments and settlements. Foreshore vegetation and estuaries are also a known bushfire hazard to nearby rural-residential settlements.

The Shire's convenient access to Melbourne and its natural environmental values and recreational opportunities associated with coastal living attracts development pressure in bushfire hazard areas.




SURF COAST MUNICIPAL MAP



Identified Areas

-  Small lots in or close to hazard (0 - 0.4 hectares)
-  Medium lots in or close to hazard (0.4 - 4 hectares)
-  Specific local knowledge
-  Other information of interest to planning
-  Multiple matters
-  Limited access and egress
-  Urban/bushfire hazard interface
-  Future strategic directions and bushfire hazard conflict

Features

-  Major road
-  Road
-  Railway
-  Railway station
-  Watercourse
-  Waterbody
-  Public land

SURF COAST – IDENTIFIED AREA DESCRIPTION TABLE

| IDENTIFIED AREA CODE | LOCATION | IDENTIFIED AREA DESCRIPTION |
|----------------------|--|--|
| 65-001 | Deans Marsh | The township of Deans Marsh includes a mix of small lots and medium size lots in the Township Zone and Low Density Residential Zones respectively. Vegetated areas are located surrounding the settlement in riparian corridors extending into Deans Marsh from the Great Otway National Park. |
| 65-002 | Lorne | Multiple bushfire matters include: <ul style="list-style-type: none"> • cluster of small and medium size lots in excess of 0.4 hectares located along the Great Ocean Road in or in close proximity to bushfire hazard areas • lots have direct interfaces with Great Otway National Park and associated bushfire hazard areas • scattered vegetation throughout the settlements extends the interface between the Great Otway National Park and urban areas • grassland and coastal scrub provide additional interfaces between the Great Otway National Park and settlement boundaries • extensive areas are mapped as containing vegetation of high and very high conservation significance • strategy for Lorne identifies potential for urban growth. |
| 65-003 | Gherang | Clusters of medium size lots located in a rural landscape with patches of vegetation surrounding development and linking to the broader forested areas associated with the Great Otway National Park and vehicle proving ground to the south. |
| 65-004 | Anglesea | Grass and scrubland surrounding the Anglesea River, estuary, golf course and coastline are a known bushfire hazard to the Anglesea settlement. |
| 65-005 | Bellbrae | Clusters of developed and undeveloped lots in an area of rural conservation significance surrounding Gundrys and Vickerys Roads. The settlement interfaces and extends in a vegetated landscape and associated bushfire hazard to the south. |
| 65-006 | Bells Beach | Clusters of developed and undeveloped medium size rural-residential lots in excess of 0.4 hectares in or in close proximity to bushfire hazard area. Developed and undeveloped lots along the coastline have a direct interface with scrubland and associated bushfire hazard. Rural lots to the north directly interface with scattered vegetation and bushfire hazards. |
| 65-007 | Bellbrae | Cluster of small and medium size lots in a rural landscape setting with direct interfaces to scattered vegetation and riparian corridors. These features establish an area of interest in relation to bushfire considerations given the presence of bushfire hazards in and around established settlements. |
| 65-008 | Aireys Inlet / Fairhaven / Eastern View / Moggs Creek Big Hill | Multiple bushfire matters include: <ul style="list-style-type: none"> • presence of a mixed settlement pattern including a range of lot sizes containing vegetated landscape located along the Great Ocean Road in or in close proximity to bushfire hazard areas. • settlements have multiple interfaces with Great Otway National Park and associated bushfire hazard areas • multiple single dirt and constructed access roads servicing clusters of dwellings throughout the area • grassland and coastal scrub provide additional interfaces between the Great Otway National Park and settlement boundaries • extensive areas contain vegetation of high and very high conservation significance. |
| 65-009 | Anglesea | The settlement of Anglesea is located in and at the foothills of the Great Otway National Park. Bushfire hazard interfaces surround and penetrate the urban settlement. |
| 65-010 | Deans Marsh | South-western boundary of Deans Marsh interfaces with the Great Otway National Park and associated bushfire hazard. |
| 65-011 | Lorne | The Lorne Framework Plan identifies potential low density residential areas north and west of the township for investigation in a vegetated area of bushfire hazard. |
| 65-012 | Bells Beach / Anglesea | Grasslands are a known bushfire hazard which provide an interface between the forested area of the Great Otway National Park and Bells Beach. Area contains scattered lots in a vegetated landscape. |

SURF COAST – IDENTIFIED AREA DESCRIPTION TABLE cont...

| IDENTIFIED AREA CODE | LOCATION | IDENTIFIED AREA DESCRIPTION |
|----------------------|--|--|
| 65-013 | Lorne | The settlement of Lorne directly interfaces with the Great Otway National Park and surrounding environs. Development penetrates vegetated areas containing significant landscapes of high and very high conservation value. |
| 65-014 | Aireys Inlet / Fairhaven / Eastern View / Moggs Creek Big Hill | Multiple boundaries of these settlements interface with bushfire hazard. |
| 65-015 | Anglesea | Development pressure is being experienced north-east of the Anglesea settlement in proximity to a bushfire hazard area associated with the Great Otway National Park. |
| 65-016 | Jan Juc | Northern and western boundaries of Jan Juc interface with scattered remnant vegetation and bushfire hazard. The lots in these areas are generally medium size. The density decreases and pattern of development becomes less frequent as it approaches vegetated bushfire hazard areas. Developed lots along the coastline have a direct interface with scrubland and associated bushfire hazard. |

11.0 MUNICIPAL OVERVIEW – WARRNAMBOOL CITY

Warrnambool City is located on the Victorian coastline towards the centre of the region, surrounded by the Shire of Moyne, with an area of about 121 square kilometres. The Warrnambool township is the main urban centre of the municipality and the largest coastal city outside the Melbourne metropolitan region. The total population of Warrnambool City is about 33 900.

The municipality comprises expansive residential and commercial precincts as well as beaches and coastal hinterland, grasslands, agricultural areas and rural settlements. It is a major tourist destination for people travelling along tourist routes including the Great Ocean Road, Princes Highway and the south-west railway.

Low rolling coastal hills characterise much of the surrounding land with the coastal landscape of beaches, cliffs, dunes and estuaries retaining significant biodiversity and landscape value. The tributaries of the Hopkins and Merri Rivers converge in the municipality and flow out into the Southern Ocean at Warrnambool. Settlements back onto the majority of the riparian corridors along these rivers.

Native vegetation is protected and managed through a range of environmental land management overlays which apply to watercourses, lakes, estuaries and coastal hinterlands.

11.1 Merri river environs

The Merri River meanders through small rural-residential settlements in the north of the municipality before it outfalls to the Southern Ocean at Warrnambool. The watercourse contains patches of riparian vegetation surrounded by grassland environments. Surrounding developed and undeveloped lots are in or in proximity to vegetated bushfire hazard areas.

11.2 Warrnambool foreshore

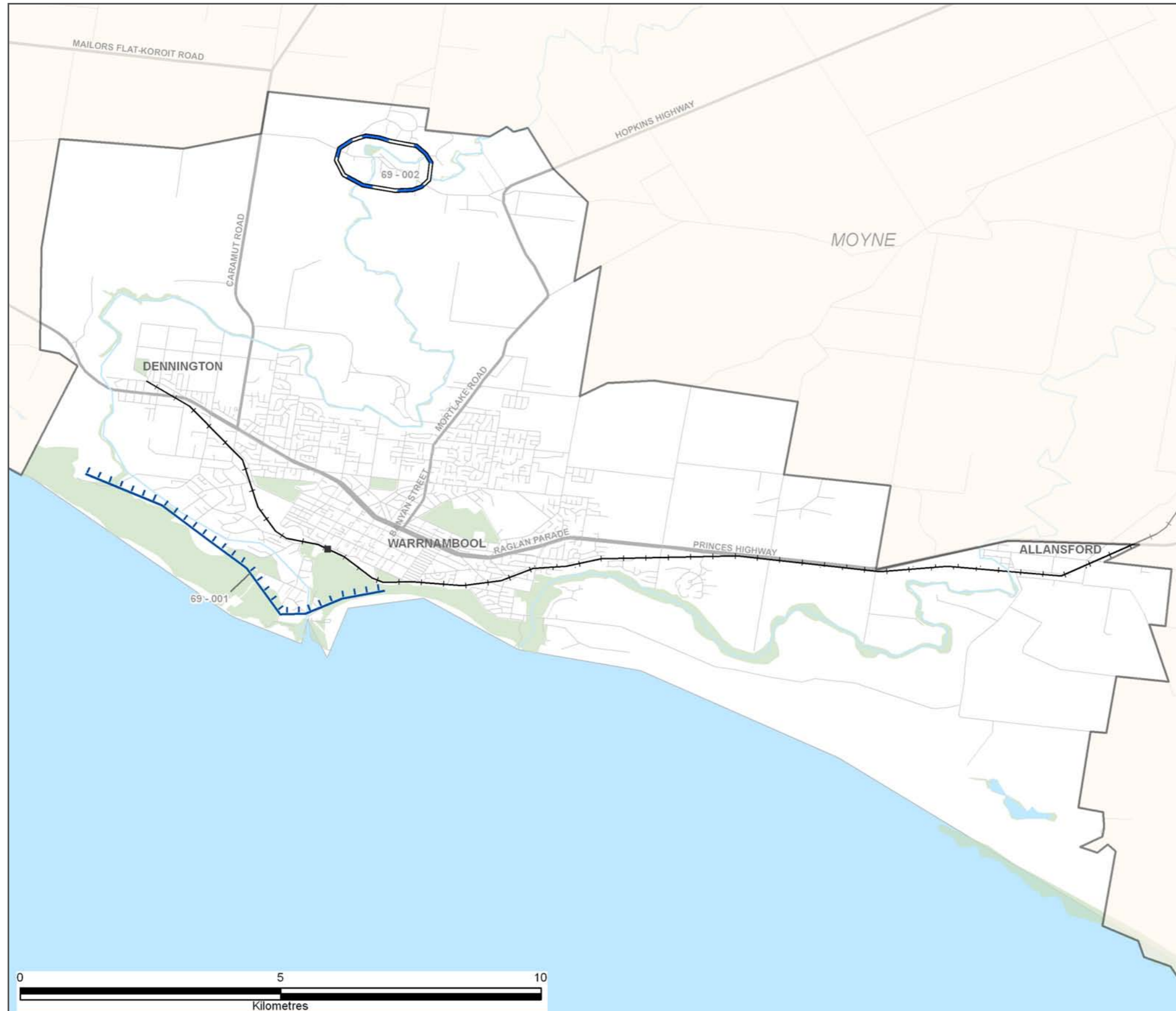
The Foreshore Trust Grounds are located to the west of the Hopkins River where it outfalls to the Southern Ocean at Warrnambool. Grassland environments have been identified as a bushfire hazard and surrounding small residential lots may be at risk of localised grassfire.

Lake Pertobe, Harris Reserve and Victoria Park extend north-west from the Foreshore Trust Grounds area. The coastal hinterland extends west of the Merri River outfall and surrounds the Warrnambool Golf Course and Equestrian Centre. These areas contain grass and scrubland environments identified as a bushfire hazard. Adjoining small developed lots are in or in proximity to vegetated bushfire hazard.


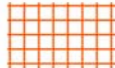






WARRNAMBOOL – IDENTIFIED AREA DESCRIPTION TABLE

| IDENTIFIED AREA CODE | LOCATION | IDENTIFIED AREA DESCRIPTION |
|----------------------|-------------|--|
| 69-001 | Warrnambool | Scattered small lots on the edges of Warrnambool located adjacent to and interfacing with bushfire hazard areas associated with coastal foreshore and remnant vegetation. Includes vegetation of high and very high conservation significance. |
| 69-002 | Woodford | Clusters of low density residential lots located adjacent to bushfire hazard areas associated with riparian vegetation and grassland environments. |








WARRNAMBOOL MUNICIPAL MAP



Identified Areas

-  Small lots in or close to hazard (0 - 0.4 hectares)
-  Medium lots in or close to hazard (0.4 - 4 hectares)
-  Specific local knowledge
-  Other information of interest to planning
-  Multiple matters
-  Limited access and egress
-  Urban/bushfire hazard interface
-  Future strategic directions and bushfire hazard conflict

Features

-  Major road
-  Road
-  Railway
-  Railway station
-  Watercourse
-  Waterbody
-  Public land

ISBN 978-1-921940-38-5

Published by the Victorian Government Department of Planning and Community Development
Melbourne, April 2012.

© The State of Victoria Department of Planning and Community Development 2012.

This publication is copyright. No part may be reproduced by any process except in accordance
with the provisions of the *Copyright Act 1968*.

Authorised by the Victorian Government, 1 Spring Street, Melbourne.

This publication may be of assistance to you but the State of Victoria and its employees do
not guarantee that the publication is without flaw of any kind or is wholly appropriate for your
particular purposes and therefore disclaims all liability for any error, loss or other consequence
which may arise from you relying on any information in this publication.

The content of the Regional Bushfire Planning Assessment is provided for information purposes
only. No claim is made as to the accuracy or authenticity of the content. DPCD does not accept
any liability to any person for the information or advice in the RBPA.

www.dpcd.vic.gov.au/planning