



East Gippsland Shire Council  
**Coastal and Marine  
Management Plan**



East Gippsland Shire Council and the Alluvium team acknowledge the Gunaikurnai, Monero and the Bidawel people as the Traditional Custodians of the land that encompasses East Gippsland Shire.

We recognise and acknowledge the unique relationship and deep connection to coastal Land and Sea Country shared by Aboriginal and Torres Strait Islander people.

We pay our respects to all Aboriginal and Torres Strait Islander people living in East Gippsland, their Elders past and present.



This report has been prepared by Alluvium Consulting Australia Pty Ltd for **East Gippsland Shire Council** under the contract titled 'East Gippsland Shire Council Coastal and Marine Management Plan'.

Authors: E. Hodson, S. Doumstis, I. Kostas, P. Bicknell, M. Turel, A. Lawrence  
Review: P. Bicknell  
Approved: E. Hodson

Version: 5 – Final draft for Ministerial approval  
Date issued: 07/07/2025  
Issued to: S. Beasley, East Gippsland Shire Council  
Citation: East Gippsland Shire Council (2025) Coastal and Marine Management Plan. Prepared by Alluvium Consulting Australia Pty Ltd and East Gippsland Shire Council.

Cover image: Snowy River Estuary at Marlo, Alluvium

# Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	<i>This document .....</i>	2
1.2	<i>How to read this document .....</i>	3
1.3	<i>Scope of the CMMP.....</i>	3
<b>2</b>	<b>East Gippsland.....</b>	<b>4</b>
2.1	<i>Gunaikurnai Country.....</i>	5
2.2	<i>Landscape setting and history .....</i>	6
2.3	<i>Communities .....</i>	9
2.4	<i>Environment .....</i>	10
2.5	<i>Tourism and economy.....</i>	11
<b>3</b>	<b>Shire wide coastal and marine management.....</b>	<b>12</b>
3.1	<i>Policy context.....</i>	12
3.2	<i>Management roles and responsibilities .....</i>	15
3.3	<i>Coastal hazard management.....</i>	21
3.4	<i>Vision and objectives .....</i>	22
3.5	<i>Values, challenges and opportunities .....</i>	24
3.6	<i>CMMP management approach .....</i>	26
3.7	<i>Locality summaries.....</i>	37
<b>4</b>	<b>Paynesville and Newlands Arm.....</b>	<b>42</b>
4.1	<i>Community and connection to coast.....</i>	42
4.2	<i>The coastal environment.....</i>	43
4.3	<i>Coastal processes and hazards .....</i>	43
4.4	<i>Coastal uses, reserves and facilities .....</i>	44
4.5	<i>Coastal and marine management.....</i>	44
4.6	<i>Management actions.....</i>	55
<b>5</b>	<b>Raymond Island .....</b>	<b>59</b>
5.1	<i>Community and connection to coast.....</i>	59
5.2	<i>The coastal environment.....</i>	60
5.3	<i>Coastal processes and hazards .....</i>	60
5.4	<i>Coastal uses, reserves and facilities .....</i>	61
5.5	<i>Coastal and marine management.....</i>	61
5.6	<i>Management actions.....</i>	72
<b>6</b>	<b>Eagle Point .....</b>	<b>76</b>
6.1	<i>Community and connection to coast.....</i>	76
6.2	<i>The coastal environment.....</i>	77



6.3	<i>Coastal processes and hazards</i> .....	77
6.4	<i>Coastal uses, reserves and facilities</i> .....	78
6.5	<i>Coastal and marine management</i> .....	78
6.6	<i>Management actions</i> .....	89
<b>7</b>	<b>Metung</b> .....	<b>92</b>
7.1	<i>Community and connection to coast</i> .....	92
7.2	<i>The coastal environment</i> .....	93
7.3	<i>Coastal processes and hazards</i> .....	93
7.4	<i>Coastal uses, reserves and facilities</i> .....	94
7.5	<i>Coastal and marine management</i> .....	94
7.6	<i>Management actions</i> .....	105
<b>8</b>	<b>Nungurner</b> .....	<b>109</b>
8.1	<i>Community and connection to coast</i> .....	109
8.2	<i>The coastal environment</i> .....	110
8.3	<i>Coastal processes and hazards</i> .....	110
8.4	<i>Coastal uses, reserves and facilities</i> .....	110
8.5	<i>Coastal and marine management</i> .....	110
8.6	<i>Management actions</i> .....	121
<b>9</b>	<b>Lakes Entrance</b> .....	<b>124</b>
9.1	<i>Community and connection to coast</i> .....	124
9.2	<i>The coastal environment</i> .....	125
9.3	<i>Coastal processes and hazards</i> .....	125
9.4	<i>Coastal uses, reserves and facilities</i> .....	126
9.5	<i>Coastal and marine management</i> .....	127
9.6	<i>Management actions</i> .....	138
<b>10</b>	<b>Lake Tyers Beach</b> .....	<b>142</b>
10.1	<i>Community and connection to coast</i> .....	142
10.2	<i>The coastal environment</i> .....	143
10.3	<i>Coastal processes and hazards</i> .....	144
10.4	<i>Coastal uses, reserves and facilities</i> .....	144
10.5	<i>Coastal and marine management</i> .....	144
10.6	<i>Management actions</i> .....	155
<b>11</b>	<b>Marlo</b> .....	<b>158</b>
11.1	<i>Community and connection to coast</i> .....	158
11.2	<i>The coastal environment</i> .....	159
11.3	<i>Coastal processes and hazards</i> .....	159
11.4	<i>Coastal uses, reserves and facilities</i> .....	160



11.5	<i>Coastal and marine management</i> .....	160
11.6	<i>Management actions</i> .....	171
<b>12</b>	<b>Bemm River</b> .....	<b>175</b>
12.1	<i>Community and connection to coast</i> .....	175
12.2	<i>The coastal environment</i> .....	176
12.3	<i>Coastal processes and hazards</i> .....	176
12.4	<i>Coastal uses, reserves, and facilities</i> .....	177
12.5	<i>Coastal and marine management</i> .....	177
12.6	<i>Management actions</i> .....	188
<b>13</b>	<b>Mallacoota</b> .....	<b>192</b>
13.1	<i>Community and connection to coast</i> .....	192
13.2	<i>The coastal environment</i> .....	193
13.3	<i>Coastal processes and hazards</i> .....	193
13.4	<i>Coastal uses, reserves and facilities</i> .....	194
13.5	<i>Coastal and marine management</i> .....	194
13.6	<i>Management actions</i> .....	205
<b>14</b>	<b>Implementation</b> .....	<b>209</b>
14.1	<i>Implementation plan</i> .....	209
14.2	<i>Monitoring, evaluation, review and improvement</i> .....	210
14.3	<i>Next steps</i> .....	211
<b>15</b>	<b>References, figures and tables</b> .....	<b>212</b>
15.1	<i>References</i> .....	212
15.2	<i>Table of figures</i> .....	213
15.3	<i>Table of tables</i> .....	216
	<b>Attachment A: Engagement approach</b> .....	<b>217</b>
	<b>Attachment B: Document review</b> .....	<b>221</b>
	<b>Attachment C: Mapping supplement</b> .....	<b>240</b>
	<b>Attachment D: Additional mapping</b> .....	<b>259</b>

## Definitions and acronyms

Term	Definition
AEP	Annual exceedance probability – on average, the probability of an event occurring in any given year. A higher AEP means it is more likely the event will occur in any one year.
BBV	Better Boating Victoria
Blue carbon	Blue carbon refers to carbon stored by our oceans, marine and coastal environments. Marine and coastal ecosystems have a huge potential for carbon sequestration (storage) in their soils, roots and plants. Blue carbon ecosystems can include mangroves, tidal marshes, saltmarsh and seagrasses.
C&EP	Communication and Engagement Plan
C MMP	Coastal and Marine Management Plan
Coastal hazards	Natural coastal processes that may negatively impact on the marine and coastal environment, including impacts on human use, values, property or infrastructure. Hazards can include coastal erosion and inundation (flooding) due to storm tide and sea level rise.
Coastal erosion	The process of winds, waves and coastal currents shifting sediment away from a localised area of the shoreline. When coastal erosion impacts on the way in which we use and enjoy the coast, it becomes a coastal hazard.
Council, EGSC	East Gippsland Shire Council
Country	A term to describe all that is encompassed by the lands, waterways, and seas to which we are connected; often used by Aboriginal peoples.
Crown land	Land owned by the State or Commonwealth Government. Most Crown land in Victoria is owned by the Victorian Government but is managed by various management agencies.
DEECA	Department of Energy, Environment and Climate Action.
Ecosystem	All living things in a given area, as well as their interactions with each other, and with their non-living environments (e.g. weather, earth, sun, soil, climate, atmosphere).
EGCMA	East Gippsland Catchment Management Authority
Encroachment	Coastal and marine Crown Land reserves exist for the benefit of the public. Encroachment occurs when a landholder undertakes activities in an adjoining Crown Land reserve which has detrimental impacts on the environment or excludes public use and enjoyment. This could involve vegetation removal, land management, building structures or otherwise using the land for a private use. Encroachment is illegal under the <i>Crown Land reserves Act 1978</i> .
EPBC	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPFFR	Eagle Point Flora and Fauna Reserve
EVC	Ecological Vegetation Class
FMP	Foreshore Management Plan
GLaWAC	Gunaikurnai Land and Waters Aboriginal Corporation
GLCC	Gippsland Lakes Coordinating Committee
GLRSMP	Gippsland Lakes Ramsar Site Management Plan
GP	Gippsland Ports
Habitat	The place or type of site where an organism or population naturally occurs.
High-value reserves	Public reserves identified as having high natural resource management values in an Ethos NRM (2022) report
Inundation	Flooding due to elevated water levels. Inundation can be caused by storm tide (elevated sea levels due to storm activity), sea level rise and/or rainfall (catchment) influences.
IPA	Indigenous Protection Area
IWM	Integrated Water Management
KBA	Key Biodiversity Area
LCHA	Local Coastal Hazard Assessment
LEFL	Lakes Entrance Fishing Cooperative



Term	Definition
Littoral	Relating to or situated on the shore of the sea or a lake.
Marine environment	Land, water and biodiversity between the outer limit of Victorian coastal waters and the high water mark of the sea. Defined further in the <i>Marine and Coastal Act 2018</i> and Policy.
Marine and coastal Crown land	All Crown land and waters between the outer limit of Victorian coastal waters and 200 metres inland of the high-water mark of the sea. Defined further in the <i>Marine and Coastal Act 2018</i> and Policy.
Marine and coastal environment	Land, water and biodiversity between the outer limit of Victorian coastal waters and 5 kilometres inland of the high-water mark of the sea. Defined further in the <i>Marine and Coastal Act 2018</i> and Policy.
Marine and coastal processes	The physical, chemical and biological processes that occur in the marine and coastal environment over both long and short timescales. For example, the natural accretion and erosion of beaches, nutrient cycling and soil formation processes, the structure and functioning of ecological communities.
Natural hazards	Natural physical, chemical, and biological process continually drive changes in the landscape over short and long timeframes. When these natural processes have a negative impact on landscape values and uses, we may refer to them as natural hazards. Natural hazards can include a diversity of processes/events such as bushfires, extreme temperatures, invasive species, water quality changes, floods and drought. The majority of natural hazards are not unique to the coast, and strategic management of natural hazards takes place through a range of specific and integrated approaches at local and regional scales.
NCCAG	Nungurner Community and Coast Action Group
NCLG	Nungurner Community Landcare Group
Partner	Rightsholders, agencies and stakeholders involved in delivery or providing advice to inform implementation of an action. A Partner may collaborate with Council through a formal partnership, or through informal channels, providing advice and guidance on action implementation. Some Partners lead their own actions, where Council participates in delivery.
Planning scheme	A planning scheme controls land use and development within a municipality. It contains state and local planning policies, zones and overlays and other provisions that affect how land can be used and developed. Council are the responsible authority for administration or enforcement of the East Gippsland Planning Scheme.
PV	Parks Victoria
Ramsar	A wetland site designated to be of international importance under the Ramsar Convention, also known as "The Convention on Wetlands", an intergovernmental environmental treaty.
RAP	Registered Aboriginal Party
Rightsholders	A person or organisation that has legal rights. Rightsholders include Traditional Owners
Resilience	The capacity of social, economic, and environmental systems to cope with a hazardous event, trend or disturbance, responding or reorganising in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation.
Salinity	Salinity is a measure of the salt concentrations in water. Salinity influences the density of water, and interactions and mixing between fresh (low salinity) and salt (high salinity) water.
Sea level rise (SLR)	An increase in the mean level of the ocean. Relative sea level rise occurs where there is a local increase in the ocean level relative to the land, which might be due to ocean rise and/or land subsidence.
Shire	The land covered by East Gippsland Shire Local Government Area
Stewardship	Community stewardship involves caring for the natural marine and coastal places that exist in and around the communities we live in, and taking actions that benefit the environment. Those taking action have various motivations and levels of capacity to protect, care for and responsibly use the marine and coastal environment. Increasing this sense of community stewardship requires understanding and overcoming barriers to action.
The Act, MaCA	<i>Marine and Coastal Act 2018</i>
VFA	Victorian Fishing Authority



# 1 Introduction

Covering 220 km along eastern Victoria, the East Gippsland coast stretches from Lake Victoria in the Gippsland Lakes to the eastern Victorian border with New South Wales. The East Gippsland Shire (the Shire) includes part of the internationally significant Gippsland Lakes, one of the longest stretches of sandy beaches in 90 Mile Beach, and many estuaries, inlets and coastal lagoons.

These coastal, lake and marine areas are an important feature in the history, development, economic function and future of the region. This includes unique ecosystems and fascinating cultural heritage, but also difficult and challenging history. Diverse tourism experiences and a busy marine industry also mean the coast, lakes and sea of East Gippsland is core to the people who live, work and visit the region.

Managing this vast stretch of coastline and its settlements and townships presents a range of ongoing and emerging challenges. These include:

- aging infrastructure and facilities;
- increasing pressures from population growth, visitation and usage;
- natural hazards, bushfire management and recovery; and
- emerging issues of sea level rise and changes to our climate.



As a land manager for parts of the coast, East Gippsland Shire Council (Council) have developed this Coastal and Marine Management Plan (CMMP) to help guide sustainable management of these valued areas. This strategic approach will ensure management initiatives provide communities and visitors with suitable ways to enjoy the coast sustainably and retain what we love about the coast for future generations.

The focus for this CMMP is the marine and coastal Crown land for which Council is the designated land manager.





We worked together with key stakeholders and the community to develop the East Gippsland Shire Council CMMP.

The Plan guides how we manage the coastal and marine areas Council is responsible for over the next 10 years by:

- Highlighting what people love about these areas and what challenges they face.
- Setting our overall vision, objectives, principles and management approach.
- Outlining opportunities, priority actions and projects for delivery.
- Helping coordinate management across Council, relevant organisations and community groups.

### 1.1 This document

Council commenced development of the CMMP in early 2023. The process to develop the CMMP is summarised in Figure 1.

The CMMP brings together all of the work undertaken to date. This includes our work with the community and other stakeholders, as guided by a tailored Communication and Engagement Plan (C&EP). These activities are further described in Attachment A.

The CMMP outlines context and key features for the East Gippsland coast and key localities. It identifies core values, challenges and opportunities for future management. This guides our management approach including long-term objectives, principles and actions.



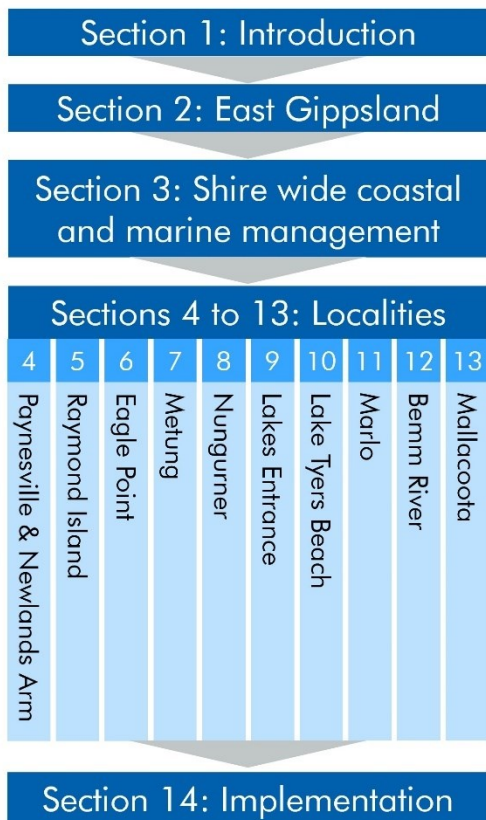
Figure 1. Timeline for developing the CMMP.



## 1.2 How to read this document

The CMMP is set out in Sections:

- **Section 2** provides an overview of East Gippsland Shire and the landscape setting, history, communities, environment and uses of marine and coastal areas.
- **Section 3** details the Shire wide approach to coastal and marine management including translating Statewide policy into a framework for holistic management across East Gippsland.
- **Sections 4 to 13** step through the ten localities included in the East Gippsland Shire Council CMMP and summarise the values and challenges across each locality, and proposed management actions.
- **Section 14** provides details on implementation arrangements for the CMMP, with additional detail provided for Council in a separate Implementation Plan.



## 1.3 Scope of the CMMP

The purpose of a CMMP is to provide direction for the future local management of an area of marine and coastal Crown land. This includes translating Statewide marine and coastal policy and strategy to on-ground action.

As a Council document, the focus for this CMMP is the marine and coastal Crown land for which Council is the designated land manager. These areas are located in ten townships across East Gippsland.

It was not feasible to develop a CMMP for all of East Gippsland’s marine and coastal Crown land, across multiple land managers. However, specific Statewide policies still apply to all marine and coastal Crown land, regardless of land manager.

A CMMP must also consider the broader marine and coastal environment. In this way, the CMMP:

- Provides a Shire wide management framework to promote consistent management across Council-managed land and operations
- Focusses actions on aspects of coastal and marine management where Council has a management role and can influence change
- Promotes and enables integrated management across management boundaries, agencies and with a holistic catchment-wide approach

Further detail on management roles and responsibilities and the geographic scope of the CMMP is provided in Section 3.2.



## 2 East Gippsland

From Bairnsdale to the New South Wales border, East Gippsland Shire covers over 21,000 square kilometres of eastern Victoria.

With vast swathes of public land and rural wilderness, the Shire’s environment is a major drawcard for residents and visitors. The economy of East Gippsland relies heavily on the region’s environmental resources and natural setting through agriculture and tourism.



### Traditional Owners

The Aboriginal community across the East Gippsland region is represented by:

- the Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC), the Registered Aboriginal Party (RAP) and Native Title holder
- Bidwell people
- Ngarigo Monero people.

Traditional Owners of these groups have an enduring connection to land and sea Country and have played an important role in caring for land and water across the region over millennia.

The East Gippsland coastal and marine environment supports unique and diverse plants and animals. These ecosystems range from coastal saltmarsh, lakes, estuaries and intertidal zones to littoral rainforests and dune barrier systems. The internationally significant Gippsland Lakes are a designated Ramsar site and support nationally threatened species and communities.

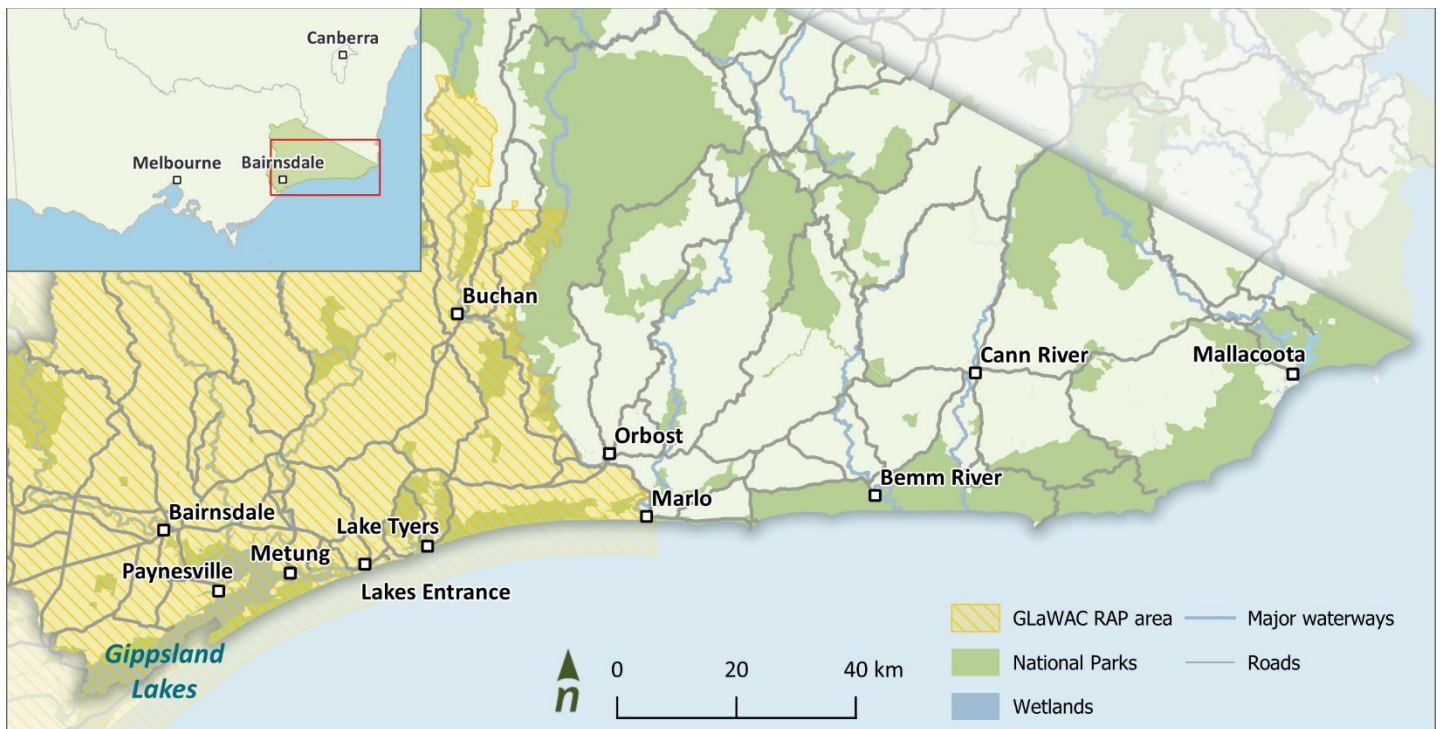


Figure 2. East Gippsland Shire coastal areas, major townships, RAP area and other features.



## 2.1 Gunaikurnai Country

Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC) is the Registered Aboriginal Party (RAP) for Gunaikurnai. Gunaikurnai are the Traditional Owners of a large part of Gippsland, approx. 10% of the Victoria, as recognised by the Victorian Aboriginal Heritage Council under the *Aboriginal Heritage Act 2006*.

The Gunaikurnai have managed coastal land and sea environments for thousands of years, including areas that were once dry land before sea levels stabilised around 5,000 years ago. Coastal regions were among the most densely populated areas of Gunaikurnai Country, providing abundant marine and terrestrial food sources.



Coasts were an ideal location for Gunaikurnai to live, camp, and harvest fish and coastal species at levels that did not disrupt the natural balance. It is important that their stories can be told on Country, so the wider community can gain a greater appreciation of the significance of this place to Gunaikurnai people and how they lived here sustainably for thousands of generations.

*Text and pictures provided by GLaWAC*

Greater involvement in Sea Country management presents opportunities for economic growth for the Gunaikurnai community while enhancing cultural heritage protection and environmental outcomes.



With an enduring connection to the coast and sea, the Gunaikurnai community holds unique knowledge and perspectives that can significantly enhance coastal management efforts. Strengthening Gunaikurnai leadership in protecting coastal and submerged cultural values is essential, both within and beyond Aboriginal Title areas.

Strong Gunaikurnai involvement paves the way for a future where the Gunaikurnai are empowered to shape the sustainable management of their land and waters, ensuring cultural and environmental resilience for generations to come. It is vitally important to Gunaikurnai that this includes opportunities to share knowledge where appropriate across country.

Further information about Joint Management is provided in Section 3.2 and at [gunaikurnai.org/our-country/joint-management/](http://gunaikurnai.org/our-country/joint-management/).



## 2.2 Landscape setting and history

The East Gippsland region covers diverse environments. These range from the alpine headwaters and uplands of the Great Dividing Range to the lowland estuaries, plains and lakes along the coast.

Granite, sands, marine sediments and beach deposits dominate the geology of the region. Unique biodiversity and diverse values, uses and industries are supported by this landscape setting and rely upon the natural environment.



The region is well-vegetated with vast areas of forest and woodland. In a temperate climate, the region averages around 500 to 1200 mm of rainfall each year. Waterways generally flow south and heavy rainfall can cause flooding across waterways, floodplains and inlets.


The East Gippsland lowlands stretch across the far eastern coast from the NSW border to Lakes Entrance. Coastal plains, terraces and dunefields, along with several river estuaries and inlets, are found across the landscape. East to west, these include:

- Mallacoota Inlet and the Wallagaraugh River
- Tamboon Inlet and the Cann River
- Sydenham Inlet and the Little and Bemm Rivers
- The Snowy River and estuary at Marlo, including Lake Corringle
- Lake Tyers and Stony and Boggy Creeks

Many of these inlets intermittently close and open, depending on rainfall and catchment flows and coastal processes. Managing these dynamic systems and balancing natural ecological values and flooding impacts can be challenging.

Further west, in the Gippsland Plains region, the Gippsland Lakes is a dominant feature. Text Box 1 provides further context on the history of the Gippsland Lakes and present day management challenges.

The East Gippsland CMA manage catchments and waterways across the region. Catchment management is guided by the East Gippsland Regional Catchment Strategy.



The Gippsland Lakes have always been an important cultural landscape for Gunaikurnai Traditional Owners. Ancestors travelled across the Bassian Plain - the land bridge to Tasmania now under Bass Strait - for thousands of generations. When the lakes system formed after the last Ice Age, the Tatungalung and Krauatungalung clans utilised the abundance of resources provided.

In recent times, stronger involvement in the management of Sea Country is creating opportunities to improve economic outcomes for Gunaikurnai Traditional Owners, whose relationship with these cultural landscapes continues, even where the evidence of their previous occupation now lies beneath the ocean.

*Text provided by GLaWAC*



### Text Box 1: The Gippsland Lakes

The Gippsland Lakes are an iconic feature of East Gippsland - a network of coastal lakes, marshes and lagoons covering over 600 square kilometres. The Gippsland Lakes receive water from seven major river systems, covering a catchment area of around 20,000 km<sup>2</sup>. The Lakes are the largest coastal barrier and lagoon system on the Australian coast.

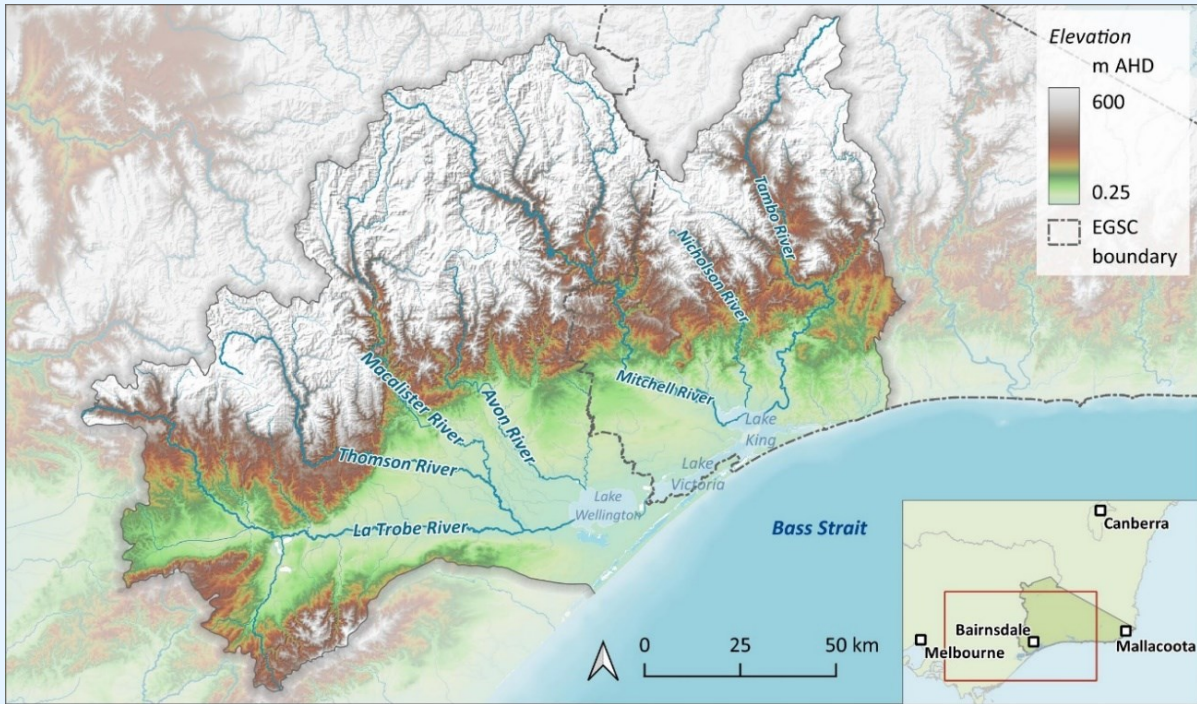


Figure 3. The Gippsland Lakes catchment.

### Formation of the Lakes

A marine “Gippsland Bay” formed in higher sea levels, with a cliff coastline and the sea extending north into major river valleys. When sea levels lowered, the shoreline moved south, streams extended further and sediment filled the valleys. Over the past 4 million years, barrier dunes formed with changes in sea level. These dunes separated the Lakes from what is now known as Bass Strait. Evidence of these changes include:

- **Coastal bluffs and cliffs** formed at highest sea levels, around Metung and Tambo Bluff.
- **Prior barrier** formed before the lakes were enclosed, including Banksia Peninsula and Raymond Island.
- **Inner barrier** formed at the southern margin of Lake Wellington and Lake Victoria, from Golden Beach to Sperm Whale Head.
- **Outer barrier** a narrow sand dune extending along the coast from Seaspray to Red Bluff. The seaward shore of the Outer Barrier is now known as Ninety Mile Beach.

Figure 4 shows this barrier evolution.

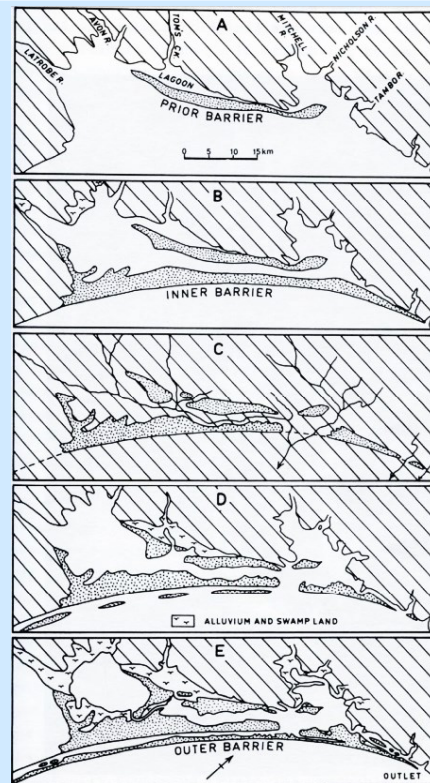








Figure 4. Stages in the evolution of the Gippsland Lakes Barriers (Bird, 1978, Water Technology 2014a).



### Present day management challenges

Managing the Gippsland Lakes is complex, with several management plans and strategies aiming to meet specific objectives. A large portion of the Gippsland Lakes (from Sale Common to Lake Tyers) is a listed wetland of international importance under the Ramsar Convention on wetlands. The 2015 Gippsland Lakes Ramsar Site Management Plan (GLRSMP) was renewed by the East Gippsland Catchment Management Authority (EGCMA) in 2024. It defines priority strategies for management of the site.

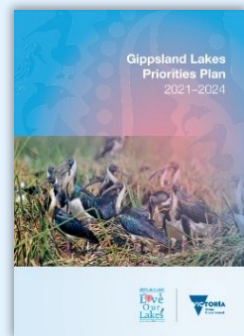
High-priority threats identified in the GLRSMP include:

-  Nutrient inflows from catchment agricultural activities.
-  Climate change (storms and sea level rise) impacting on vegetation, silt jetties, exposed islands and sandy spits.
-  Biota impacts of artificial opening of Lake Tyers.
-  Non-native terrestrial and marine invasive species affecting tern nesting, native fish, flora diversity, and habitat.
-  Decreased freshwater inflows, salinity and impacts on flora and fauna, including fish breeding.
-  Flora and fauna disturbance through recreational activities and pest animals.

Many of these threats cross jurisdictional boundaries. Managing these challenges is a shared responsibility.

In 2016, the Victorian government invested \$12.5 million over four years to implement projects to improve the health of the Gippsland Lakes. The Gippsland Lakes Coordinating Committee (GLCC) was appointed to make recommendations to the Minister on specific funding priorities. In 2021, the Victorian government committed an additional \$7.5 million over three years.

The GLCC together with delivery managers developed Gippsland Lakes Priorities Plans in 2016 and 2021 to guide their decision making. These plans provide a clear and transparent approach for making recommendations for funding.



A key objective of the GLCC is to foster cooperation and coordination between agencies and organisations with an interest in the health of the Gippsland Lakes.

**i** More information, including the 2021-2024 Priorities Plan, Gippsland Lakes Environmental Report and Annual Reports can be found at the Love Our Lakes website: [www.loveourlakes.net.au](http://www.loveourlakes.net.au)

### Scope of the CMMP in relation to the Gippsland Lakes

Council is responsible for many activities that may impact the Gippsland Lakes environment. However, they cannot control all activities. Other agencies, stakeholders and the community also have a part to play. The CMMP outlines actions where Council has a management role and can influence change. Relating to improving the broader health and condition of the Gippsland Lakes, roles may include:

- Stormwater and runoff controls, including water sensitive urban design
- Planning, land use, and development arrangements and controls
- Habitat protection and management of Council-managed land / reserves
- Influencing community and industry behaviour change
- Collaborating with other management agencies and advocating for action
- Promoting sustainable tourism and commercial use

CMMP objectives, principles and actions compliment ongoing work across the Lakes. Other agencies may have supporting roles in implementing CMMP actions. Section 3.2 provides further detail on the scope of the CMMP and management agency roles / responsibilities.



### 2.3 Communities

East Gippsland is home to around 48,700 people. The geographic nature of East Gippsland is unique, with many small rural communities separated by extensive tracts of public land. This means every community has its own unique identity.

Many communities are located across the coastal plain, often near rivers and connected by the Princes Highway. The largest town, Bairnsdale, acts as a regional hub and hosts many administrative offices.



The natural environment of the region acts as a driver for population growth and tourism, particularly attracting retirees. Historically, retirees have driven migration and population growth. This means a generally older population and lower percentage in the labour force (Figure 5). Centres such as Bairnsdale are particularly important in providing services for older residents and visitors.

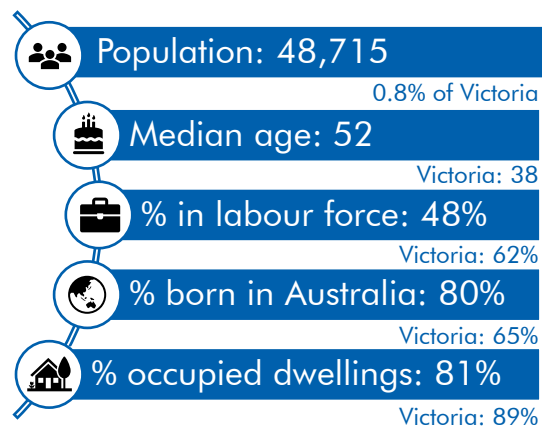
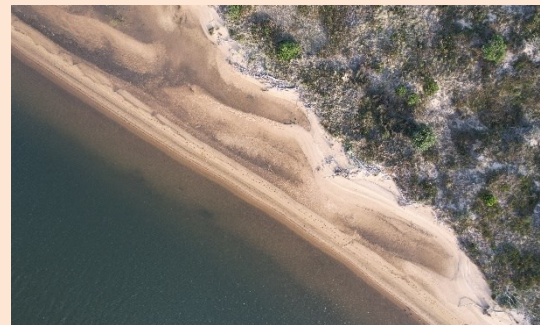


Figure 5. Key census statistics for East Gippsland Shire, with Statewide comparison (ABS, 2021).

#### Connection to Land and Sea Country

Around 3.5 % of the East Gippsland population identify as Aboriginal and/or Torres Strait Islander.

Coastal and marine areas are rich in food sources and were the most densely populated parts of Country. As is still the case today, these areas provide good places for older people to live and offer launching places for expeditions out to sea to gather seafood. Travelling in bark canoes, Aboriginal people would harvest fish and other coastal species at sustainable levels, being careful to not disrupt the natural balance.



With a longstanding connection to managing the coast and sea, Traditional Owners can provide valuable perspectives in caring for these coastal and marine environments.

In 2022, GLaWAC signed an agreement with the Federal Government to start the process of establishing a Sea Country Indigenous Protection Area (IPA) from Nanjet, east of Wilsons Promontory, to Mallacoota, on the Vic/NSW Border.

The CMMP supports the development of the Nanjet to Mallacoota IPA.

*We see no distinction between the land and the sea. It is all a part of our Country. But our connection to the coastal and marine parts of our Country is rarely recognised, so we need to be clear about how important it is to us.*

GLaWAC ([gunaikurnai.org/our-country/sea-country](http://gunaikurnai.org/our-country/sea-country))



## 2.4 Environment

The East Gippsland region is unique in retaining around 80% of pre-European native vegetation. These habitats support over 5,000 species of plants and animals, 35 of which are exclusive to the region (EGCMA, 2022).

The coastal and marine environment supports diverse plant and animal communities including migratory shorebirds, marine mammals, fish and invertebrates. Many of these species are Commonwealth Environment Protection and Biodiversity Conservation (EPBC) Act- and Victorian Flora and Fauna Guarantee (FFG) Act-listed. Important ecological communities and species include:

- Temperate coastal saltmarsh
- Littoral and warm temperate rainforest
- International migratory shorebirds
- Marine mammals including one of only two resident populations of the Burrunan dolphin
- Coastal lagoons and soft sediment providing waterbird feeding ground
- Seagrass beds and rocky reefs that support diverse fish species and invertebrate communities
- Barrier sand islands providing nesting habitat for coastal birds

A recent study of natural resource values across East Gippsland Council-managed reserves (Ethos NRM, 2022) has helped to prioritise Council management. Many coastal reserves exhibit high natural value.

As a core feature of the East Gippsland environment, the Gippsland Lakes are recognised internationally as a Ramsar site for their significant environmental values. The Lakes are a Key Biodiversity Area (KBA) of global significance for the conservation of birds and other wildlife.



Several wetlands are also listed on the Directory of Important Wetlands in Australia. Intertidal mudflats and saltmarsh habitats are important feeding grounds, with high tide roosting sites also significant. The Ramsar site supports over 20 international migrant species, with many other international migratory bird agreements in place.

The East Gippsland Environmental Sustainability Strategy 2022-2032 is Council's key environmental policy document. It guides work across Council to achieve objectives for climate change, biodiversity, land and water management, and resource efficiency.





## 2.5 Tourism and economy

The coastal economy in East Gippsland is heavily reliant on natural resources, the environment and eco-tourism. Coastal dependent economic sectors include:

- Commercial fisheries
- Commercial ports, shipping and boating
- Services supported by coastal settlements (retail, offices etc.)
- Tourism (accommodation, etc.)
- Oil and gas in Bass Strait




The Gippsland coastal region is an important centre for commercial fisheries. This includes the largest commercial fishing fleet in Victoria, operating out of Lakes Entrance, and the eastern zone abalone fishery, based at Mallacoota.

Recreational boating and fishing activities also attract both residents and tourists, making a significant contribution to the local economy of coastal townships.



With an older population, health care and social assistance is East Gippsland’s largest employment sector, supporting nearly 18% of jobs in the Shire.

**Largest contributors to economic output:**



- Manufacturing (17%)
- Construction (16%)
- Agriculture, forestry and fishing (11%)
- Rental, hiring and real estate services (10%)
- Health care and social assistance (8%)

**Largest employment sectors:**



- Health care and social assistance (18%)
- Retail trade (10%)
- Education and training (10%)
- Construction (10%)
- Agriculture, forestry and fishing (9%)
- Accommodation and food services (9%)

**Largest export industries:**



- Manufacturing (36%)
- Agriculture, forestry and fishing (25%)
- Construction (12%)
- Electricity, gas, water and waste services (5%)
- Accommodation and food services (5%)

REMPPLAN *Economy, Jobs and Business Insights (2022)*  
[app.rempplan.com.au/eastgippsland/economy](http://app.rempplan.com.au/eastgippsland/economy)

The East Gippsland Economic Development Strategy (2022-2032) is Council’s key regional economic policy document aimed to achieve high levels of economic prosperity for the region.

**Tourism and commercial use**

East Gippsland has spectacular and well recognised coastal landscapes. They are integral to the identity of the region and its people. These include rugged wildernesses of the Croajingolong coast, unparalleled Ninety Mile Beach and the iconic Gippsland Lakes. As well as containing important ecological, cultural and social values, these landscapes attract eco-tourism.

When managing tourism and commercial activities across the marine and coastal environment, land managers must ensure uses, facilities and activities:

- Are ecologically, socially and economically sustainable
- Promote equitable use
- Minimise negative impacts
- Have a functional need to be in or near water
- Are appropriated sited and designed



### 3 Shire wide coastal and marine management

#### 3.1 Policy context

Across the Shire, coastal and marine management takes place in the context of Victorian Government legislation and policies. Policies apply across the entire Victorian marine and coastal environment, with specific policies applying to coastal and marine Crown land.

The Department of Energy, Environment and Climate Action (DEECA) has led a reform of coastal and marine management in Victoria. These reforms aim to better support coordinated management and provide tools to identify and adapt to coastal hazards. The key components of this reform are summarised in Figure 6.

#### What came before this CMMP?

Foreshore Management Plans (FMPs) have guided Council management of coastal areas to date. These plans present visions, priorities and actions for the day-to-day management of foreshore areas, guided by the previous *Coastal Management Act 1995*. FMPs exist for Bemm River, Marlo, Mallacoota, Lake Tyers Beach, Lakes Entrance, Eagle Point and Paynesville. Many of these plans are now outdated. This CMMP provides an opportunity to update these plans and create a coordinated, Shire wide approach to coastal and marine management, in alignment with the new Act and Statewide approach.

#### Marine and Coastal Act 2018

The *Marine and Coastal Act 2018* replaces the previous *Coastal Management Act 1995*. It aims to provide a simpler, more integrated and coordinated approach to planning and managing the marine and coastal environment. It creates the legislative framework to make the policy, strategy and plans described below, and also outlines principles and objectives for planning and managing our marine and coastal environment. The Act also established the Victorian Marine and Coastal Council (VMaCC).

#### Marine and Coastal Policy (2020)

The Victorian Government has developed the Policy in line with the Act and with guidance from the VMaCC. It came into operation in March 2020, and sets a 15-year vision for *'a healthy, dynamic and biodiverse marine and coastal environment that is valued in its own right, and that benefits the Victorian community, now and in the future.'*

It guides decision makers (including local councils and land managers) in planning, management and sustainable use of our coastal and marine environment. It provides direction on issues such as the impacts of climate change, population growth, and ageing coastal structures. It also includes a Marine Spatial Planning Framework, specific to the marine environment.

#### Marine and Coastal Strategy (2022)

The Strategy is a five-year action plan. As the link between the Policy and on-ground action, it lays the foundation to achieve the Policy's vision and intended outcomes on a State-wide scale.

The Strategy includes six actions and an important message from Victorian coastal Traditional Owners. It also identifies 54 activities to deliver the six actions. Lead agencies are responsible for implementing activities.

The final version of the Strategy was released by State Government in May 2022. It was developed with input from Traditional Owners, the VMaCC, marine and coastal managers, communities and interest groups. It is the first of three strategies over the next 15 years.

#### Victorian Marine and Coastal Council (VMaCC)

The Act established the VMaCC to provide independent advice on marine and coastal issues. The inaugural VMaCC was appointed in August 2018.

#### Coastal and Marine Management Plans (CMMPs)

Under the Act, CMMPs are a tool to assist Crown land managers (including local councils) and communities to care for special coastal and marine environments and manage demand and conflicting uses, now and in the future. They implement long-term guidance in the Policy by translating it as on-ground actions for specific areas of coast.

Figure 6. Victoria marine and coastal policy context.

DEECA has guidelines for developing CMMPs (DEECA, 2023a). These guidelines, along with DEECA advice (formal and informal), and Victoria's marine and coastal policy context (Figure 6) guided the development of this CMMP.

The Marine and Coastal Policy includes a 'Planning and Decision Pathway' which shows how the objectives and guiding principles of the Act should be used in decision making in the marine and coastal environment (Figure 7).

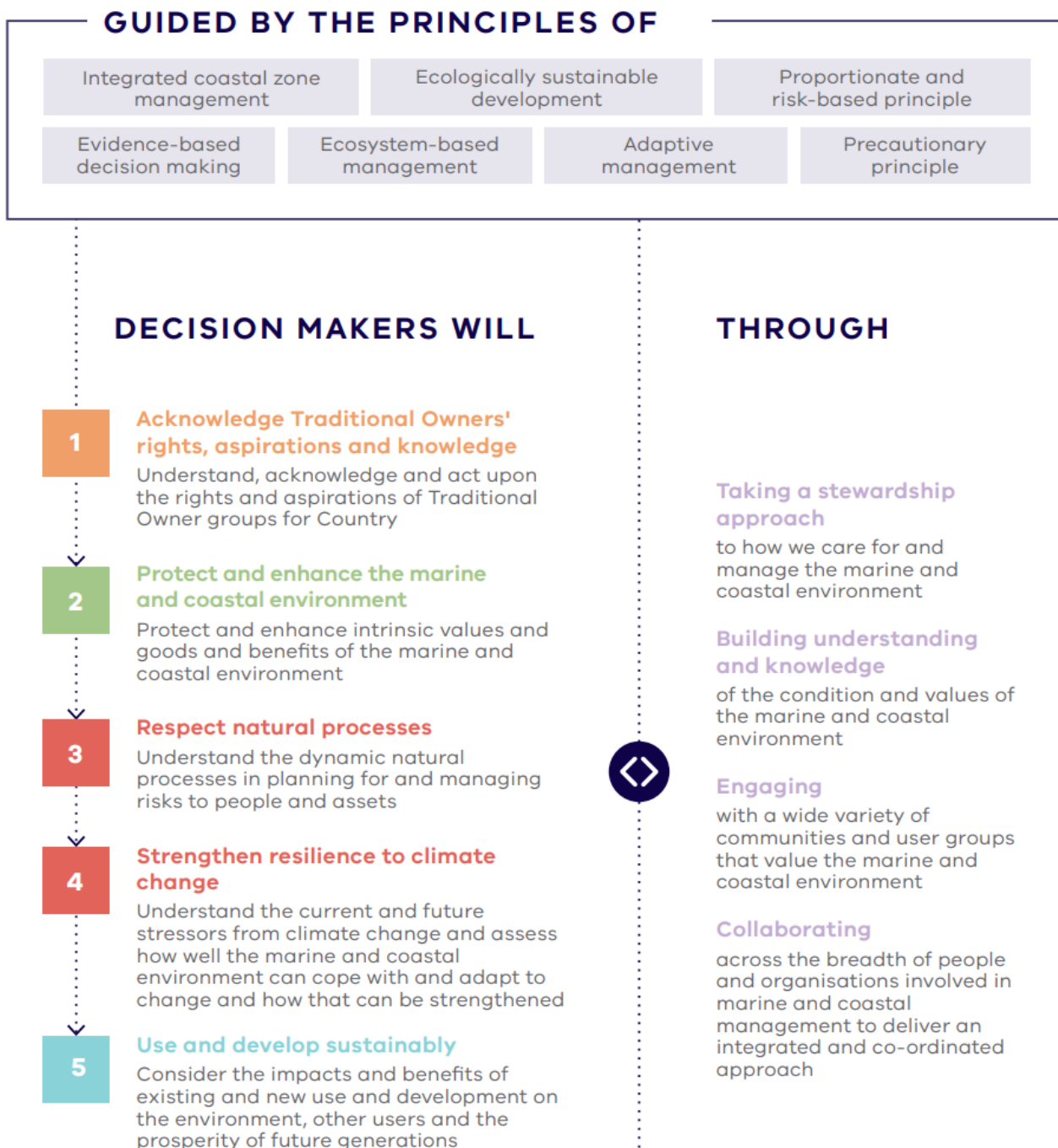


Figure 7. The Planning and Decision Pathway sets out how the guiding principles and policy must be considered in decision making.

Along with this Statewide guidance, there are various policies, strategies and plans at regional and local government levels that are relevant to coastal and marine management. An overview of some of the Council and regional plans and strategies, and how they relate to the Planning and Decision Pathway (Figure 7) is provided in Figure 8.

To promote integrated coastal zone management, the CMMP has been developed to compliment and support existing plans and strategic direction across the region. Some CMMP actions directly support delivery of complimentary management priorities, plans or strategies.

A summary of relevant documents is provided in Attachment B.

	Acknowledge Traditional Owners' rights, aspirations and knowledge	Protect and enhance the marine and coastal environment	Respect natural processes and strength resilience to climate change	Use and develop sustainably	Stewardship, understanding, engaging, collaborating
<i>Council Plan 2021-2025</i>	Strong working relationships are further developed with Aboriginal people and organisations (strategy)	A natural environment that is managed and enhanced (strategic objective)	Planning with local communities for natural disasters and emergencies strengthens capacity, infrastructure, resilience, preparedness, and recovery		Communities are engaged in decision-making and support is provided to develop local solutions to local issues (strategy)
<i>Well placed for Wellbeing 2021-2025</i>		Natural environment, resources and its biodiversity prioritised to support community health/wellbeing (goal)	Enhance the resilience and skills in communities around preparedness to adapt to a changing climate/disasters (goal)	Support partner agencies and communities to plan, develop and maintain natural and built assets under their control for community inclusion (goal)	
<i>Shaping the Future: Our Community Vision 2040</i>	Respect and protect the Shire's Aboriginal community's cultural heritage and role in decision-making about the future of the area (priority)	The ecological diversity and beauty of East Gippsland's national parks, forests, waterways, beaches and oceans is managed and any potentially adverse impacts from human activity and natural events is minimised (priority)	The community is more involved in planning to adapt to a changing environment and the impact of catastrophic events		
<i>Environmental Sustainability Strategy 2033-2032</i>		Respect and alignment [of all <i>Environment Sustainability Strategy</i> goals] with the rights of Traditional Owners (goal)	Community resilience to respond to increasing climate risk and natural disasters (goal)		Community participation in climate change response (goal)
<i>Reconciliation Action Plan 2015-18</i>	Provide opportunities for the promotion of Aboriginal Arts and Culture (strategic action)				
			Investigate Aboriginal tourism opportunity for Lakes Entrance that supports sustainable economic growth for the region (strategic action)		
<i>Economic Development Strategy 2022-2032</i>	Bring together the unique environmental, cultural, and historical selling points of East Gippsland and support and promote cohesive brand and promote (strategy).	East Gippsland is a region of natural landscapes, small towns and villages (strategy)	Build business resilience to natural hazards including drought, fire, flood, sea level rise (strategy)	Enhance tourism industry opportunities on public and private land (strategy)	Support exiting operators and new tourism entrepreneurs (strategy)
			East Gippsland is a climate change adaptation leader and mitigates climate hazard risk to protect the economy (strategy)	Develop public tourist infrastructure (both physical and digital) to enable a high-quality visitor experience (strategy)	
<i>Asset Plan 2022-2032</i>	Understand the relationship of Aboriginal people with place and their intrinsic connection with the environment, when planning, constructing and/or maintaining our natural and built assets (key opportunity)	Maintain and preserve the natural beauty and coastal and foreshore areas of the region (future challenge)	Ensure that communities are more actively engaged in decision making with respect to asset planning to adapt to a changing environment and impact of catastrophic events (key opportunity)		
<i>Housing and Settlement Strategy 2023</i>		Ensure the protection of human life and environmental values are prioritised in planning for settlement and housing in East Gippsland.		Support sustainable patterns of residential development across East Gippsland.	
<i>Gippsland Regional Climate Change Adaptation Strategy 2021</i>	Empowering Traditional Owners to care for Country (strategic direction)	Monitor and manage the impacts on coastal and estuarine environments (strategic direction)	Build understanding of coastal asset vulnerability (strategic direction)		Actively share adaptation education and awareness within and through industry, community educational and training networks (strategic direction)
	Understand the impacts of climate change on Country, cultural values and cultural heritage (strategic direction)				

Figure 8. Alignment of recent key East Gippsland Shire Council and regional documents in relation to the Marine and Coastal Policy planning and decision pathway themes



### 3.2 Management roles and responsibilities

Management of East Gippsland’s coastal and marine environment is a shared responsibility between East Gippsland Shire Council and various other management agencies, stakeholders and rightsholders.

Around 83% of the Shire is public land as National Parks, State forest or other Crown land. Parks Victoria are the land manager for large areas of coastal and national parks and reserves across East Gippsland.

Council’s land management responsibilities are largely focussed on public land within townships (Figure 9).

Historically, as townships have grown, Council’s foreshore management area has also grown. This coincides with township and settlement boundaries and reflects that foreshores are important open space areas for townships.

Table 1 outlines the roles of land managers, rightsholders and other key stakeholders across the shire. Table 2 summarises coastal and marine management roles and responsibilities.

#### Geographic scope of the CMMP:

A CMMP applies to marine and coastal Crown land. As a Council-led project, the focus for this CMMP is the marine and coastal Crown land for which Council is the designated land manager. These areas are located in the townships of:

- Paynesville and Newlands Arm
- Raymond Island
- Eagle Point
- Metung
- Nungurner
- Lakes Entrance
- Lake Tyers Beach
- Marlo
- Bemm River
- Mallacoota

Under the Act, a CMMP must also consider the broader marine and coastal environment, extending up to 5 km inland and 3 nautical miles offshore from the high water mark. This includes both public and private land.

The CMMP promotes and enables integrated management across management boundaries, with a holistic catchment to coast approach.

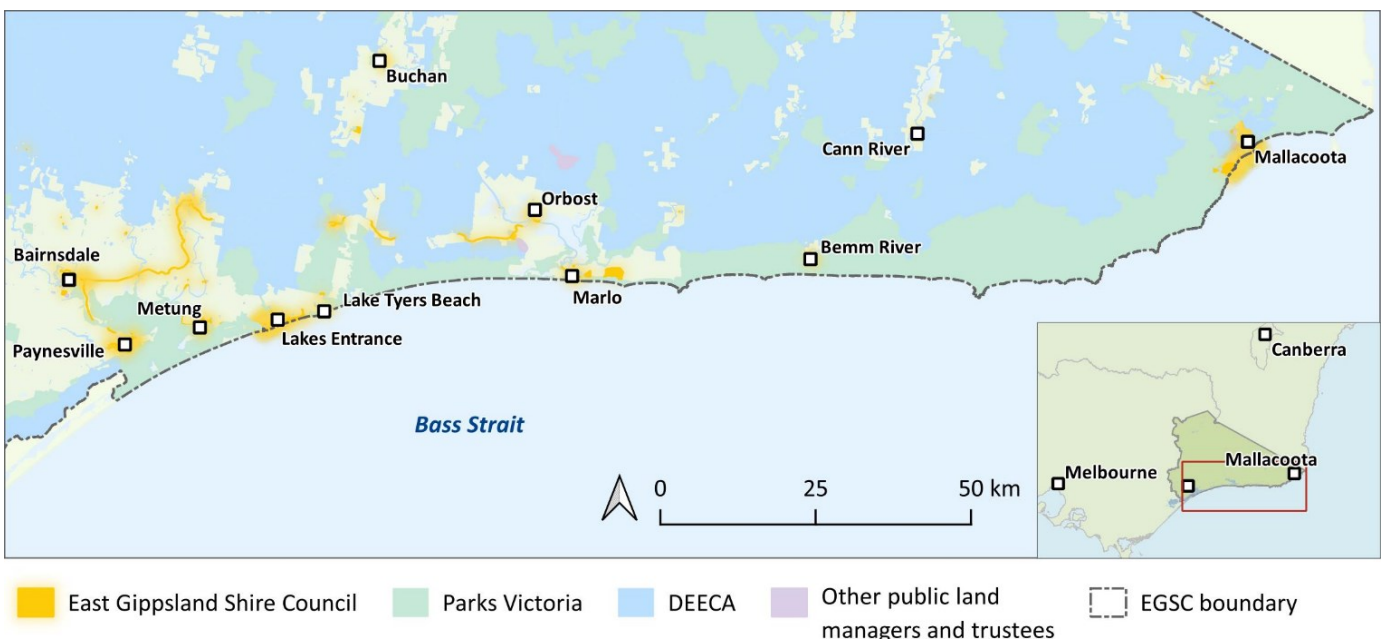


Figure 9. Shire coastal public land management responsibilities.

Table 1. Land managers, rightsholders and other key stakeholders.

Agency	Role
	<p>The <b>Department of Energy, Environment and Climate Action*</b> (DEECA) is responsible for overseeing management of Crown land and marine areas for its environmental, conservation and recreational values. DEECA recently reformed coastal and marine management with the new <i>Marine and Coastal Act 2018</i>, associated Policy (DELWP, 2020a) and Strategy (DELWP, 2022). * formerly known as the Department of Environment, Land, Water and Planning (DELWP) to January 2023</p>
	<p><b>East Gippsland Shire Council</b> is the designated land manager for portions of coastal Crown land within communities and townships across the Shire. Council directly manage a number of coastal foreshore reserves. Council’s role in coastal and marine management also includes (but is not limited to):</p> <ul style="list-style-type: none"> <li>• managing, upgrading and improving Council-owned foreshore infrastructure and facilities including some jetties, boat ramps and marinas; foreshore paths and trails; and public recreation facilities (playgrounds, benches, toilets)</li> <li>• administering the East Gippsland Planning Scheme, assessing and determining planning permit applications and managing commercial use of public land through leasing and licensing</li> <li>• management of Eagle Point Caravan Park and Mallacoota Foreshore Holiday Park</li> <li>• facilitating advocacy with other organisations and liaising with the community.</li> </ul>
	<p><b>Gippsland Ports (GP)</b> is the local Authority responsible for the application of the <i>Port Management Act 1995</i>, the <i>Marine Safety Act 2010</i>, and other related legislation for five local ports and four waterways. These include Mallacoota Inlet, Sydenham Inlet, Snowy River (Marlo), Lake Tyers and the Gippsland Lakes. Gippsland Ports’ management responsibilities include navigation, port operations, facility maintenance, regulation, security and compliance, boating safety, incident management, emergency response, maritime security, oil spill response and salvage, dredging and sand management. The areas and facilities managed by Gippsland Ports are listed at: <a href="http://gippslandports.vic.gov.au/ports-and-waterways/ports-and-waterways">gippslandports.vic.gov.au/ports-and-waterways/ports-and-waterways</a></p>
	<p><b>Parks Victoria (PV)</b> is the Victorian Government agency responsible for managing protected areas of land, marine parks and reserves under the <i>Parks Victoria Act 2018</i>. Parks Victoria manage National Parks, marine protected areas, and other Crown land reserves and assets. Parks Victoria also has responsibilities for monitoring estuary water quality and completing artificial estuary openings in collaboration with EGCMA.</p>
	<p>The <b>East Gippsland Catchment Management Authority (EGCMA)</b> is one of ten Catchment Management Authorities throughout Victoria established under the <i>Catchment and Land Protection Act 1994</i> and the <i>Water Act 1988</i>. The EGCMA provides for the integrated management of land, biodiversity and water resources in the region. The Authority also has responsibility for the planning and delivery of river health works, and several statutory activities. As the waterway manager, the EGCMA also has a role in managing estuary openings and estuary health. The West Gippsland CMA also manage parts of the outer barrier.</p>
	<p>The <b>Gunaikurnai Land and Waters Aboriginal Council (GLaWAC)</b> is the Registered Aboriginal Party (RAP) that represents Gunaikurnai people, the Traditional Owners, as determined under the <i>Aboriginal Heritage Act, 2006</i>. GLaWAC’s RAP area extends along the coast from the Franklin River in the west to the Snowy River in the east. GLaWAC provide joint management of 10 parks and reserves, including the Gippsland Lakes Coastal Park, Lakes National Park, Gippsland Lakes Reserve at Raymond Island, Lake Tyers and Corringale Foreshore Reserve.</p>





Agency	Role
	<p>The <b>Victorian Fisheries Authority (VFA)</b> is an independent statutory authority established to effectively manage Victoria's fisheries resources. Servicing all fisheries and aquaculture sectors and providing advice to government, VFA work closely with many stakeholders to deliver sustainable fishing and aquaculture, clear resource access and sharing arrangements and increased economic, social and cultural value.</p>
	<p><b>Better Boating Victoria (BBV)</b> is a division of the Victorian Fisheries Authority. It oversees the implementation of boating reforms and the Victorian Government's investment in boating infrastructure and facilities. This includes upgrading boat ramps and reviewing management arrangements for boating infrastructure.</p>
	<p>The <b>Environmental Protection Authority (EPA)</b> is Victoria's environmental regulator. It is an independent statutory authority with a role to prevent and reduce the harmful effects of pollution and waste on Victoria's environment and people. The <i>Environment Protection Act 2017</i> makes provision for the Authority's powers, duties and functions. It includes environmental obligations and protections and includes a general environmental duty (GED). The EPA are responsible for all activities relating to discharge of waste into the environment. This includes sewage discharge licensing and reporting of environmental quality.</p>
	<p><b>East Gippsland Water</b> provide urban water supply and wastewater disposal services for East Gippsland. They provide drinking water, recycled water and sewerage services to townships. They also manage water supply catchments and sewage treatment plants.</p>

Table 2. Summary of roles and responsibilities in coastal and marine management – not an exhaustive list.

Roles and responsibilities	DEECA	EGSC	GP	PV	EGCMA	GLaWAC	VFA	BBV	EPA	EGW
Developing State marine and coastal policy	✓	+	+	+	+	+	+	+	+	+
Cultural heritage protection	✓	✓	✓	✓	✓	✓	+	+	+	✓
Crown Land management	✓	✓	+	✓	+	✓				✓
Planning scheme implementation	✓	✓			✓	✓				✓
Waterway health / catchment management	+	+	+	+	✓	+	+	+	+	+
National Park and Reserve management				✓		✓				
State forest management	✓					+				
Port management and waterway safety	+	+	✓	+	+	+	+	+		
Boating infrastructure and investment		✓	✓					✓		
Urban water supply and wastewater disposal		+			+					✓
Urban drainage and stormwater	+	✓			+				+	+
Integrated water management		✓			✓	+			+	✓
Weed, pest and biosecurity management	✓	✓	✓	✓	✓	✓				✓
Waste discharge, pollution control and environmental/water quality		+			+				✓	+
Fisheries management and research	+	+			+	+	✓	+		

- ✓ Core role or responsibility
- ✓ Has a role or responsibility if designated as the land manager or referral authority
- ⊕ May contribute as a partner



## Land management

Defining land management boundaries and responsibilities is complex. Boundaries can shift with changes in legislation, policy, natural processes, and the use and purpose of land. Some land may have multiple pieces of legislation and policy that are applicable, along with multiple rightsholders, agencies and stakeholders involved in decision making.

**Marine and coastal Crown land** is defined as all Crown land and waters between the outer limit of Victorian coastal waters and 200 metres inland of the high-water mark of the sea. Marine and coastal Crown land may also extend further inland where it has been reserved under the *Crown Land (Reserves) Act 1978* for the purposes of the protection of the coastline.

The **marine and coastal environment** is defined as the land, water and biodiversity associated with that land and water between the outer limit of Victorian coastal waters and 5 kilometres inland of the high-water mark of the sea.

Figure 10 presents these areas and where marine and coastal policies apply.

A CMMP is prepared by a marine and coastal Crown land manager. 'Land managers' include Committees of Management, local government (Councils) and Parks Victoria.

Some general principles can be used to describe typical land management arrangements for marine and coastal Crown land.

Primary purpose of land	Land manager
Community benefit, including amenity, the interaction of people, development, and economic drivers.	Local Government (Council)
Environmental management including wildlife, pest and weed control, and management of natural processes.	DEECA or Parks Victoria

Land may also be jointly managed with Traditional Owners as rightsholders. **Joint management** is the establishment of a legal partnership between the State and Traditional Owners in the management of public land. Joint Management enables the knowledge and culture of a Traditional Owner group to be recognised and embedded in the management of land and sea. Joint management agreements exist between GLaWAC and land management agencies.

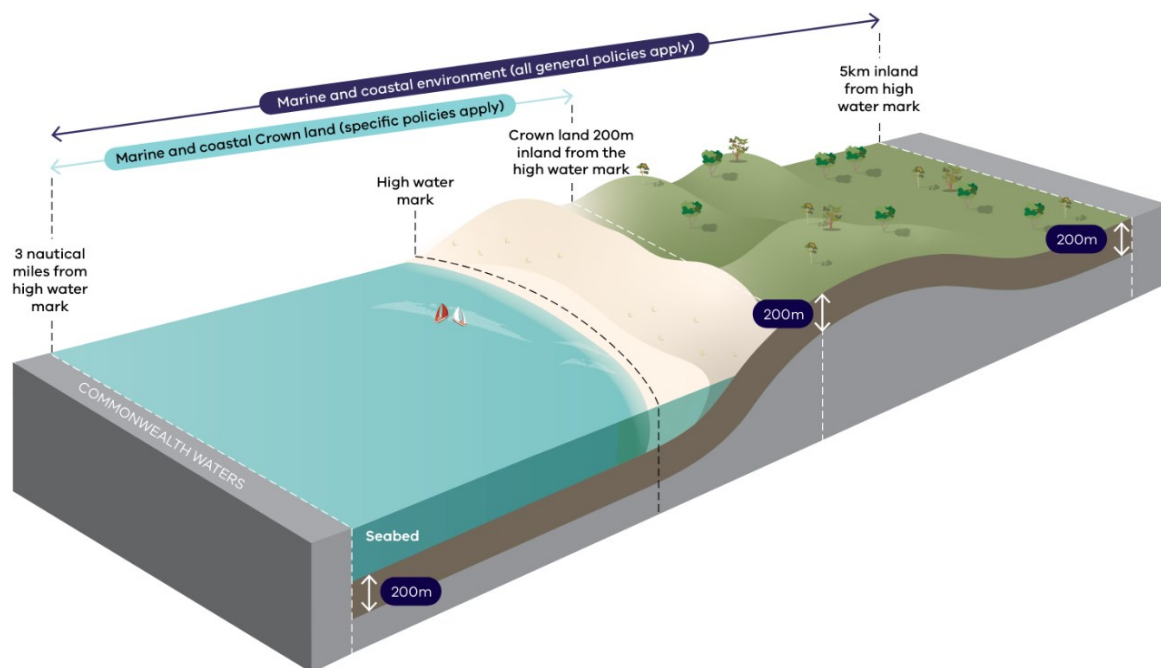


Figure 10. Areas where the Marine and Coastal Policy applies (DELWP, 2020a)




### Siting and design

Crown land reserves and foreshores in the marine and coastal environment are important publicly owned spaces. They have unique values and characteristics that benefit all Victorians. However, these land areas are limited and may be further reduced as sea levels rise and the coastline retreats. Growth in resident populations and visitor numbers also puts additional pressure on these limited coastal areas.

Structures, uses and projects in the marine and coastal environment contribute to our enjoyment of the coast. To promote sustainable use, these structures must be appropriately located (sited) and designed.

**All use and development on marine and coastal Crown land requires consent under the *Marine and Coastal Act 2018*.**

Siting and Design Guidelines for Structures on the Victorian Coast (DELWP, 2020b) aim to inspire creative and innovative approaches to development in the marine and coastal environment.



These guidelines consider natural and cultural values and respond to climate change and population growth challenges.

Table 3 details aspects that must be considered in locating (siting) and designing structures in coastal and marine areas.

Table 3. Considerations for siting and design of structures (in or of priority)

<b>1</b>	Is there a demonstrated need for the proposed structure (including all or any of its elements) to be on marine and coastal Crown land?
Do not proceed if the first principle cannot be met	
<b>2</b>	Does the proposal ensure the protection of environmental and cultural values? Does the siting of the proposed development identify and avoid locations of coastal vulnerability and hazard?
<b>3</b>	Is the proposal sympathetic to the local coastal character and sense of place? Does the proposed development provide positive public benefit, access and/or amenity?
<b>4</b>	Does the proposed development ensure more efficient use of the site and contribute positively to the environment for the future?





### Volunteers and stewardship

East Gippsland communities have an essential and active role in environmental stewardship and caring for the marine and coastal environment.

Council and other management agencies are supported by and support a range of environmental and volunteer groups to enhance care for these special areas.

Council recognise the significant work that volunteers contribute through:

- On-ground vegetation management, weed removal and environmental protection works through Landcare and other environmental groups
- Building knowledge of our marine and coastal environment through:
  - Research and citizen science monitoring programs
  - Dedicated investigations and assessments
- Advocating for environmental protection and communication of compliance with environmental protection controls

#### Effective stewardship must ensure groups:

- Are actively engaged and empowered
- Collaborate to deliver integrated and coordinated management
- Have the knowledge skills and capacity to manage current and future challenges
- Are supported by management agencies through funding, grants or other resources

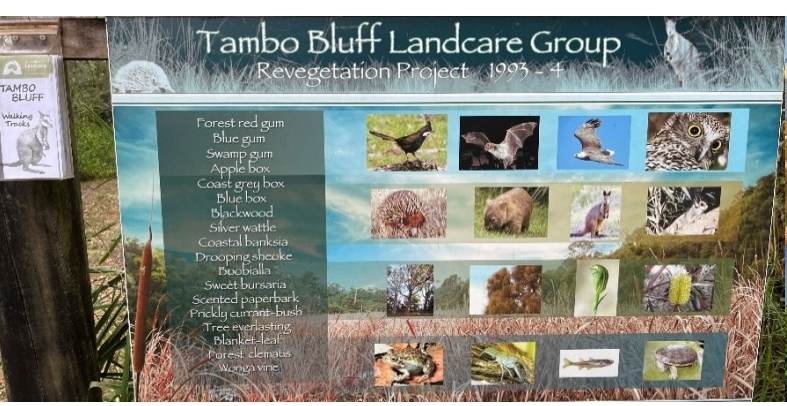
In addition to Council, management agencies and State Government, many people contribute to improving the health and values of the marine and coastal environment. These include:

- Aboriginal Victorians and Traditional Owners
- Volunteers
- Other committees of management
- Coastcare and Landcare groups
- Citizen science groups such as WaterWatch, EstuaryWatch and koala monitoring groups
- Bird protection groups
- Coastal advisory and other community groups
- Historic societies
- Conservation management networks
- Boating and fishing groups
- Industry groups
- Individuals

Figure 11 summarises community roles in coastal and marine management.

Community role	
Inform land managers on coastal and marine management issues	✔
Monitor coastal and marine changes and processes	✔
Plan strategically to manage the coastal and marine environment	⊕
Act to implement measures under the guidance of land managers	⊕

✔ Community have a role  
 ⊕ Community may contribute  
 ✘ Not a community role



### 3.3 Coastal hazard management

Coastal environments are dynamic and constantly changing. Natural coastal processes like winds, waves, tides and currents work to shift sediment and shape the coastline. When these processes negatively impact on the way in which we value, use and enjoy the coast, they become “coastal hazards”. These impacts could be environmental, social, cultural or economic impacts.

#### What are coastal hazards?

Coastal hazards are natural processes that impact on our use and enjoyment of the coast. They can include:

- **Coastal erosion** – where sediment is moved away from a local area of coast
- **Accretion** – where sediment builds up in a local area of coast
- **Inundation** – flooding of an area, which can be due to storms, sea level rise and/or rainfall
- **Estuary dynamics** – changes in estuarine processes and opening/closure

Some coastal hazards have shorter term impacts (e.g. a storm event). Others may be more permanent (e.g. sea level rise).

**Natural hazards** cover a diversity of processes/events. This includes coastal hazards, sea level rise, floods, storm events, bushfires, extreme heat, drought, invasive species water quality changes.

#### Statewide coastal hazard guidance

The Marine and Coastal Policy provides guidance on managing coastal hazards. This is supported by a strategic approach for coastal hazard risk management and adaptation called: *Victoria’s Resilient Coast – Adapting for 2100+* (DEECA, 2023b).

Statewide policies include:

- planning for not less than 0.8 m sea level rise by 2100
- taking a pathways approach to adaptation that assesses all options, in order (Table 4)
- respecting natural processes

Table 4. Coastal hazard adaptation options - to be considered in order (DELWP, 2020a)

Option in order	Definition As per State Policy
<b>Non-intervention</b>	Allow marine and coastal processes, and hazards they may pose, to occur.
<b>Avoid</b>	Locate new uses, development and redevelopment away from areas that are or will be negatively impacted by coastal hazards.
<b>Nature-based methods</b>	Enhance or restore natural features to mitigate coastal hazard risk.
<b>Accommodate</b>	Design structures to reduce the exposure to, or decrease the impact of, coastal hazard risk, thus ‘accommodating’ the risk.
<b>Retreat</b>	Decommission or relocate existing structures, assets or uses away from areas that are, or will be, negatively impacted by coastal hazards.
<b>Protect</b>	Enhance or newly construct physical barriers to mitigate impacts of coastal hazards. ‘Protect’ is an option of last resort. It is often expensive, its benefits tend to be very localised, and it frequently transfers problems to nearby areas.

#### Councils’ role in hazard management

Council must prioritise coastal hazard management activities strategically, using a risk-based approach. Under State Policy, the State government and Crown land managers (such as Council) do not have an obligation to manage marine and coastal Crown land or coastal processes for the primary purpose of protecting private property. Figure 12 summarises Council’s role in managing coastal hazard risk.

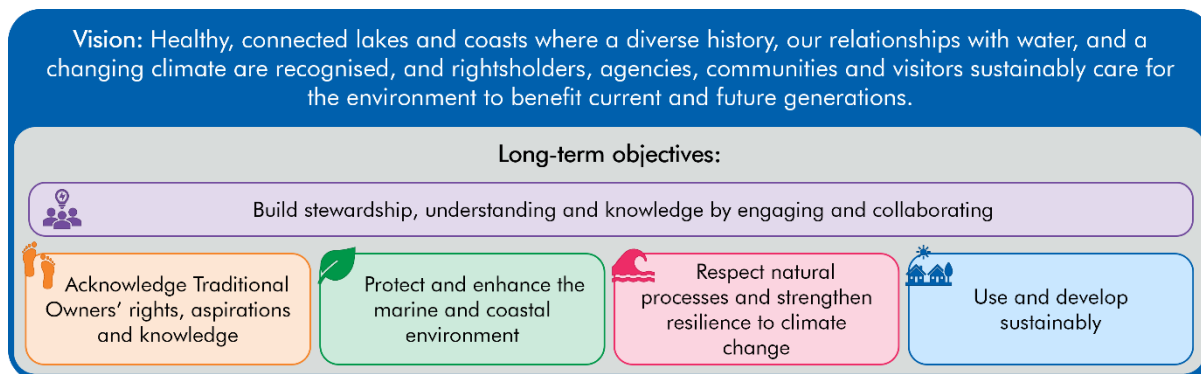
Figure 12. Council’s role in managing coastal hazard risk and adaptation planning

	Land or asset type		
	Council owned	Managed by other authorities	Private
<b>Councils’ role</b>			
Inform people on outcomes of their investigations	✓	✓	✓
Monitor coastal hazard risk	✓	⊙	✗
Plan strategically to manage coastal hazard risk and adapt	✓	⊙	⊙
Act by implementing measures to manage coastal hazard risk	✓	✗	✗

- ✓ Council takes lead role
- ⊙ Council may contribute or guide
- ✗ Council not responsible

### 3.4 Vision and objectives

The CMMP provides the strategic direction for Council’s marine and coastal management over the next 5-10 years. A vision and long-term objectives have been developed to guide longer term management (30+ years). These are informed by community and stakeholder perspectives, and Statewide Policy. The vision and long-term objectives are:



The intent of the vision includes:

<b>Healthy, connected lakes and coasts</b>	<ul style="list-style-type: none"> <li>Integrated coastal zone management which supports ecosystem connectivity across boundaries, including across the Gippsland Lakes and estuary systems.</li> <li>Fosters and supports connection to Country and inter-generational connection.</li> <li>Ecosystem-based management that considers catchment to coast connectivity and supports diverse ecosystems.</li> <li>Provides walking and cycling connectivity to promote a healthy lifestyle and coastal experiences.</li> </ul>
<b>A diverse history</b>	<ul style="list-style-type: none"> <li>Recognition of Aboriginal cultural heritage, past atrocities, ancestral connections across generations and long-held connections to Country.</li> <li>Appreciation of a varied industrial and commercial history that has supported the economic growth of many towns.</li> </ul>
<b>Relationships with water</b>	<ul style="list-style-type: none"> <li>Coastal settlements are and remain desirable places to live, work, visit and play</li> <li>Facilities and infrastructure are provided to sustainably support access to water, tourism and commercial opportunities, and a coastal lifestyle for all.</li> <li>Waterside coastal character and views are maintained through sustainable use and development.</li> </ul>
<b>A changing climate</b>	<ul style="list-style-type: none"> <li>Planning for and adapting to varied natural hazards including coastal, bushfire, drought, water quality hazards, with consideration to future climate changes and sea level rise.</li> <li>An adaptive and risk-based management approach helps communities plan for and build resilience to natural hazards, considering interactions between multiple hazard types.</li> </ul>
<b>Rightsholders, agencies, communities and visitors sustainably care for the environment</b>	<ul style="list-style-type: none"> <li>Care for coastal and marine environments is a shared responsibility for all who have a connection to, live, work, and visit the East Gippsland coast.</li> <li>Through self-determination Traditional Owners can fulfil caring for Country obligations with opportunities to connect on Country.</li> <li>Management agencies show coordination and shared responsibilities, in partnerships with Traditional Owners and communities.</li> </ul>
<b>Benefit current and future generations</b>	<ul style="list-style-type: none"> <li>The value and benefits of coastal and marine environments are recognised in their own right.</li> <li>Sustainable management, development, use and enjoyment to ensure values are retained for future generations.</li> <li>Traditional Owners can reap the benefits of involvement in marine and coastal management through self-determination.</li> <li>Promotes equitable use of the marine and coastal environment for broader public benefit.</li> </ul>

Figure 13 shows the intended outcomes of the Marine and Coastal Policy, under the key themes of the planning and decision pathway (Figure 7).



Figure 13. Marine and Coastal Policy intended outcomes (adapted from DELWP, 2020a).



### 3.5 Values, challenges and opportunities

Through our in-person discussions, workshops and online activities, a range of community and stakeholder perspectives have been gathered.

Emerging from these conversations and feedback are some key values, challenges and opportunities that exist across our coastal and marine environment. These might be specific to a certain locality, across multiple localities or at a Shire wide scale.

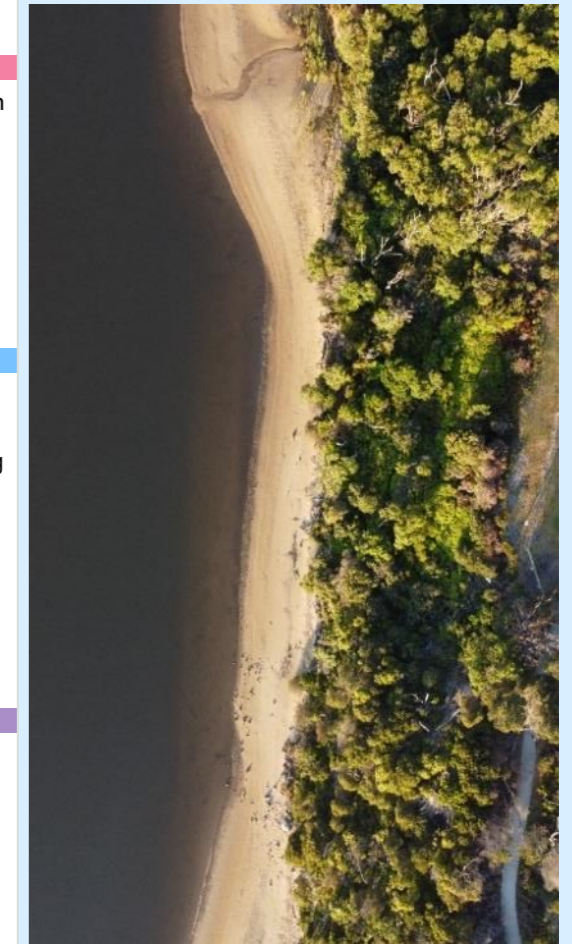
This section summarises these values, challenges and opportunities at a Shire wide level. Values, challenges and opportunities are framed under each of the long-term objectives of the plan, considering the intended outcomes of the Marine and Coastal Policy (2020a).

These values, challenges and opportunities inform the focus for future management. Management principles and actions have been developed to address these focal areas. Principles and actions aim to enhance values, manage challenges and help realise opportunities.



Table 5. Values, challenges and opportunities for East Gippsland Shire coastal and marine management, with focus areas for future management.

		Shire wide			
		Values	Challenges	Opportunities	Focus for management
	Traditional Owners' rights, aspirations and knowledge	<ul style="list-style-type: none"> <li>Responsibility to look after Country, heal damage of the past and protect for future generations</li> <li>Significant species, including the Borun (Pelican) &amp; Tuk (Musk Duck) - creators of Gunaikurnai</li> <li>Significant Aboriginal Heritage places and sites (recorded and unrecorded)</li> <li>Existing groups implementing on-ground works and strengthening connection to Country.</li> <li>Attractions and trails including Bataluk Cultural Trail</li> </ul>	<ul style="list-style-type: none"> <li>Extremely high likelihood of unrecorded heritage sites</li> <li>Damage to important sites and values through other recreational uses, occupation and development</li> <li>Threats to natural values including development, erosion, pests and pollution</li> <li>Unsustainable management and exploitation of land, rivers and oceans.</li> </ul>	<ul style="list-style-type: none"> <li>Support establishment of a Sea Country Indigenous Protection Area</li> <li>Through self-determination, strengthen Traditional Owner opportunities in coastal and marine management and foster connection with Country</li> <li>Create a sense of place and support cultural, spiritual and physical needs of Aboriginal people</li> <li>Identify unrecorded Aboriginal Heritage sites and continue implementing planning overlays and controls to protect sites</li> </ul>	<ul style="list-style-type: none"> <li>Better definition of activity, recreation and environmental areas to strategically plan and communicate the uses and value in different areas of the coast and minimise impacts on coastal environments.</li> <li>Improve cross-boundary management through communicating management roles, collaborating with other agencies and strategic planning to contribute to broader Shire wide outcomes.</li> </ul>
	The marine and coastal environment	<ul style="list-style-type: none"> <li>Healthy and unique ecosystems</li> <li>Health of the Gippsland Lakes including good water quality and ecologically functioning systems</li> <li>Ramsar listed Lakes and important wetlands</li> <li>Unique and diverse species, including State- or Commonwealth-listed species such as the Burrunan Dolphin and White-bellied Sea Eagle</li> <li>Health of river, estuarine and coastal systems</li> <li>Water quality and freshwater catchment inputs</li> <li>Sites of geomorphological significance</li> <li>Peaceful, wilderness setting and landscape character</li> </ul>	<ul style="list-style-type: none"> <li>Catchments water quality impacts including:               <ul style="list-style-type: none"> <li>Upstream pollutants from agricultural activities</li> <li>Sediment inputs (development and agriculture)</li> </ul> </li> <li>Community concerns over emergency wastewater discharge and boat pump-out arrangements</li> <li>Outdated environmental overlays and strategic planning not including latest mapping</li> <li>Balancing bushfire fuel management requirements with loss of native vegetation – e.g. vegetation removal controls and species selection</li> <li>Water resource management (catchment inflows and mine closure impacts)</li> </ul>	<ul style="list-style-type: none"> <li>Improve stormwater management and best-practice water sensitive urban design</li> <li>Update environmental planning overlays</li> <li>Coordinate with and leverage off catchment-wide work of other authorities</li> <li>Improve Council management of natural values including sensitive ecosystem and threatened species</li> <li>Communication and management of impacts of recreational activities, dogs and human impacts on environmental values including nesting birds</li> </ul>	<ul style="list-style-type: none"> <li>Utilise best-available information to improve strategic planning and decision making, including recognising unique natural values, sustainable use (including tourism) and current and emerging hazard risks.</li> <li>Enhance ecosystem-based management and consideration of impacts on marine and coastal environments in Council-wide activities.</li> </ul>
	Natural processes and climate change	<ul style="list-style-type: none"> <li>Dynamic coastal environments that change each day</li> <li>Scientific understanding of natural processes and drivers of hazard risk</li> <li>Planning, preparedness and resilience to natural hazards including coastal and bushfire</li> <li>Natural buffers and resilience to hazards</li> <li>Contribution of blue carbon ecosystems (saltmarsh, mangroves, seagrass) in climate regulation</li> </ul>	<ul style="list-style-type: none"> <li>Sea level rise and coastal hazard impacts               <ul style="list-style-type: none"> <li>Foreshore erosion in some locations</li> <li>Temporary flooding during storm events</li> <li>Increasing permanent inundation areas</li> </ul> </li> <li>Increasing salinity across the Gippsland Lakes</li> <li>Flooding impacts from closure of estuaries</li> <li>Outdated coastal hazard overlays and planning</li> <li>Multiple natural hazards - coastal, riverine, bushfire</li> </ul>	<ul style="list-style-type: none"> <li>Understand regional coastal hazard risk and adaptation opportunities</li> <li>Raise awareness of drivers of coastal change and potential coastal hazard impacts</li> <li>Update hazard planning, based on best-available information and science</li> </ul>	
	Sustainable use and development	<ul style="list-style-type: none"> <li>Boating facilities - Boat ramps, wharfs, marinas, jetties, and maintenance facilities</li> <li>Access to water for multiple uses - swimming, kayaking, paddleboarding, sailing, boating</li> <li>Foreshore facilities - Playgrounds, camping facilities</li> <li>Connectivity - shared pathways and boardwalks</li> <li>Tourism, commercial ventures - boat tours, fishing charters, foreshore events etc.</li> <li>Green wedges and township separation</li> <li>Public open space</li> </ul>	<ul style="list-style-type: none"> <li>Unsustainable visitation and use that does not respect sensitive natural environment</li> <li>Pressures of human recreation on sensitive environments</li> <li>'Missing links' and poor connectivity of walking tracks</li> <li>All abilities access to and along the foreshore and water</li> <li>Facilities to meet changing tourism and seasonal demands</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable visitation, tourism, development and use that is sensitive to ecological values</li> <li>Better coordinate connectivity of walking trails, including consideration of all abilities access</li> <li>Use usage data to inform facility design</li> <li>Better define reserve purposes and management approach (nodes)</li> <li>Equitable and sustainable tourism and commercial opportunities that recognise the value of marine and coastal Crown land</li> </ul>	
	Stewardship, knowledge, engagement and collaboration	<ul style="list-style-type: none"> <li>Community involvement in on-ground natural resource management</li> <li>Citizen science opportunities</li> <li>Passionate community members with desire to improve environmental outcomes</li> </ul>	<ul style="list-style-type: none"> <li>Confusing and unclear land and asset management arrangements</li> <li>Private frontage encroachment and unclear property boundaries</li> <li>Confusing and outdated signage</li> <li>Some distrust in management agencies</li> </ul>	<ul style="list-style-type: none"> <li>Define agency roles, improve coordination and communicate tenure boundaries</li> <li>Consolidate and update signage</li> <li>Promote monitoring programs</li> <li>Foster stewardship and citizen science opportunities</li> </ul>	





### 3.6 CMMP management approach

#### CMMP framework

An overview (program logic) of the CMMP structure (Figure 14) shows the relationships between the vision, long-term objectives, management principles and actions. Sections below provide more detail on the management principles and actions.

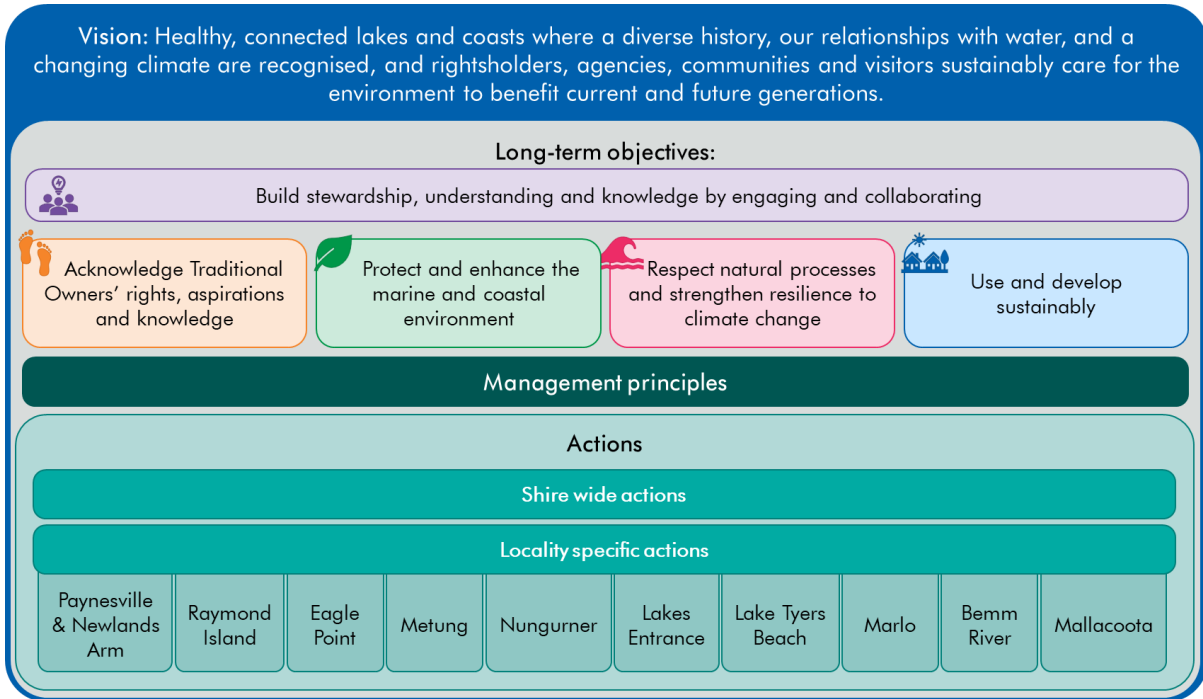


Figure 14. East Gippsland Shire Council CMMP program logic.

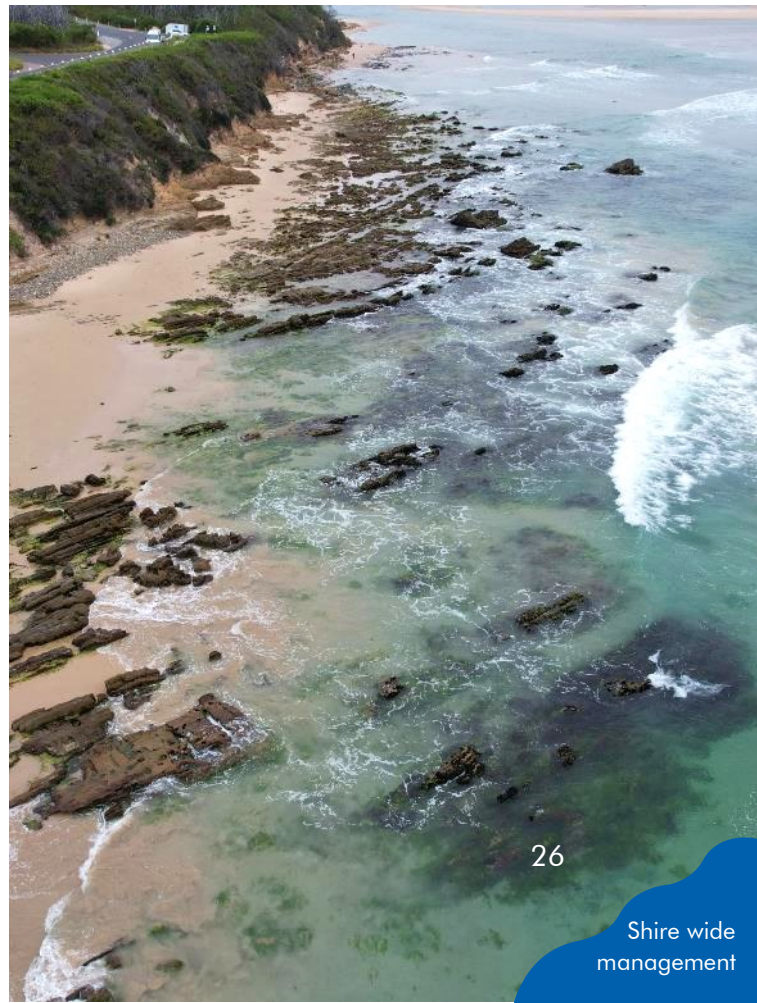
#### Management principles

Principles are used to guide the development of suitable actions and ensure that any initiatives or proposed works are in keeping with our broader coastal and marine management vision, long-term objectives and State policies.

These principles can help determine the appropriateness of future works or management actions. Any potential misalignment with these principles can be identified and actions reconsidered or modified accordingly.

These principles are to act as overarching guidance that should be considered for any works, initiatives, decision making or planning for the management of coastal and marine areas.

Figure 15 sets out these principles.





## Management principles

To guide holistic, strategic and evidence-based decision making in the marine and coastal environment

### Build stewardship, understanding and knowledge by engaging and collaborating

- ❑ The latest technical assessments and knowledge is incorporated into evidence-based planning and management
- ❑ Roles and responsibilities for relevant stakeholders are defined, with accountability and empowerment for action
- ❑ Coastal and marine management is inclusive, transparent and holistic, with increased communication, stewardship and collaboration between Council, rightsholders, stakeholders and communities

### Acknowledge Traditional Owners' rights, aspirations and knowledge

- ❑ Traditional Owners are supported to connect with Land and Sea Country through self-determination
- ❑ Traditional Owner aspirations are embedded into collaborative decision making, planning and management
- ❑ Traditional Owner partnerships are sought and coordinated to respect the time, knowledge and expertise of Traditional Owners
- ❑ Two-way knowledge sharing and capacity building is used to develop a shared understanding and responsibility to care for Country
- ❑ The coastal experience is enriched for both Aboriginal and non-Aboriginal people, with enhanced access, storytelling, and sense of shared responsibility.

### Protect and enhance the marine and coastal environment

- ❑ Ecosystems and habitats are protected and enhanced
- ❑ High value reserves and vegetation are protected and managed appropriately
- ❑ Holistic management considers catchment to coast connectivity with consideration to water quality, quantity and catchment-wide interactions with the coastal and marine environment
- ❑ Enjoyment of the natural environment occurs in a sustainable manner with respect to nodes and protected areas
- ❑ Natural buffers and biodiversity links are protected and promoted allowing landscape connectivity and respect for natural processes

### Respect natural processes and strengthen resilience to climate change

- ❑ Consideration of current and future coastal hazards is embedded in all decision-making, planning and design
- ❑ The latest coastal hazard understanding is used to inform appropriate management
- ❑ Long-term adaptation pathways are considered with dedicated planning for priority locations
- ❑ Resilience is built through upgrades, modifications and/or relocation that appropriately adapts to increasing coastal hazards and changing conditions
- ❑ Adaptation option assessment embeds a risk-based approach and State policy order of consideration: non-intervention, avoid, nature-based solutions, accommodate, retreat, protect

### Use and develop sustainably

- ❑ Growth, development and use is environmentally, socially and economically sustainable to ensure coastal settlements remain desirable places to live, work and visit
- ❑ Access to marine and coastal areas is concentrated to activity and recreation nodes to protect the natural environment and cultural values
- ❑ The recreational and tourism experience is enhanced through strategically located and designed infrastructure and attractions, in dedicated nodes
- ❑ Ecologically sustainable commercial, industrial and recreational use of coastal and marine areas is supported
- ❑ Diversified business and commercial opportunities are strategically promoted to maximise public benefit

Figure 15. East Gippsland Shire Council CMMP management principles



## Actions

Our actions describe the projects and tools we will use to achieve our vision and long-term objectives over the next 5 years. They also reflect our management principles.

CMMP actions are defined at two scales:

- **Shire wide actions** (Table 6) – applicable across East Gippsland Shire and delivered consistently and strategically across the Shire.
- **Locality-based actions** (within Sections 4 to 13) – specific to ten localities within East Gippsland, where Council have a coastal and marine land management role.

These actions have been guided by the findings of community and stakeholder consultation, and the management experiences of Council and other management agencies. They align with the long-term objectives defined for the CMMP and Statewide Marine and Coastal Policy. They are presented under the five long-term objective themes.

Action development and prioritisation has considered:

- Alignment with East Gippsland Shire Council CMMP vision, objectives and principles
- Alignment with Victorian marine and coastal legislation and policy
- “Multi-benefit” opportunities and those achieving greatest public benefit
- The breadth of interest groups and stakeholders
- Costs at various stages of project/action/structure lifecycle
- Ease of implementation – Approvals, stakeholder/public sentiment

These CMMP actions will guide investment and management priorities over the next 5 – 10 years and are to be reviewed and revised after 5 years.

Implementation will be dependent on funding and resource availability.





Coastal and marine management is a shared responsibility. For some actions, Council may play a lead role in delivery. In others, Council participates in work of other rightsholder groups or authorities. For each action, the following is defined:

#### Timeframe

- **Ongoing** - part of Council’s ongoing work in a ‘business as usual’ capacity
- **0-3 years** – should commence within 3 years or is already underway and is a high priority to implement as soon as possible
- **3-5 years** – should be initiated within 3-5 years as a medium priority during implementation of the plan
- **5+ years** – should be commenced in ~5 years as a lower priority, however preliminary work and consultation may occur sooner if opportunities arise

#### Council’s role

- **Lead** – Council will drive and deliver the action with the support of partners
- **Participate** – Council will contribute to work of other partners

#### Partners

Groups, agencies and stakeholders involved in delivery or providing advice for implementation.

#### Implementation plan

A separate implementation plan outlines:

- Specific implementation details for actions, including deliverables/measurables and next steps to progress each action
- Council’s role and level of involvement
- Key partners involved in action delivery
- Action prioritisation and recommended timing of action commencement
- Indicative costing ranges, funding mechanisms and approvals requirements
- Relevant links to Council, rightsholder or other agency plans, projects or programs

This Implementation Plan provides an internal tool for Council to manage, monitor, review and track action delivery.

#### Shire wide actions

A suite of Shire wide actions has been developed to:

- achieve the long-term objectives of the CMMP
- reflect management principles across the Shire
- guide consistent management of Council-managed marine and coastal Crown land

These actions are presented below, under the long-term objective themes.

Shire wide actions (Table 6) are applicable across all of East Gippsland Shire’s coastal and marine areas. These actions focus on progressing Council’s approach to coastal and marine management. Many look to improve Council systems, procedures, communication and relationships, local laws, policies, and accountabilities, to provide the foundations for robust management at a locality specific scale.

Some of the locality specific actions rely upon the Shire wide processes to help guide and/or implement them.

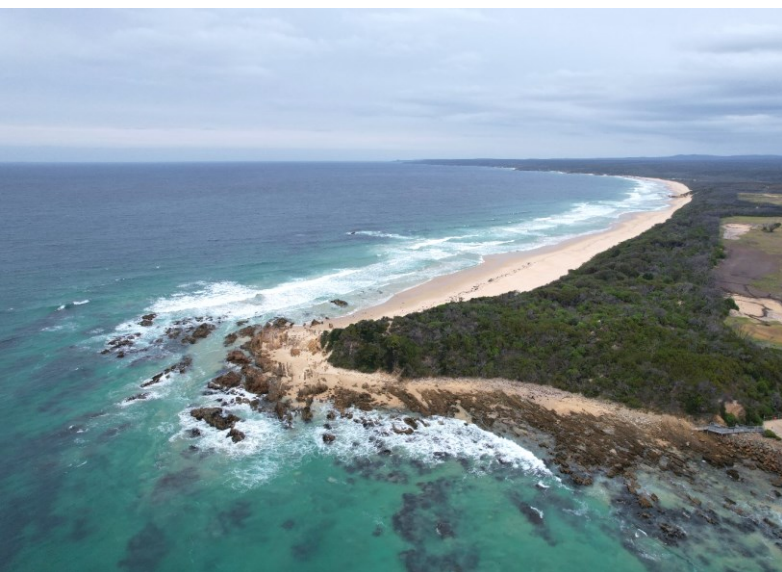




Table 6. Shire wide CMMP actions

Long-term objective	No.	Action	Timeframe	Council role	Partners
Objective 1: Acknowledge Traditional Owners' rights, aspirations and knowledge	EG1.1	<p>Guided by GLaWAC and Far East Traditional Owner groups, explore, examine and implement ways to identify, manage and protect cultural values, heritage sites, significant species and stories across Land and Sea Country. This includes:</p> <ul style="list-style-type: none"> <li>Investigating and recording cultural heritage, identifying appropriate activities in culturally sensitive areas that respect and protect values in accordance with the <i>Aboriginal Heritage Act 2006</i>.</li> <li>Implementing Cultural Heritage Management Plans across coastal areas (CHMPs) and exploring opportunities for voluntary CHMPs</li> <li>Ensuring all staff and contractors understand the procedures for reporting Aboriginal heritage and incorporate this into all projects and contracts.</li> </ul>	Ongoing	Participate	GLaWAC, Far East Traditional Owner groups, Heritage Victoria
	EG1.2	<p>Guided by the GLaWAC and Far East Traditional Owner groups, support recognition, promote custodianship and celebrate important cultural values and experiences across Land and Sea Country, through meaningful and considered communication and engagement activities. This could include:</p> <ul style="list-style-type: none"> <li>Cultural education and training days</li> <li>Community events along existing walking trails and sites</li> <li>Sharing cultural practices in the natural environment and in its management.</li> </ul>	Ongoing	Participate	GLaWAC, Far East Traditional Owner groups, Heritage Victoria
	EG1.3	<p>Collaborate with relevant stakeholders (including GLaWAC, Far East Traditional Owner Groups, community groups and heritage organisations) to design and install interpretive signage and artwork/sculptures that:</p> <ul style="list-style-type: none"> <li>increase awareness and understanding of Aboriginal history and experience,</li> <li>acknowledge and celebrate natural, cultural and heritage values of coastal and marine areas.</li> <li>incorporate cultural values along the foreshore to create a sense of place to support cultural, and spiritual needs of Aboriginal people.</li> <li>Approach to be developed in partnership with Traditional Owners and embracing self-determination.</li> </ul>	5+ years	Lead (with direction from Traditional Owners)	GLaWAC, Far East Traditional Owner Groups
	EG1.4	<p>Collaborate with relevant stakeholders (including GLaWAC, Far East Traditional Owner Groups) to support establishment of the Nanjet to Mallacoota Sea Country Indigenous Protection Area.</p>	0-3 years, then ongoing	Participate	GLaWAC, Far East Traditional Owner Groups, DEECA, and Parks Victoria
	EG1.5	<p>Continue to advance partnerships and collaborate with the GLaWAC and Far East Traditional Owner Groups. Includes seeking opportunities within Council operations for Traditional Owner involvement in coastal and marine management roles and initiatives to work towards co-management, on-Country work and achieving outcomes of GLaWAC's Whole of Country Plan.</p>	Ongoing	Participate	GLaWAC, Far East Traditional Owner communities



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 2: Protect and enhance the marine and coastal environment</b>	EG2.1	<p>Advocate, facilitate, educate, and promote behaviour change to protect the natural environment through activities to:</p> <ul style="list-style-type: none"> <li>• Improve community-led environmental weed identification and removal</li> <li>• Increase and celebrate community involvement in site management, through facilitating volunteer community / Friends of groups and public celebration/communication of this work</li> <li>• Protect significant and established vegetation, consistent with planning and overlay controls</li> <li>• Share Traditional Owner knowledge to guide community and Shire on planting and vegetation management, as appropriate</li> </ul>	Ongoing	Participate	EGCMA, GLaWAC, Parks Victoria, community and other environmental groups
	EG2.2	<p>Provide vegetation and weed management services for coastal reserves through activities to:</p> <ul style="list-style-type: none"> <li>• Progressively prioritise, develop and implement Vegetation Management Plans, including weed control plans for high biodiversity value coastal reserves - as identified in Ethos NRM (2022)</li> <li>• Enforce vegetation management controls (clearing and trimming of vegetation on council-managed reserves), incorporated into an Encroachment Policy (Action EG5.8).</li> <li>• Seek funding to develop and implement revegetation strategies in priority reserves</li> <li>• Collaborate with Landcare and environmental community groups to enhance vegetation management</li> </ul>	0-3 years, then ongoing	Lead	EGCMA, DEECA, GLaWAC, Parks Victoria, community and other environmental groups (e.g. Friends of groups)
	EG2.3	<p>Continue a prioritised management and intervention approach towards onshore seaweed, shells, grass, organic and other coastal materials on beaches and in foreshore areas. Increase awareness of biodiversity values, as a habitat, nesting and food source, and a natural erosion mitigation measure. Prioritise beach cleaning of coastal materials in activity and recreation nodes, as required. Continue to support litter management and cleaning of non-coastal debris.</p>	Ongoing	Lead	DEECA, Parks Victoria
	EG2.4	<p>Continue to support DEECA, EGCMA, Gippsland Lakes Coordinating Committee, and other management agencies in coordinated management of the Gippsland Lakes Ramsar Site including continued:</p> <ul style="list-style-type: none"> <li>• Support for and promotion of DEECA, EGCMA and citizen science programs to monitor water quality to inform management of algal blooms, salinity, and ecological character of the Ramsar site</li> <li>• Administration of the East Gippsland Planning Scheme to ensure sustainable use and development within the catchment and across Ramsar Site boundaries</li> <li>• Support for implementation of actions in the Gippsland Lakes Ramsar Site Management Plan 2024</li> </ul>	Ongoing	Participate and lead	DEECA, EGCMA, Gippsland Lakes Coordinating Committee, other stakeholders (activity dependent)



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 2: Protect and enhance the marine and coastal environment (cont.)</b>	EG2.5	Partner with EGCMA, Parks Victoria and Traditional Owner groups to celebrate and promote unique and diverse environmental values of East Gippsland, including State- or Commonwealth-listed species, sites of geomorphological significance, and Ramsar-listed lakes and wetlands. Achieve this through meaningful and considered communication and engagement activities.	0-3 years, then ongoing	Lead	EGCMA, Parks Victoria, friends groups and other environmental groups
	EG2.6	In alignment with Action EG2.2, collaborate with DEECA and CFA to improve vegetation-based fire management across Council-managed reserves including: <ul style="list-style-type: none"> <li>Identifying and mapping fire sensitive vegetation types and significant values in recently burnt areas</li> <li>Strategically managing the protection of significant vegetation with planned burns and fuel management activities</li> <li>Meeting bushfire vegetation management responsibilities, particularly at township edges</li> <li>Improved communication of vegetation management activities undertaken to manage bushfire risk</li> </ul>	Ongoing	Participate	DEECA, CFA
<b>Objective 3: Respect natural processes and strengthen resilience to climate change</b>	EG3.1	Embed existing and emerging coastal and other natural hazard understanding in all Council operations. Includes: <ul style="list-style-type: none"> <li>future strategic projects, planning scheme overlays and zoning, and other statutory and strategic planning arrangements (Action EG4.2)</li> <li>development and planning proposals, upgrades, masterplanning or foreshore facility improvements</li> <li>communication and engagement as part of Action EG5.1 and Shire wide coastal adaptation approach (Action EG3.2)</li> <li>proactive management of current and emerging coastal and natural hazard risks in alignment with State policy</li> <li>investigation of opportunities for dedicated adaptation planning and funding (Action EG3.2).</li> </ul>	0-3 years, then ongoing	Lead	DEECA and other asset and land managers
	EG3.2	In line with Victoria's approach to coastal adaptation, <i>Victoria's Resilient Coast – Adapting for 2100+</i> : <ul style="list-style-type: none"> <li>review best-available coastal hazard assessment information across coastal communities and its suitability for adaptation planning</li> <li>review existing data on values, assets and infrastructure to confirm readiness to commence adaptation planning</li> <li>identify priority locations for dedicated coastal hazard adaptation planning and funding applications</li> <li>undertake a strategic approach to adaptation planning and decision making at regional and locality scale (for high-priority localities).</li> <li>incorporate latest / best-available coastal hazard understanding and State policy into Council operations, asset management and land-use planning (linked to Action EG4.2).</li> </ul> <p>May involve inclusion of coastal hazard adaptation in broader climate-related risk assessments.</p>	0-3 years, then ongoing *funding dependent	Lead	DEECA and other asset and land managers



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 3: Respect natural processes and strengthen resilience to climate change (cont.)</b>	EG3.3	In collaboration with EGCMA, continue to support current estuary management operations and communicate management approach, including: <ul style="list-style-type: none"> <li>• messaging on respect of natural processes and protection of ecological values</li> <li>• managing flooding impacts and promoting accommodation and adaptation of the built and natural environment to prolonged estuary closure</li> <li>• support for investigations into future coastal adaptation and reduced artificial estuary openings</li> </ul>	Ongoing	Participate	EGCMA, Parks Victoria
	EG3.4	Support DEECA, CFA and other partners to implement fire management procedures, including in coastal areas. This may include: <ul style="list-style-type: none"> <li>• supporting and communicating the Gippsland Bushfire Management Strategy (2020) and incorporating into Council operations and fire management plans</li> <li>• considering methods to strategically manage fuel reduction requirements with protecting natural coastal values and significant vegetation, including vegetation and bushfire overlay considerations</li> <li>• communication and engagement of fire preparedness, management practices and risk management</li> </ul>	3-5 years	Participate	Country Fire Authority, DEECA, Parks Victoria, GLaWAC and Universities/research groups (incl. Melbourne University fire group)
	EG3.5	Collaborate with DEECA to share findings of recent coastal processes studies and condition assessments for existing hazard protection and coastal structures. Embed knowledge to inform options for adapting to and strengthening resilience to climate change. Assessment should consider: <ul style="list-style-type: none"> <li>• structure design life, performance, ongoing maintenance and fit-for-purpose considerations</li> <li>• potential impacts of any infrastructure changes on surrounding areas</li> <li>• feasibility of alternate adaptation actions (including nature-based solutions), in line with State policy.</li> </ul>	Ongoing	Participate	DEECA
	EG3.6	Collaborate with land managers, EGCMA, research institutes and not-for-profit organisations to explore opportunities for mitigating habitat loss due to changing climate. May include identifying opportunities for: <ul style="list-style-type: none"> <li>• maintaining and increasing the extent of natural buffers to build resilience to sea level rise</li> <li>• exploring land planning practices to allow ecosystem retreat or migration</li> <li>• restoring or creating habitats, including 'blue carbon' habitats (saltmarsh, mangroves, seagrass)</li> <li>• managing water quality impacts and changing ecosystems due to increased salinity</li> </ul>	Ongoing	Participate	EGCMA, Parks Victoria, DEECA, universities/ research groups, The Blue Carbon Lab



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 4: Use and develop sustainably</b>	EG4.1	<p>Implement and communicate defined activity, recreation, and industrial nodes across coastal communities to:</p> <ul style="list-style-type: none"> <li>strategically plan compatible uses and concentrate activity to defined nodes in order to best-protect sensitive ecosystems</li> <li>guide masterplanning, facility upgrades and suitable siting and design of infrastructure</li> <li>ensure efficient foreshore development through co-location, partnership use, and consolidation of community assets, where appropriate</li> <li>communicate and encourage desired uses (includes active and passive communication of node purpose)</li> <li>coordinate on-land facilities, marine uses and connectivity to/from the foreshore, along the coast, and between land and water</li> <li>support sustainable tourism experiences, commercial and economic activities</li> </ul>	0-3 years, then ongoing	Lead	All other land managers
	EG4.2	Incorporate updated knowledge and information into Council statutory and strategic planning, projects and any upgrades. Use best-available information and science to reflect updated understanding. Includes cultural heritage protection in Action EG1.1, vegetation protection in Action EG2.2, coastal hazard understanding in Action 3.1 and adaptation planning in Action EG3.2.	3-5 years, dependant on other Shire-wide actions	Lead	
	EG4.3	Review leasing, licensing and arrangements for use of coastal Crown land to promote only activities and infrastructure that have a functional need to be near or in the water, cannot be located elsewhere and provide significant public benefit. Includes review of sites for temporary commercial licenses, development of guidelines for assessment of licensing requests and managing increased demand for commercial activities in an equitable way. Ensure consistency across Shire and alignment with the <i>Marine and Coastal Act 2018</i> and policy (DELWP, 2020a).	0-3 years	Lead	DEECA, leasees and licensees
	EG4.4	Work with DEECA and Gippsland Ports to advocate for improved tourism operator licensing, permits and enforcement. Includes strengthening wastewater pump out arrangements and compliance, improving water quality and compliance with EPA regulations.	0-3 years	Participate	DEECA, Gippsland Ports
	EG4.5	Continue to collaborate with and contribute to East Gippsland Integrated Water Management Forum, including supporting EGCSMA, East Gippsland Water, Gippsland Ports and the community to implement sustainable water management practices and catchment and drainage water quality improvements across East Gippsland. Reflect CMMP objectives into Council's integrated waterway management approach, IWM activities, statutory and strategic planning and other Council water management activities.	3-5 years, then ongoing	Participate	East Gippsland IWM Forum (multiple stakeholders)
	EG4.6	Collaborate with DEECA, as required, to implement a monitoring system for carrying capacity of high-use marine and coastal areas (e.g. Gippsland Lakes) as part of Activity 4.4 of the Marine and Coastal Strategy.	0-3 years, then ongoing	Participate	As outlined in Marine and Coastal Strategy



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 4: Use and develop sustainably (cont.)</b>	EG4.7	Continue to monitor and maintain Council-managed foreshore infrastructure and facilities with consideration to CMMP objectives, State policy, siting and design guidelines and adaptation planning. Incorporate the CMMP and its objectives into the Shire's asset management procedures (including asset renewal, future asset management plans and strategies), ensuring consideration of current and long-term changing conditions and Victorian Government policy.	Ongoing	Lead	DEECA, all other partners
	EG4.8	Embed Marine and Coastal Policy, CMMP objectives, principles and actions into Shire wide stormwater management planning. Consider best-practice stormwater management, intersection with adaptation planning, and catchment to coast connectivity.	0-3 years, then ongoing	Lead	DEECA, EGCMA, EGW
<b>Objective 5: Take a stewardship approach, build understanding and knowledge, engage and collaborate</b>	EG5.1	In collaboration with EGCMA, DEECA, Parks Victoria and educational institutes, investigate opportunities to improve public awareness of coastal processes (changing environments and natural buffers) and current and emerging coastal hazards through community education, events, awareness campaigns, signage and citizen science monitoring programs (linked to Action EG5.2).	Ongoing	Participate	EGCMA, Parks Victoria, Universities/ research, DEECA, community groups and individuals
	EG5.2	In collaboration with EGCMA and DEECA, promote marine and coastal citizen science monitoring programs, including monitoring and reporting of coastal processes (e.g. Fluker posts, CoastSnap, VCMP), environmental monitoring opportunities (e.g. EstuaryWatch, water quality, flora and fauna monitoring, marine pest monitoring), and coastal issues identification (e.g. Snap Send Solve).	Ongoing	Participate	EGCMA, DEECA, Universities/research (incl. Deakin University Marine Mapping Group, Melbourne Uni), community groups and individuals
	EG5.3	Undertake foreshore signage audit across the Shire, examining messaging, physical condition, design and placement, and investigate improvement opportunities. Consolidate or update signage. May include communication of Traditional Owner values and stories, environmental values, heritage, coastal processes and communication of intended or restricted uses (i.e. activity / recreation / industrial nodes, sustainable use) and wayfinding (Aligns with Actions EG1.3 and EG4.1).	3-5 years	Lead	
	EG5.4	Working with Boating Vic and Gippsland Ports, prepare communication materials and website information to detail Council-managed boating facilities. Includes communicating diversity of boating facilities, desired use and purpose of facility (e.g. craft types, facilities and amenities) and links to further information. Aligns with communication of activity, recreation and industrial nodes through Action EG4.1.	0-3 years, then ongoing	Participate	Boating Vic, Gippsland Ports
	EG5.5	Strengthen partnerships and advocacy with other stakeholders to <ul style="list-style-type: none"> <li>• improve cross-boundary management</li> <li>• raise awareness of management initiatives</li> <li>• promote and support catchment-wide and "catchment to coast" activities to care for East Gippsland coastal and marine areas.</li> </ul> Includes identifying opportunities for collaboration, funding streams, management efficiencies between stakeholders, agencies and community.	Ongoing	Participate	All other land managers, including, DEECA, Parks Victoria, East Gippsland Water, EGCMA.



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 5: Take a stewardship approach, build understanding and knowledge, engage and collaborate (cont.)</b>	EG5.6	Investigate initiatives across the Shire to engage private landowners with environmental management and restoration through targeted education materials and communications.	5+ years	Lead	EGCMA, Parks Victoria, DEECA, CFA, environmental groups
	EG5.7	Liaising with DEECA and in line with the Marine and Coastal Policy (DELWP, 2020a), identify current and future funding mechanisms for coastal and marine management, including exploration of partnerships, grant fundings (e.g. CMMP implementation and VRC grants) and alternative opportunities for investment. Includes coordination of CMMP activities with other Council and managing agency activities.	0-3 years, then ongoing	Lead	DEECA
	EG5.8	Work with DEECA, Parks Victoria and other land managers to develop and implement an Encroachment Policy to address cases of native vegetation removal and encroachment into Crown Land foreshore and bushland reserves. Aligns with Action EG2.2. Prioritise encroachment issues on Council's managed land.	0.3 years	Lead	DEECA, Parks Victoria, other land managers



### 3.7 Locality summaries

The Sections 4 to 13 describe the ten communities where Council have a coastal and marine land management role. This includes an overview of the coastal communities' environment and uses; mapping of key values and features; CMMP actions; and activity, recreation and industrial node definition (described further below).

The ten localities are:

- Paynesville and Newlands Arm
- Raymond Island
- Eagle Point
- Metung
- Nungurner
- Lakes Entrance
- Lake Tyers Beach
- Marlo
- Bemm River
- Mallacoota

Each locality section provides a series of maps detailing key features under a range of themes. These map themes are summarised in Table 7. Data source details for these maps are provided in Attachment C.

Various core values, uses and infrastructure have been identified across these ten localities.

These core values help to:

- Characterise what makes each locality special
- Recognise the key ways in which people use and enjoy the coast,
- Identify key facilities and infrastructure that support these uses.

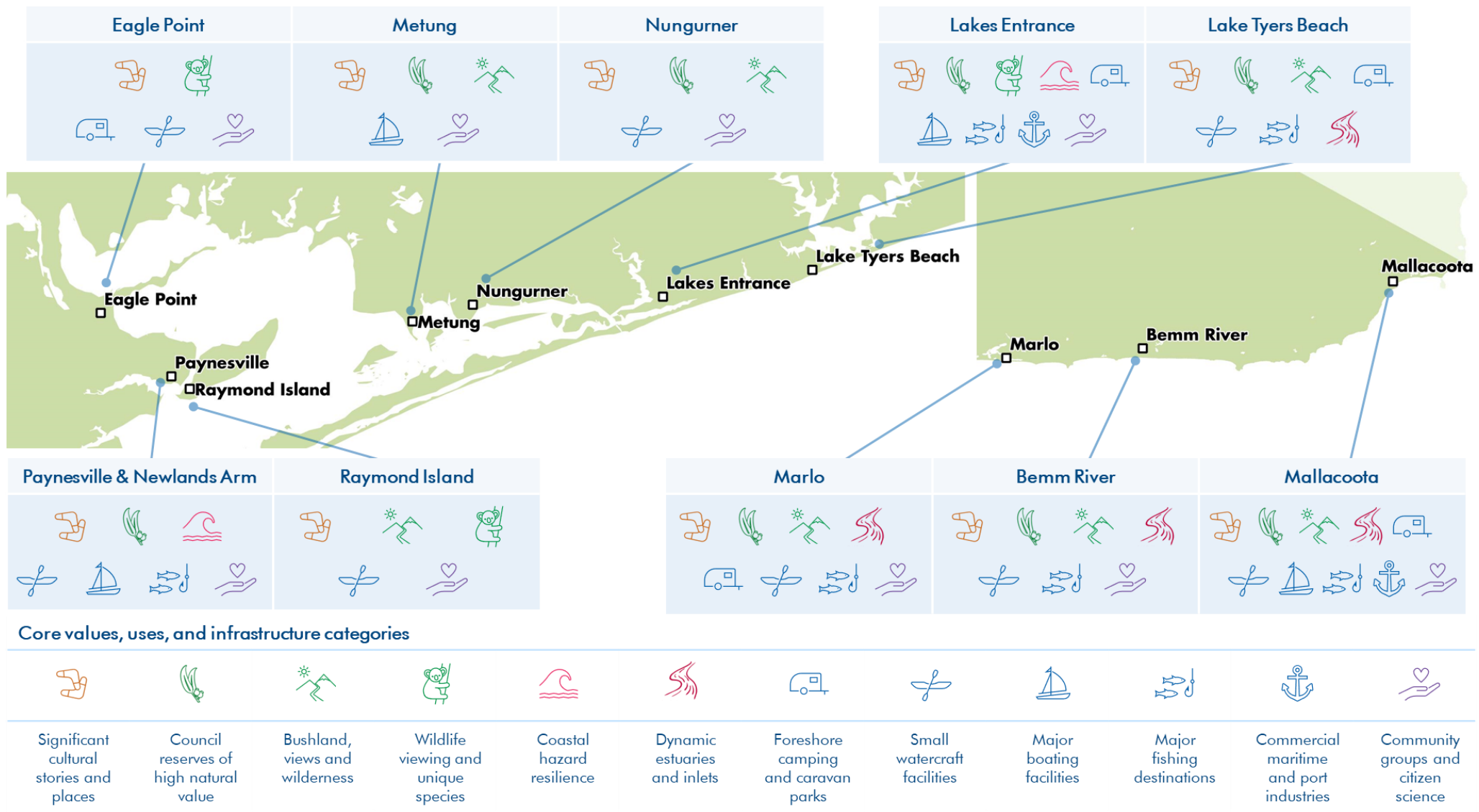
Figure 16 summarises these core values, uses and infrastructure.



Table 7. Mapping for each locality.

Map theme	Description
<b>Traditional Owners and cultural values</b>	Gunaikurnai Registered Aboriginal Party areas, areas of cultural heritage sensitivity and areas under Gunaikurnai and Parks Victoria Joint Management.
<b>Environmental values</b>	Environment, ecosystem and habitat mapping including marine habitats and native vegetation.
<b>Environmental overlays</b>	Environmental and land management planning overlays including: <ul style="list-style-type: none"> <li>• environmental and landscape significance</li> <li>• vegetation protection</li> <li>• bushfire management</li> <li>• erosion and salinity management</li> </ul>
<b>Coastal hazards</b>	Publicly available coastal hazard mapping from: <ul style="list-style-type: none"> <li>• Gippsland Lakes/90 Mile Beach Local Coastal Hazard Assessment (LCHA) Project (Water Technology, 2014)</li> <li>• Statewide coastal hazard data as part of the Victorian Governments Future Coasts Project (2009) and Victorian Coastal Hazard Assessment (2017)</li> </ul> Further mapping of coastal inundation and acid sulphate soils is available in Attachment D.
<b>Coastal protection and drainage infrastructure</b>	Infrastructure to protect or mitigate impacts of coastal hazards including protection structures (seawalls, revetments, groynes) and stormwater drainage networks.
<b>Recreation and transport</b>	Open space and recreational assets, including trails, footpaths, boating facilities, playgrounds, parks and reserves.
<b>Planning scheme zones</b>	East Gippsland Shire Planning Scheme zoning
<b>Planning overlays</b>	Other planning scheme overlays including design, development land subject to inundation and heritage overlays
<b>Land management arrangements</b>	Public land management arrangements and responsible authorities.





Core values, uses, and infrastructure categories

Significant cultural stories and places	Council reserves of high natural value	Bushland, views and wilderness	Wildlife viewing and unique species	Coastal hazard resilience	Dynamic estuaries and inlets	Foreshore camping and caravan parks	Small watercraft facilities	Major boating facilities	Major fishing destinations	Commercial maritime and port industries	Community groups and citizen science

Figure 16. Core values, uses and infrastructure across East Gippsland Shire. This is not intended to be an exhaustive list.



### Locality specific actions

Local values, characteristics and management needs of each locality and their communities, have been used to develop locality-specific actions.

These actions seek to achieve the outcomes and objectives of the East Gippsland Shire Council CMMP for each of the ten localities.

The locality specific actions are presented in the below sections, under each locality and aligned to long-term objectives. Actions may be applicable across the broader coastal and marine areas of a locality, or a specific site-based action.

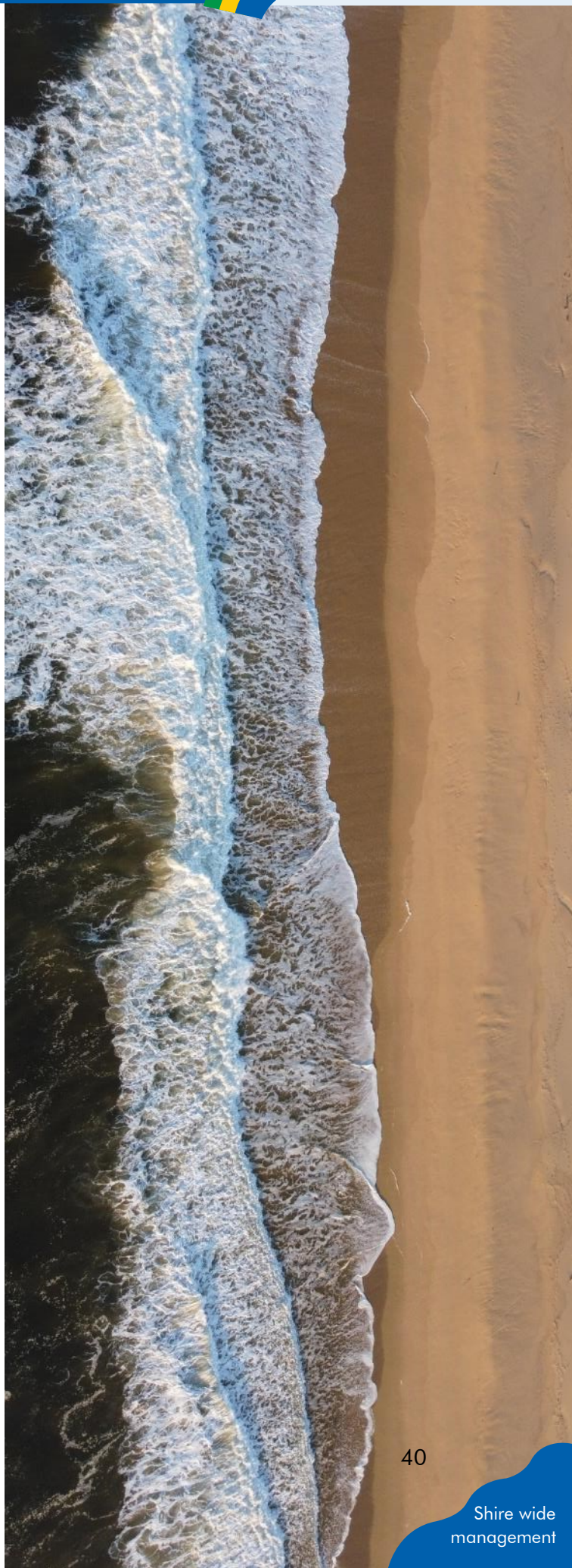
The locality sections are as follows:

Sections 4 to 13: Localities									
4	5	6	7	8	9	10	11	12	13
Paynesville & Newlands Arm	Raymond Island	Eagle Point	Metung	Nungurner	Lakes Entrance	Lake Tyers Beach	Marlo	Bemm River	Mallacoota

For each locality, each section steps through:

- The community and connection to coast
- The coastal environment
- Coastal processes and hazards
- Coastal uses, reserves and facilities
- Coastal and marine management under the CMMP
- Locality mapping
- Management actions

Section 14 then presents implementation arrangements.





Activity, recreation and industrial nodes  
Defined nodes are a strategic planning tool for identifying and improving current and future activity, recreation and industrial developments and uses in the marine and coastal environment.

Identifying nodes creates efficient relationships between buildings and structures, minimises development impacts, and sustainably manages use across coastal and marine areas (Figure 17).



Figure 17. How activity, recreation and industrial nodes might appear in a coastal context (adapted from DELWP, 2020a)

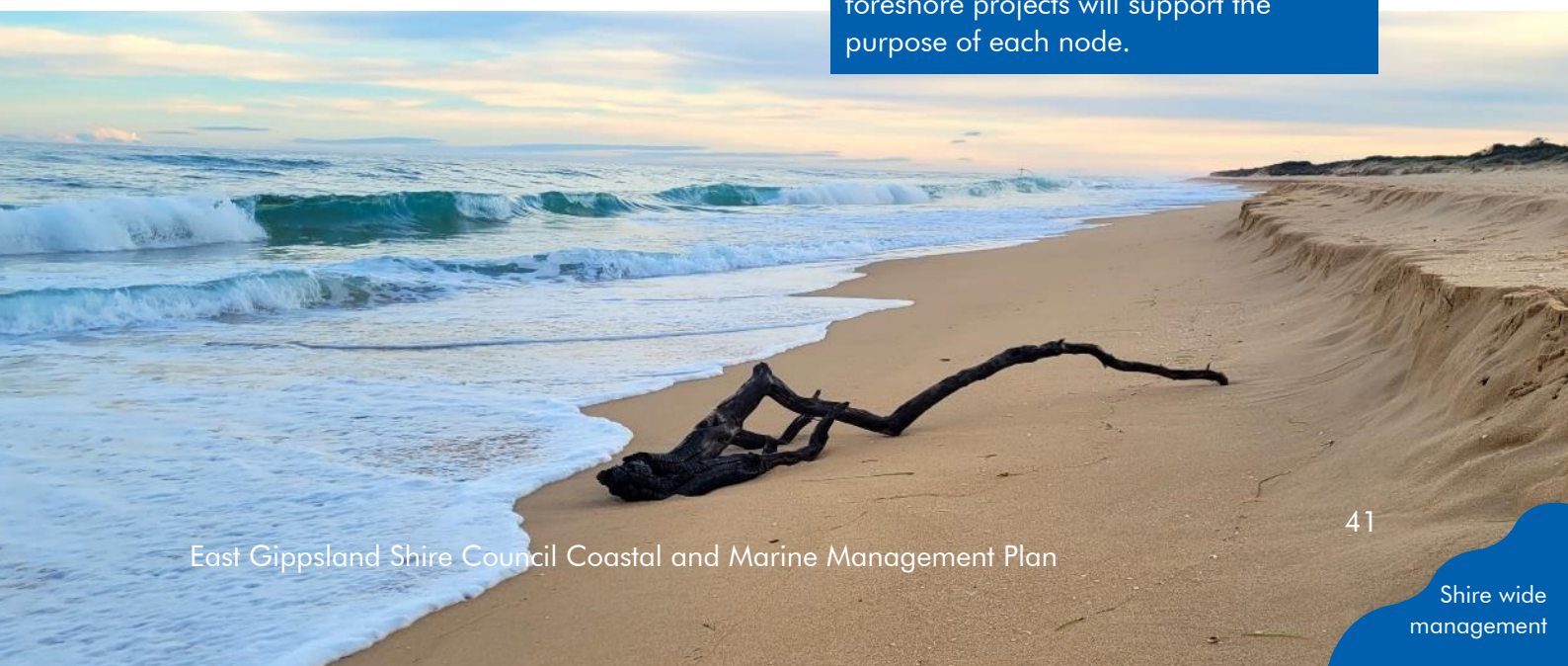
**Activity nodes** are located within settlements adjacent to activity centres, such as commercial, business and recreation zoned areas. Including both public and private land, they often provide facilities to support a range of activities in these areas, from commercial enterprises through to tourism and community recreation.

**Recreation nodes** are located on marine and coastal Crown land outside activity nodes. They provide access and infrastructure for recreation and water-related activities. Use and development that supports access or the functioning of coastal-dependent activities may be sited in recreation nodes.

Boating and fishing access points in recreation nodes will be maintained and enhanced, in line with relevant plans and strategies.

**Industrial nodes** are located on marine and coastal Crown land adjacent or within industrial zoned areas. These nodes often support significant industrial or commercial activities for the region. For East Gippsland, these include commercial fishing, boating and other coastal and marine industries.

Nodes are defined and mapped for each locality. Some localities may have multiple nodes. Locality maps present the nodes and desired purpose. Facility upgrades, masterplanning and other foreshore projects will support the purpose of each node.



## 4 Paynesville and Newlands Arm

Around 17 km southeast of Bairnsdale, Paynesville is on the western shore of Lake King, close to Raymond Island. Newlands Arm sits to the south, across Newlands Backwater and Forge Creek. The area is a boating and fishing haven with many boat ramps, jetties, boat yards and mooring areas.

Paynesville has increasingly developed to include canal estates and artificial islands, providing direct water access for many residents. This proximity to the water is crucial to the lifestyle of residents and visitors in the area but could also present a hazard in the future.

### 4.1 Community and connection to coast

Paynesville is the boating capital of Victoria and is a hot spot for commercial, industrial and recreational boating and marine activities. Paynesville also acts as a local hub to surrounding townships of Eagle Point and Newlands Arm, with access to Raymond Island via the Raymond Island Ferry. Newlands Arm is a relatively new community developed since the 1970s. As a quiet community, the town attracts young families and retirees.

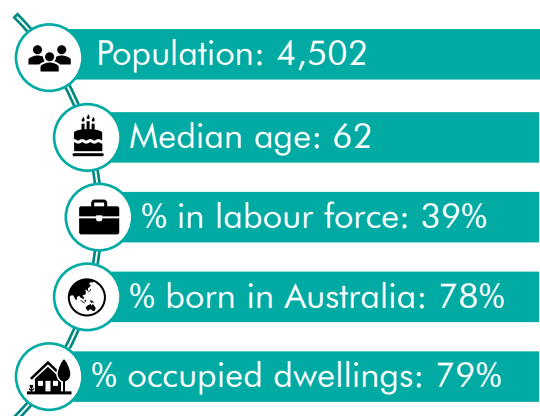


Figure 18. Key statistics for Paynesville and Newlands Arm (ABS, 2021).

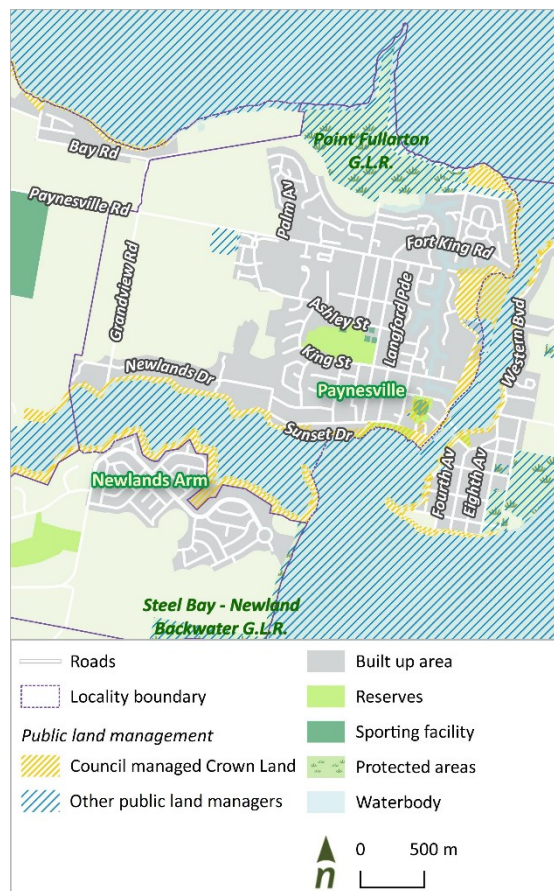


Figure 19. Paynesville and Newlands Arm locality.

Although an aging community, the region is also growing in population across the two localities. It is one of the fastest growing communities in the region, with an estimated 45% growth projected by 2041 across the Paynesville, Newlands Arm and Eagle Point region<sup>1</sup>.

The Gunaikurnai people are the Traditional Owners of the areas around Paynesville and Newlands Arm, represented by GLaWAC. The areas sits within Tatungalung Country. The town of Paynesville itself was developed on Traditional Owner camping grounds. Evidence of this use and occupation exists, with many Aboriginal places and objects such as middens, scar trees and artefact scatters.

<sup>1</sup> <https://forecast.id.com.au/east-gippsland/about-forecast-areas?WebID=180>



## 4.2 The coastal environment

Sitting on the western shores of Lake King, Paynesville and Newlands Arm are surrounded by water. This includes by Lake King itself, and various inlets, backwaters, canals, and rivers.

The foreshore is diverse, ranging from natural saltmarsh ecosystems, lawned recreational areas and sandy beaches to marinas, canals, and jetties. North of Paynesville lies Point Fullarton, an ecologically important saltmarsh area, managed by Parks Victoria. Spanning across the coastline are seagrass beds, a key source of habitat and food for the marine ecosystem.



The waterways, lakes and coastal areas surrounding Paynesville and Newlands Arm support hundreds of species of native vegetation, such as banksia, and diverse terrestrial and marine wildlife. These include threatened species of fish like black bream and multiple migratory waterbirds such as Fairy Terns and Black Swans.

## 4.3 Coastal processes and hazards

Inundation (flooding) in the region is due to a combination of river inflows and lake water levels. Being surrounded by water, and lower lying in elevation, significant areas of the Paynesville and Newlands Arm foreshore are currently vulnerable to the impacts of temporary flooding through catchment floods and storm tide inundation.

Areas around the Esplanade, Gilsenan Reserve, Slip Road, Burrabogie Island, and across Point Fullarton Reserve are currently exposed to storm tide inundation. This is likely to become more frequent, increase in areas or move to permanent inundation into the future. Assets that could be affected include jetties, car parks, boating facilities, pathways, other recreational facilities, roads, commercial properties, and residences.

The East Gippsland Floodplain Management Strategy (EGCMA, 2017) identifies Paynesville as being at high risk of flood related impacts. A high proportion of holiday homeowners and absent boat owners makes preparing for floods difficult. Paynesville currently relies on various revetments, seawalls, and drainage infrastructure throughout the southern and eastern regions to mitigate exposure to flooding. Historically, beach renourishment has also occurred along the foreshore for high-use beaches, like at Progress Jetty.





#### 4.4 Coastal uses, reserves and facilities

Much of the town's allure involves its access and proximity to water. Multiple canals are lined with waterfront properties and facilities to support a range of boating activities. These include:

- The Sunset Cove, Esplanade, Fort King and Slip Road boat ramps
- Private and public jetties and berths across the foreshore and canals
- Various, yacht, motor cruiser and boating clubs
- Boat storage and maintenance facilities across the Slip Road area
- The Council-managed ferry service to Raymond Island.

Other attractions and facilities across the foreshore include restaurants, trails, playgrounds, public toilets, holiday parks, fishing facilities, boardwalks, walking trails, swimming spots, and car parks. The Esplanade is the main road flowing along the foreshore, with multiple cafes, shops, and accommodation options. The Progress Jetty and Sunset Cove areas also provide parking, playground and picnic facilities.

At Newlands Arm there is a boat ramp, playground, public toilets and car parking to the east at Dawsons Cove. A walking trail connects the foreshore with scattered jetties and moorings.



#### 4.5 Coastal and marine management

Council holds management responsibilities across most of the Paynesville and Newlands Arm foreshore. Gippsland Ports manage some jetties around Slip Road, the canal entrance, the Esplanade and the Gippsland Lakes Shared Community Hub. Parks Victoria manage Point Fullarton's sensitive habitats.

Coastal and marine management across Paynesville is guided by the Paynesville Foreshore Management Plan (2017). 19 key objectives in the plan sought to:

- Improve connectivity, signage and quality of new infrastructure
- Manage environmental values, vegetation and algal blooms
- Maintain and upgrade recreational boating facilities and improve swimming and boating safety
- Improve flood, erosion and bushfire hazard management
- Incorporate cultural values
- Improve coordination across agencies, land tenure boundaries and support community groups.
- Promote commercial opportunities








Foreshore management has also been guided by the 2007 Newlands Arm Foreshore Management Plan. This plan highlighted the need to link the Paynesville and Newlands Arm walking tracks.

There are several recent or ongoing Council-led projects across Paynesville:

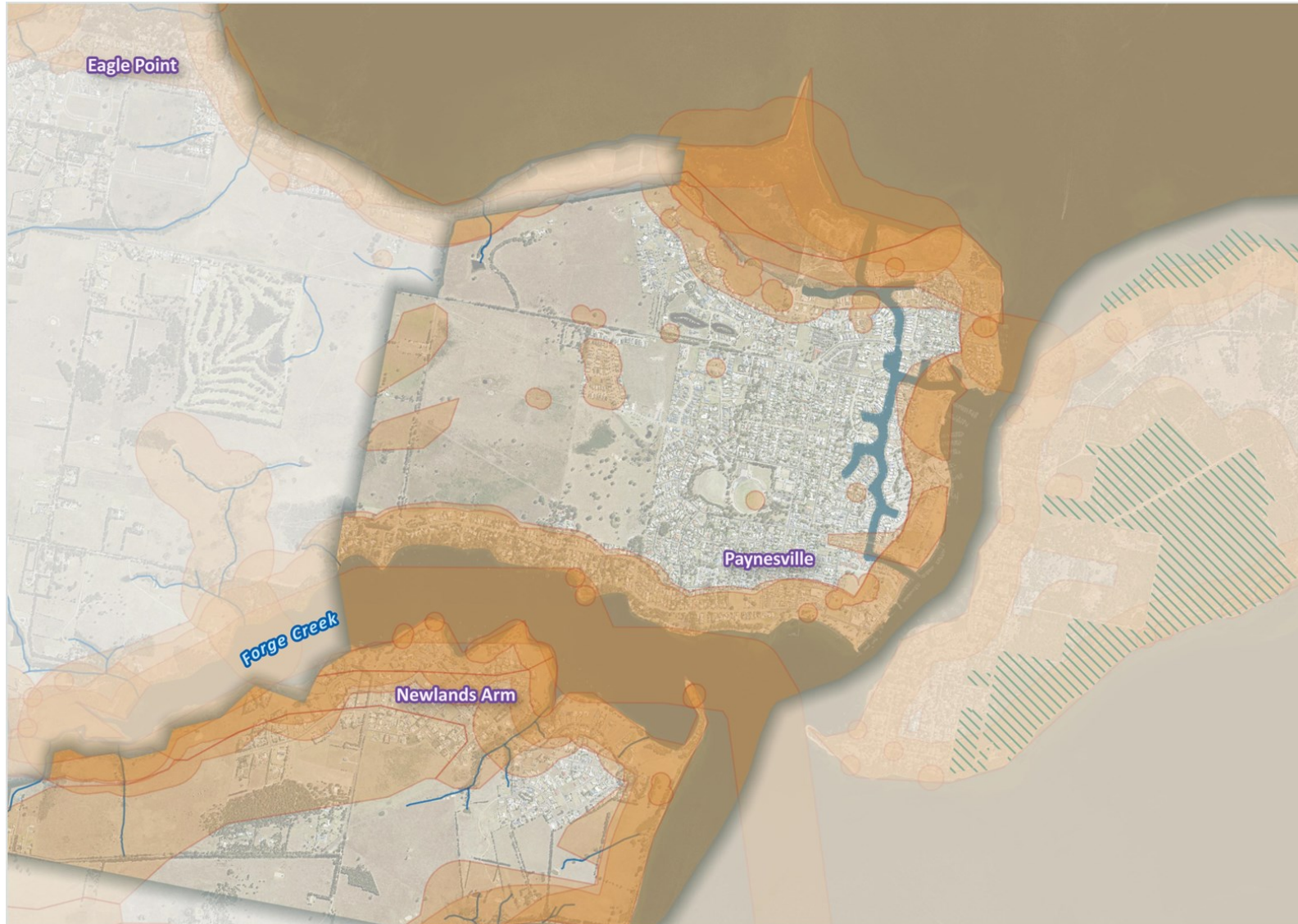
- Progress Jetty Area Redevelopment
- Gippsland Lakes Shared Community Hub Development
- Slip Road Maritime Precinct
- Fort King Landscape Masterplan

Table 8 summarises community values, challenges and opportunities across Paynesville and Newlands Arm, with focus areas for future management. Figure 20 to Figure 28 map key features, values and management arrangements across the foreshore.

Table 8. Values, challenges and opportunities for Paynesville and Newlands Arm coastal and marine management, with focus areas for future management.

		Paynesville and Newlands Arm			
		Values	Challenges	Opportunities	Focus for management
	 Traditional Owners' rights, aspirations and knowledge	<ul style="list-style-type: none"> <li>Tatungalung people and broader Gunaikurnai connection to Country</li> <li>Evidence of use and occupation of camping grounds – middens, artefact scatters, scar trees.</li> <li>Other significant Aboriginal Heritage places and sites (recorded and unrecorded)</li> </ul>	<ul style="list-style-type: none"> <li>Heritage sites being impacted or destroyed by other activities e.g. road and house construction and inappropriate recreational use</li> <li>Limited awareness and understanding of Paynesville and Newlands Arm's cultural values</li> </ul>	<ul style="list-style-type: none"> <li>Identify unrecorded Aboriginal Heritage sites and continue appropriate planning overlays and controls to protect sites</li> <li>Initiatives to share Aboriginal stories and knowledge, where desired by Traditional Owners</li> </ul>	<ul style="list-style-type: none"> <li>Adaptation planning and clarity around potential risks, management strategies and adaptation pathways for managing coastal hazards, including inundation (flooding) and erosion.</li> <li>Definition and communication of foreshore reserve purpose and uses e.g. activity, recreation and industrial nodes and environmental protection areas.</li> <li>Recognition, communication and potentially updated planning controls to strengthen vegetation and sensitive habitat protection</li> <li>Best-practice water sensitive urban design to reduce flooding risk and improve stormwater quality</li> <li>Ecologically- and water-sensitive facility upgrades to promote a sustainable visitor experience. Includes resilient design and consider natural processes, the full water cycle and emerging coastal hazards, e.g. boardwalks and raised facilities, where possible.</li> <li>Investigate and increase understanding of cultural heritage and ensure protection.</li> </ul> 
	The marine and coastal environment	<ul style="list-style-type: none"> <li>High value natural vegetation and habitat across foreshore reserves - Point Fullarton</li> <li>Important vegetation communities - saltmarsh, seagrass, swamp scrub, Gippsland red gum and woodlands</li> <li>Rare and threatened species - Burrunan Dolphin, Latham's Snipe, Lewin's Rail and Swampland Coolskink.</li> <li>Good water quality for lake and marine ecosystems</li> <li>Natural setting, town separation and open space</li> <li>Breeding grounds for birds – terns, plovers</li> </ul>	<ul style="list-style-type: none"> <li>Coastal squeeze and pressures on sensitive ecosystems and habitats from development and sea level rise/erosion – e.g. Point Fullarton</li> <li>Stormwater quality, sewage releases and pollution from urban, agricultural and industrial zones</li> <li>Impacts of coastal erosion and changing inundation regimes on vegetation, with lack of space for ecosystem retreat</li> <li>Lack of protection for remnant native vegetation</li> <li>Feral predator, pest and weed threats</li> <li>Blue-green algae blooms and associated impacts</li> </ul>	<ul style="list-style-type: none"> <li>Allow space for nature and ecosystem retreat with sea level rise</li> <li>Initiatives to protect endangered species, native vegetation and ecosystems</li> <li>Apply water-sensitive urban design, communicate emergency wastewater discharge arrangements, use of recycled water, and runoff controls from urban areas, agricultural and industrial zones</li> </ul>	
	Natural processes and climate change	<ul style="list-style-type: none"> <li>Stable sandy beaches along the Esplanade foreshore that provide safe swimming areas</li> <li>Natural geomorphological features including the foreshore areas and Point Fullarton Reserve</li> <li>Current erosion and flood management structures</li> </ul>	<ul style="list-style-type: none"> <li>Coastal hazard (inundation and erosion) impacts across large coastal areas</li> <li>Likely inundation across Burrabogie Island (Slip Road) Gilsenan Reserve and the Esplanade</li> <li>Erosion and permanent inundation across Point Fullarton and much of the foreshore</li> <li>Increase in coastal hazard impacts - sea level rise</li> <li>Potential impacts from coastal acid sulphate soils</li> <li>Current impacts to path stability and access</li> </ul>	<ul style="list-style-type: none"> <li>Undertake long-term adaptation planning</li> <li>Communicate latest coastal hazard mapping</li> <li>Update / enforce coastal hazard planning overlays</li> <li>Best-practice Integrated Water Management (IWM) and water sensitive urban design (WSUD) to mitigate flooding, improve stormwater quality and discharge points</li> <li>Resilient design of facilities to respect changing coastal processes and hazards</li> <li>Ecologically sensitive erosion control at Point Fullarton</li> </ul>	
	Sustainable use and development	<ul style="list-style-type: none"> <li>Walking tracks and pedestrian access</li> <li>Major commercial, industrial and recreational boating facilities – Esplanade jetties and moorings, Slip Road boat ramps and maintenance facilities, various small craft launching sites, Gippsland Ports facilities.</li> <li>Other water access facilities for kayaking, paddleboarding, yachting etc.</li> <li>Green wedges and separation of townships</li> <li>Facilities to support recreational activities - fishing platforms, small craft water access, parking, toilets, playgrounds, BBQ facilities</li> </ul>	<ul style="list-style-type: none"> <li>Poor walking connectivity along foreshore and between Paynesville and Eagle Point</li> <li>Impact of coastal hazards on use / development</li> <li>Facilities to support seasonal visitation fluctuations</li> <li>Conflict between users – e.g. powerboats and swimmers and safe swimming areas</li> <li>Availability of public land and facilities with large foreshore areas used for parking</li> <li>Lack of foreshore views and attractive safe swimming spots at The Esplanade /Progress Jetty</li> </ul>	<ul style="list-style-type: none"> <li>Ecological and water-sensitive development and resilient design that includes consideration of natural processes and current and future coastal hazards</li> <li>Maintain and establish new walking tracks to improve connectivity - to Newlands Arm and Eagle Point</li> <li>Rejuvenate and redevelop Slip Road / Burrabogie Island, Progress Jetty and Gippsland Lakes Shared Community Hub to facilitate diverse visitor experiences, centred around boating</li> <li>Define nodes along the foreshore to concentrate activity, promote sustainable use and protect ecosystems.</li> </ul>	
	Stewardship, knowledge, engagement and collaboration	<ul style="list-style-type: none"> <li>Community groups - Gippsland Environment Group and Paynesville Landcare Coastcare</li> <li>Recreational clubs - Paynesville Lions Club, Gippsland Lakes Shared Community Hub, Paynesville Motor Cruiser Club</li> </ul>	<ul style="list-style-type: none"> <li>Lack of opportunities for community involvement</li> <li>Lack of knowledge or awareness around sensitive ecosystems, impacts of recreational use and potential sea level rise impacts</li> <li>Ineffective or outdated signage</li> <li>Private frontage encroachment</li> </ul>	<ul style="list-style-type: none"> <li>Promote grants for community groups</li> <li>Communicate and build knowledge of the coastal and marine environment and processes</li> <li>Ecology awareness initiatives for new residents</li> <li>Improve clarity around land tenure, roles and responsibilities of government agencies</li> <li>Signage upgrades</li> </ul>	

# Paynesville and Newlands Arm mapping: Traditional Owners and cultural values



## Traditional Owners and Cultural Values

- Areas of Cultural Heritage Sensitivity
- Jointly managed parks and reserves (Gunaikurnai Land and Waters Aboriginal Corporation and Parks Victoria)

### Other Features

- Creeks and waterways

### Inset map

#### Registered Aboriginal Parties

- Gunaikurnai Land and Waters Aboriginal Corporation
- Other Registered Aboriginal Parties

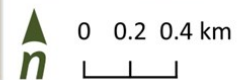
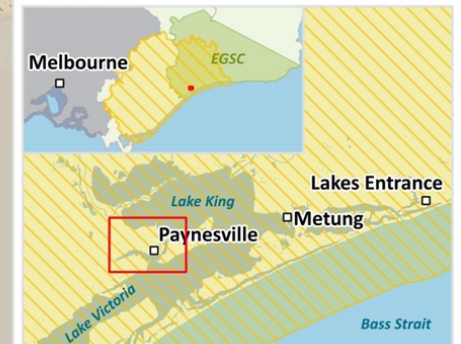


Figure 20. Registered Aboriginal Parties, culturally sensitive areas and Joint Management areas for Paynesville and Newlands Arm.

# Paynesville and Newlands Arm mapping: Environmental values



Figure 21. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Paynesville and Newlands Arm.

# Paynesville and Newlands Arm mapping: Environmental overlays




### Environmental Overlays

#### Planning Scheme Overlays

-  Bushfire Management Overlay
-  Environmental Significance Overlay
-  Erosion Management Overlay
-  Significant Landscape Overlay
-  Vegetation Protection Overlay

#### Other features

-  Creeks and waterways

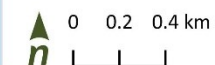


Figure 22. Environmental and land management planning overlays for Paynesville and Newlands Arm.

# Paynesville and Newlands Arm mapping: Coastal hazards



### Coastal Hazards

Gippsland Lakes/90 Mile Beach LCHA\*:

10% AEP Gippsland Lakes flood extent

- 0.0 m sea level rise (2014 baseline)
- 0.2 m sea level rise
- 0.4 m sea level rise
- 0.8 m sea level rise

Lake shoreline erosion hazard extent

- 0.8 m sea level rise

Other features

- Creeks and waterways

AEP: Annual Exceedence Probability (AEP) is the probability of an event occurring in any given year.

Data sources:  
\*Water Technology 2014 - Gippsland Lakes and 90 Mile Beach Local Coastal Hazard Assessment (LCHA) Project

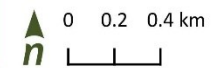


Figure 23. Coastal hazard mapping from the Gippsland Lakes/90 Mile Beach LCHA for Paynesville and Newlands Arm.

# Paynesville and Newlands Arm mapping: Coastal protection and drainage infrastructure



Figure 24. Coastal protection and drainage infrastructure for Paynesville and Newlands Arm.

# Paynesville and Newlands Arm mapping: Recreation and transport



- Recreation and Transport**
- Boating*
- Boat mooring
  - Boat ramp
  - Marinas and jetties
- Facilities*
- Playground
  - Community facility
  - Caravan park
  - Education complex
- Open space*
- Bowling green
  - Golf course
  - Reserve (park)
  - Sports ground
  - Tennis court
  - Protected areas
- Transport*
- Roads
  - Ferry route
  - Footpath
  - Trail
- Other features*
- Creeks and waterways

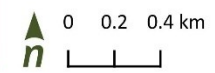
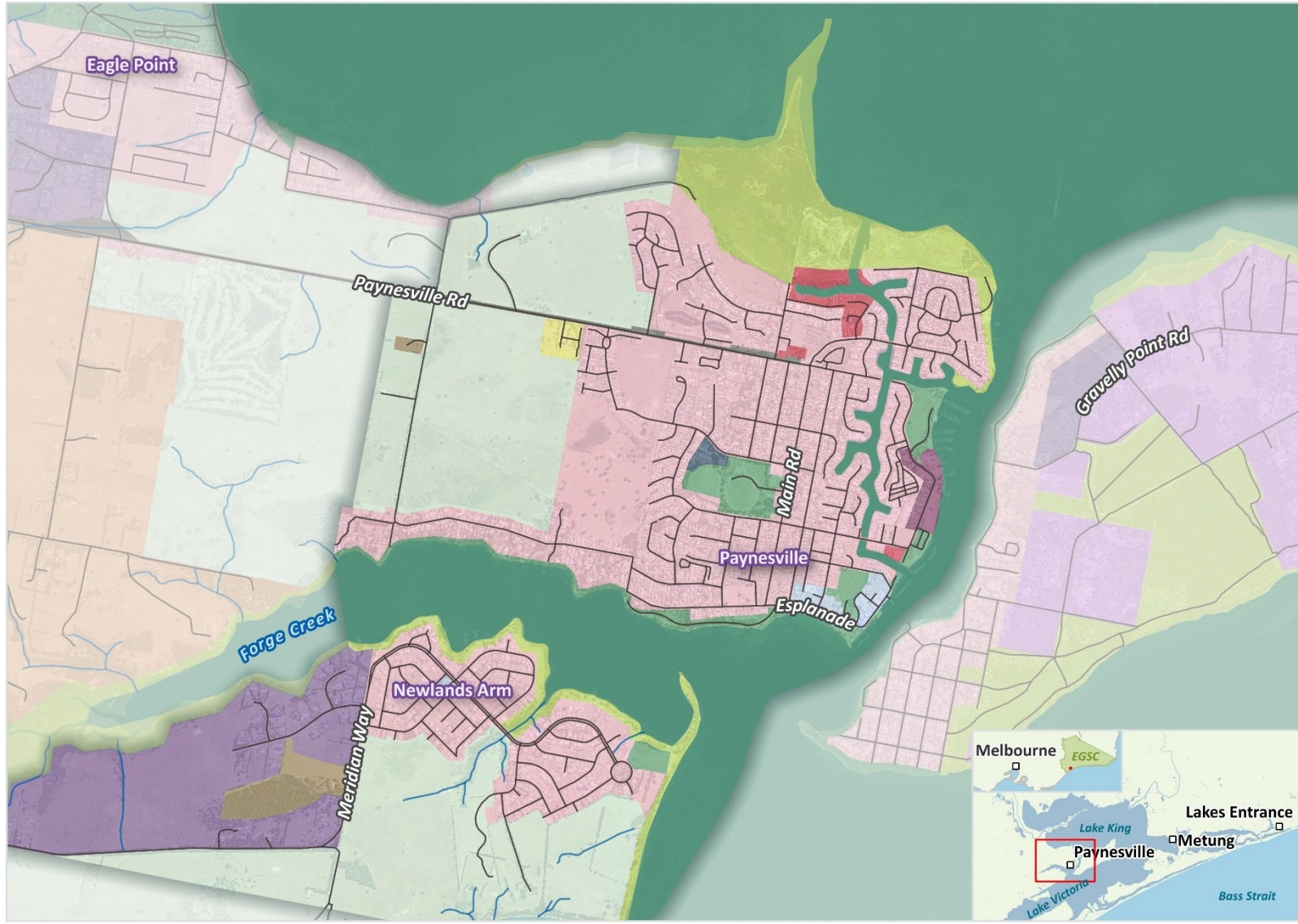


Figure 25. Recreation facilities and transport networks for Paynesville and Newlands Arm.

# Paynesville and Newlands Arm mapping: Planning scheme zones



- Planning Scheme Zones**
- Commercial 1 zone
  - Farming zone - Schedule 1
  - General residential zone - Schedule 1
  - Industrial 3 zone
  - Low density residential zone
  - Mixed use zone
  - Public conservation and resource zone
  - Public park and recreation zone
  - Public use zone - Cemetery/crematorium
  - Public use zone - Education
  - Public use zone - Service and utility
  - Rural living zone- Schedule 2
  - Rural living zone - Schedule 3
  - Transport zone 2 - Principal road network
- Transport**
- Roads
- Other features**
- Creeks and waterways

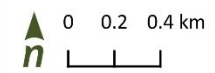


Figure 26. Planning scheme zones for Paynesville and Newlands Arm.

# Paynesville and Newlands Arm mapping: Planning overlays



### Planning Overlays

-  Property boundaries
- Planning Scheme Overlays**
-  Heritage Overlay
-  Restructure Overlay
-  Environmental Audit Overlay
-  Land Subject To Inundation Overlay
-  Design and Development Overlay
- Other features**
-  Creeks and waterways

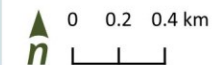


Figure 27. Other planning scheme overlays for Paynesville and Newlands Arm.

# Paynesville and Newlands Arm mapping: Land management arrangements



- Land Tenure**
- Public Land Management*
- East Gippsland Shire Council
  - Parks Victoria
  - Department of Energy, Environment and Climate Action
  - Department of Health
  - Department of Transport
  - Trustees Committee Of Management
  - Jointly managed parks and reserves (Gunaikurnai Land and Waters Aboriginal Corporation)
- Other features*
- Creeks and waterways
  - Roads
  - Property boundaries
  - Built up areas

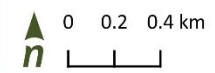


Figure 28. Public land management arrangements for Paynesville and Newlands Arm.



## 4.6 Management actions

Table 9 details the CMMP management actions for Paynesville and Newlands Arm.

Figure 29 presents site-specific management actions and maps activity, recreation and industrial nodes.

Table 9. Paynesville and Newlands Arm management actions

Long-term objective	No.	Action	Timeframe	Council role	Partners
Objective 1: Acknowledge Traditional Owners' rights, aspirations and knowledge	PN1.1	Guided by GLaWAC, support identification, management and protection of cultural heritage values across Paynesville and Newlands Arm coastal areas. In alignment with Shire Wide actions, this includes: <ul style="list-style-type: none"> <li>Supporting GLaWAC to identify unrecorded cultural heritage sites.</li> <li>Continuing to implement appropriate planning overlays and controls such as Cultural Heritage Management Plans to protect cultural heritage.</li> <li>Collaborating with GLaWAC to better understand cultural values and inform future protection.</li> <li>Incorporating culturally-sensitive design into all works across Council-managed coastal reserves.</li> </ul>	Ongoing	Participate	GLaWAC
Objective 2: Protect and enhance the marine and coastal environment	PN2.1	In collaboration with EGCMA and Parks Victoria, investigate how loss of coastal habitat resulting from changing inundation regimes with sea level rise, coastal erosion, lack of space for habitat migration and development pressures may be addressed. Consider the creation of space for nature, to aid ecosystem retreat with sea level rise, e.g. Point Fullarton and surrounds	0-3 years	Participate	EGCMA, Parks Victoria, research institutes, not-for-profits
	PN2.2	Support EGCMA and citizen science programs to monitor water quality throughout Paynesville waterways and foreshore (e.g. Forge Creek) and utilise findings to inform best-practice Council stormwater management controls, water-sensitive upgrades, pollution management and development controls, in alignment with Action PN4.5. Communicate and enforce requirements needed to improve water quality. Aligns with Shire wide Action EG5.2.	3-5 years	Participate	EGCMA, citizen science programs
Objective 3: Respect natural processes and strengthen resilience to climate change	PN3.1	Building from existing coastal hazard assessments and adaptation planning to date, prioritise and undertake long-term strategic coastal hazard adaptation planning for Paynesville. Includes: <ul style="list-style-type: none"> <li>Reviewing available information, data and mapping for Paynesville and suitability for adaptation planning.</li> <li>Investigating opportunities for dedicated adaptation planning and funding for Paynesville (e.g. VRC program - Action EG3.2).</li> <li>Following Victoria's Resilient Coast framework and guidelines to develop long-term adaptation and resilience planning.</li> <li>Engaging and communicating throughout process, including stakeholder and rightsholder partnerships and community engagement.</li> </ul>	0-3 years	Lead	DEECA, EGCMA, GLaWAC Gippsland Ports, Parks Victoria, other land asset and infrastructure managers
	PN3.2	In collaboration with DEECA, monitor and assess coastal protection structures across Paynesville, including seawalls, revetments and other structures. Consider opportunities for enhancing ecological outcomes (e.g. living seawalls) or alternatives to protection infrastructure through hybrid/nature-based solutions and adaptation planning. Embed State policy to consider adaptation options in order of preference. Aligns with action EG3.5.	0-3 years	Participate	DEECA
	PN3.3	Monitor for impacts of disturbance of coastal acid sulphate soils and take action as appropriate. Adhere to legislation and guidance on management of acid sulphate soils in any new developments of infrastructure upgrades.	Ongoing	Lead	DEECA, EPA



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 4: Use and develop sustainably</b>	PN4.1	In alignment with Action EG4.1, utilise activity, recreation and industrial nodes to clearly delineate distinct purposes and uses within foreshore zones, and ensure efficient development through co-location, partnership use, and consolidation of community assets. Includes delineation of: <ul style="list-style-type: none"> <li>• Paynesville Esplanade from Mariners Cove to Main Road as key activity node.</li> <li>• Fort King Boat Ramp, Sunset Drive boat ramp and play area and Newlands Arm / Dawson Cove boat ramp and play area as recreation nodes supporting a range of boating, fishing and recreational facilities.</li> <li>• King Street (Slip Road) boat ramp and marine industries area as an industrial node.</li> </ul>	Ongoing	Lead	All other land managers
	PN4.2	In alignment with East Gippsland Housing and Settlement Strategy (2023), continue to foster Service Town character of Paynesville through <ul style="list-style-type: none"> <li>• Provision and maintenance of foreshore facilities to meet community and visitor needs.</li> <li>• Sustainable growth subject to environmental risk (bushfire, flood, coastal hazard) constraints.</li> <li>• Promoting adherence to township boundaries, planning overlays and land use planning.</li> </ul>	Ongoing	Lead	
	PN4.3	In alignment with East Gippsland Housing and Settlement Strategy (2023), continue to foster Rural Town character of Newlands Arm through <ul style="list-style-type: none"> <li>• Maintenance of existing foreshore facilities and investment in facilities, based on assessment of need.</li> <li>• Only small scale housing development within existing residentially zoned areas.</li> <li>• Promoting adherence to township boundaries, planning overlays and land use planning.</li> </ul>	Ongoing	Lead	
	PN4.4	Progress and complete upgrade works to foreshore precincts and facilities currently underway including: <ul style="list-style-type: none"> <li>• Slip Road Maritime Precinct upgrade,</li> <li>• Progress Jetty Area redevelopment, and</li> <li>• Gippsland Lakes Shared Community Hub Development.</li> </ul> Review designs and planning to ensure proposed works and upgrades align with CMMP objectives, principles, actions and State policy.	3-5 years	Lead	
	PN4.5	In collaboration with the East Gippsland Integrated Water Management Forum, develop a stormwater management plan to promote best-practice stormwater management across Paynesville.	3-5 years	Lead	DEECA, IWM Forum partners
	PN4.6	In collaboration with Gippsland Ports, review existing berthing availability, use and requirements. Investigate opportunities to sustainably manage berthing needs for greatest public benefit. Includes: <ul style="list-style-type: none"> <li>• Review of public (Council and Gippsland Ports) berthing facilities, availability and usage.</li> <li>• Review of leasing and licensing for private jetties, especially within Paynesville canals, including consideration of boat sizing and canal width.</li> </ul>	5+ years	Lead	DEECA
	PN4.7	Assess and investigate opportunities to consolidate parking arrangements, allowing increases in foreshore open space for recreational purposes, improved foreshore views and amenity and potential improvements to drainage and water sensitive urban design through decreased hard surfaces and stormwater runoff.	0-3 years	Lead	



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 4: Use and develop sustainably (cont.)</b>	PN4.8	<p>Ensure resilient design of new/upgraded infrastructure and facilities, considering natural processes and current and future coastal hazards. Consider:</p> <ul style="list-style-type: none"> <li>• Ecologically and culturally sensitive design e.g. boardwalks through hazard prone areas and/or sensitive cultural heritage sites or ecological communities.</li> <li>• Integrated water management approaches and water-sensitive urban design to reduce flood risk, improve stormwater quality, sediment runoff and discharge points.</li> <li>• Infrastructure design life and resilience to coastal hazard impacts, and adaptative management of facilities, recognising any emerging coastal hazard risk.</li> </ul>	Ongoing	Lead	
	PN4.9	<p>Support Paynesville as a centre for sustainable boating activities on the Gippsland Lakes by ensuring the ongoing maintenance and upgrade of a diversity of boating infrastructure, including provision and communication of vessel and watercraft facility diversity, and defined preferred usage of nodes (linked to Action PN4.1)</p>	Ongoing	Lead	Gippsland Ports, Boating Vic, Better Boating Victoria
	PN4.10	<p>Increase all-abilities foreshore connectivity between and throughout Eagle Point, Paynesville, and Newlands Arm through:</p> <ul style="list-style-type: none"> <li>• Implementing foreshore trail upgrades to improve connectivity from Paynesville to Eagle Point, with consideration to sensitive environments of Point Fullarton and surrounds (with Action EP4.4)</li> <li>• Investigating opportunities for greater connection to Newlands Arm from Paynesville, including Dinni Birraark Walk Extension.</li> <li>• Improving walkability along the Paynesville Foreshore including at the Gippsland Lakes Shared Community Hub, Progress Jetty and along Sunset Cove.</li> <li>• Wayfinding signage and communication of routes and activity/recreation nodes.</li> </ul> <p>Consider appropriate siting, ecologically and culturally sensitive design, such as boardwalks, and maintenance of path stability and access with current and future coastal hazards in all works, in alignment with Action PN4.8.</p>	3-5 years	Lead	Parks Victoria, EGCMA, Paynesville Landcare Coastcare, GLaWAC
<b>Objective 5: Take a stewardship approach, build understanding and knowledge, engage and collaborate</b>	PN5.1	<p>Continue to support and collaborate with local volunteer community environment groups e.g. Paynesville Landcare Coastcare, Gippsland Environment Group. Includes:</p> <ul style="list-style-type: none"> <li>• Promoting community group activities in the coastal and marine space.</li> <li>• Fostering open communication and engagement channels with community groups.</li> <li>• Continuing to seek opportunities to increase community involvement, including through community grants and Council partnerships.</li> <li>• Promoting and increasing citizen science opportunities (including Action PN2.2)</li> </ul>	Ongoing	Lead	All other management agencies, environmental and community groups and organisations
	PN5.2	<p>In alignment with Shire wide Action EG5.3, review consolidate and update foreshore signage across Paynesville and Newlands Arm to:</p> <ul style="list-style-type: none"> <li>• Ensure consistency.</li> <li>• Promote connectivity and wayfinding.</li> <li>• Celebrate unique environments, history and culture.</li> <li>• Support implementation of activity, recreation and industrial nodes (Action PN4.1).</li> </ul>	3-5 years	Lead	Other land managers, GLaWAC
	PN5.3	<p>In alignment with Shire wide Action EG5.8, review and prioritise encroachment case across Paynesville and Newlands Arm. Work with landholders to address cases of encroachment, guided by Shire wide policy, framework and procedures.</p>	3-5 years	Lead	DEECA, Parks Victoria, other land managers



Figure 29. Paynesville and Newland Arm management actions and nodes

## 5 Raymond Island

Raymond Island is around 6 km long and 2 km wide, located just 200 m off the coast of Paynesville, in Lake King. McMillan Strait separates the island from the mainland. The Council-operated Raymond Island chain ferry provides the only public link to the island, from Paynesville.

The island is mainly residential with surrounding natural bush setting. It is a popular destination known for its resident koalas and connected community who are passionate about sustainability. Council has recently upgraded trails, improved cultural education, signage, safer access, and other amenities across the island.

### 5.1 Community and connection to coast

Only accessible by boat, the island supports a small community of permanent and part-time residents. With a median age of 68, the community includes retirees, holiday homeowners and some families. Residential development is largely across the western coast of the island, with large tracts of reserve and bushland.

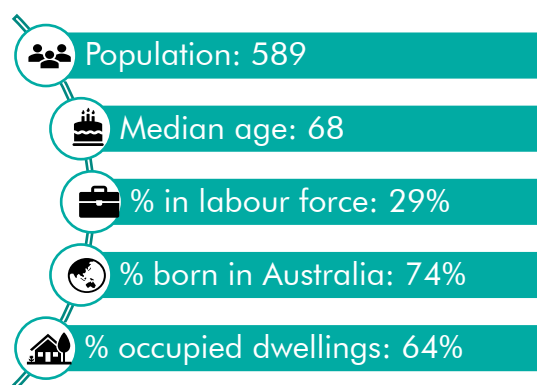


Figure 30. Key statistics for Raymond Island (ABS, 2021).

With nature and conservation as major drawcards, Raymond Island is a popular spot for wildlife-lovers and ecotourism facilities. There are many community groups dedicated to the sustainable lifestyle of the island.

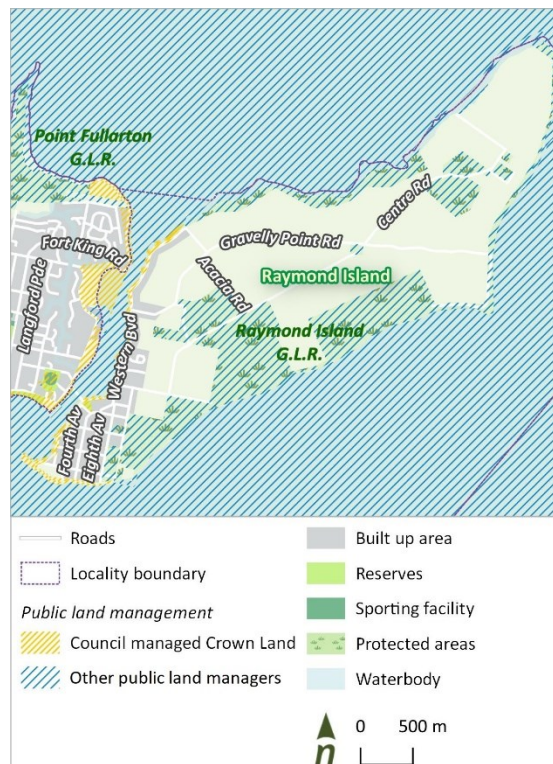


Figure 31. Raymond Island locality.

The Gunaikurnai people are the Traditional Owners of Raymond Island, represented by GLaWAC. The island sits within Tatungalung Country. Gunaikurnai Traditional Owners and Parks Victoria jointly manage the Gippsland Lakes Reserve at Raymond Island.

*Gunaikurnai camped on this Island, which they called Gragin... it was particularly important for collecting swan eggs, and evidence of scar trees, burial sites and artefact scatters have been found in the area. It is in a strategic location in the lagoon system, providing a line of sight to many of the other important places on the water. Our old people would have used this place to keep an eye on what was going on in the surrounding area.*

Gunaikurnai Whole of Country Plan  
(GLaWAC, 2015)



## 5.2 The coastal environment

Lake King surrounds the island, with extensive seagrass beds that provide fish and marine species habitat. The coastline is diverse including gravelly beaches and swampy saltmarsh in the northeast, sandy shorelines in the south and east, and grassy picnic areas and urban foreshores near the ferry terminal.



Introduced to the island in the 1950s, Raymond Island has a large population of koalas and is marketed as a guaranteed koala sighting location. Alongside this, the island is home to many other iconic species like kangaroos, echidnas, and wallabies. Threatened species on the island include:

- White-fronted and Caspian Terns
- Latham’s Snipe
- White-bellied Sea-Eagle
- Australasian Shoveler
- Pacific Gull

During bushfire events, the island also provides an unburnt habitat refuge for birds, insects and evacuated wildlife. These include Rufous Fantail, Swift Parrot, White-throated Needletail, Grey-headed Flying-fox and Gang-gang cockatoo.

Gunaikurnai Traditional Owners, Parks Victoria, Raymond Island Landcare Group, the Koala Island Foundation and Council have recently undertaken various vegetation enhancement, Koala Trail and reserves upgrades across the Island.

## 5.3 Coastal processes and hazards

Being low-lying and surrounded by water, Raymond Island is vulnerable to impacts of coastal flooding and erosion. The coastline is diverse, with a sandy and flat shoreline toward the south and east, low-lying, and swampy land towards the north, and residential developments to the west.

Northern portions of the island are already exposed to storm tide inundation and, in some areas, permanent inundation (due to sea level rise). This is likely to increase into the future with flooding extents increasing inland and further into residential areas across the western island. Erosion is also evident across much of the island, particularly on the more exposed north east and southern coast.



In the 2007 and 2012 floods, the ferry service ceased operation, leaving many isolated or having to leave the island. In 2007, 13 houses were flooded. While the community is resilient and well-prepared, some may be more vulnerable to flooding impacts and isolation.



## 5.4 Coastal uses, reserves and facilities

Eco-tourism is a core focus for Raymond Island visitors. The southern and western foreshore hosts many facilities for both residents and tourists including:

- The Raymond Island Ferry Service (including car parking in Paynesville) and Ferry Park reserve
- The Koala Trail, Nature Trail, other boardwalks, paths and wayfinding and educational signage.
- Benches, BBQs and picnic areas
- Multiple private and publicly owned jetties along the foreshore
- Accommodation at various retreats, lodges and bed and breakfasts

Most facilities, roads, paths and residences are located across the western portion of the island. The eastern and southern sides of the island are bushland, with scattered properties and private jetties.

## 5.5 Coastal and marine management

Council hold management responsibility over the foreshore reserve from Western Boulevard, around the western side of the island through to near First Parade and Tenth Avenue. Across the remainder of the Island, the foreshore reserves and Gippsland Lakes Reserves are managed by Parks Victoria, Gunaikurnai Traditional Owners and DEECA.

The Raymond Island Urban Design Framework (2007) has guided recent development across the island. The objectives of the Framework aim to protect and enhance the natural values and vegetation, whilst maintaining the low intensity character and providing safe connections for pedestrian and cyclist movement.

The document includes three master plans for the ferry park and foreshore reserve, cycle trail, and sites of heritage interest. Recent upgrades have included:

- Improvements to the Raymond Island Public Jetty
- Raymond Island Nature Trail
- New amenities and upgraded facilities at the Ferry Park Reserve

Upgraded walking tracks integrate with each other and provide opportunities to learn about Aboriginal culture and the natural environment.

There are several ongoing Council-led projects across Raymond Island:








- Koala Trail and Discovery Experience
- Raymond Island Foreshore Landscape Plan (South Western Area)

Table 10 summarises community values, challenges and opportunities across Raymond Island, with focus areas for future management.

Figure 32 to Figure 40 map key features, values, and management arrangements across the foreshore.



Table 10. Values, challenges and opportunities for Raymond Island coastal and marine management, with focus areas for future management.

		Raymond Island			
		Values	Challenges	Opportunities	Focus for management
	Traditional Owners' rights, aspirations and knowledge	<ul style="list-style-type: none"> <li>Tatungalung people and broader Gunaikurnai connection to Country</li> <li>Evidence of use and occupation of Raymond Island – scar trees, burial sites, artefact scatters</li> <li>Lines of sight to other important places</li> <li>Remnant bushland and cultural sites in largely good condition</li> <li>Joint management of Raymond Island reserves</li> </ul>	<ul style="list-style-type: none"> <li>Unrecorded and unprotected sites and heritage</li> <li>Urban development pressures on cultural values</li> <li>Some impacts on natural ecosystem and cultural values from tourism and occupation</li> </ul>	<ul style="list-style-type: none"> <li>Maintain reserves in good condition, reconnecting and restoring parcels of remnant bushland, with potential purchase of land by Gunaikurnai</li> <li>Maintain low impacts from tourists and occupation</li> <li>Establish an Indigenous Protected Area (IPA)</li> <li>Undertake cultural surveys and formally identify/protect burial sites</li> <li>Rename streets with Gunaikurnai names</li> </ul>	<ul style="list-style-type: none"> <li>Continued management of high quality natural values and sensitive ecosystems, in collaboration with Traditional Owners.</li> <li>Investigate and increase understanding of cultural heritage and ensure protection.</li> <li>Ecologically sensitive design of tourism and recreational facilities, including better definition of public/private land and sensitive ecosystems.</li> <li>Knowledge building and longer-term planning for coastal hazards, including consideration of sea level rise, inundation (flooding) and erosion.</li> </ul>
	The marine and coastal environment	<ul style="list-style-type: none"> <li>High value natural vegetation and habitat across foreshore reserves – Gippsland Lakes Reserve</li> <li>Important vegetation communities – saltmarsh, seagrass, plains grassy woodland, damp sands herb-rich woodland</li> <li>Rare and threatened species - White bellied Sea Eagle, Fairy Tern, Eastern Curlew, Latham's Snipe, Swift Parrot, sandpipers and plovers</li> <li>Koala, kangaroo, wallaby and echidna populations and bird watching opportunities</li> <li>Significant bird breeding areas and sandbars</li> <li>Large expanses of bushland and natural character</li> </ul>	<ul style="list-style-type: none"> <li>Koala population booms and overgrazing</li> <li>Weed and pest incursions, including rabbits and foxes</li> <li>Managing vegetation loss, encroachment and removal for path access and coastal views</li> <li>Erosion along the foreshore, loss of foreshore reserve and impacts on private property</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing habitat and species protection</li> <li>Ongoing weed removal and revegetation projects</li> <li>Fox and rabbit management</li> <li>Native vegetation protection and enforcement</li> <li>Koala population monitoring and management</li> </ul>	
	Natural processes and climate change	<ul style="list-style-type: none"> <li>Pristine sandy / gravelly foreshore and coastal views</li> </ul>	<ul style="list-style-type: none"> <li>Existing erosion along large areas of shoreline – north east shoreline</li> <li>Increase in coastal hazard impacts - sea level rise</li> <li>Bushfire risk and fuel loads</li> <li>Offshore sediment movement from previous renourishment causing boating safety risks</li> <li>Increasing risk of inundation for residential areas</li> </ul>	<ul style="list-style-type: none"> <li>Nature-based coastal management opportunities e.g. revegetation and sand renourishment</li> <li>Adaptation planning and knowledge sharing</li> <li>Resilient design of facilities to respect changing coastal processes and hazards</li> </ul>	
	Sustainable use and development	<ul style="list-style-type: none"> <li>Lakeside boardwalks and access along the coast</li> <li>Quiet and tranquil areas</li> <li>Eco-sensitive tourism and recreational facilities</li> <li>Accessibility to walking paths in the island</li> <li>Raymond Island ferry and terminal precinct</li> </ul>	<ul style="list-style-type: none"> <li>Tourism impacts on sensitive ecosystems</li> <li>Separation of tourism activities, private land and bushland reserves</li> <li>Ferry administration and service</li> </ul>	<ul style="list-style-type: none"> <li>Upgrade tourism experiences in eco-sensitive manner, considering appropriate siting and design</li> <li>Better define tourism areas, tracks and facilities to minimise impacts on ecosystems and promote sustainable eco-tourism experiences</li> <li>Monitor and review ferry service arrangements</li> </ul>	
	Stewardship, knowledge, engagement and collaboration	<ul style="list-style-type: none"> <li>Community groups - Raymond Island Landcare, Raymond Island Community Association, Raymond Island Sustainability Association, and Koala Island foundation.</li> <li>Sustainability-minded residents, stewardship and care for the marine and coastal environment</li> </ul>	<ul style="list-style-type: none"> <li>Poor access management signage and lack of separation between sensitive areas and private/public land</li> <li>Signage that detracts from rural setting and views</li> <li>Confusion in land management arrangements</li> </ul>	<ul style="list-style-type: none"> <li>Further support for community groups</li> <li>Consolidate and update signage, sympathetic to natural setting</li> </ul>	

# Raymond Island mapping: Traditional Owners and cultural values



### Traditional Owners and Cultural Values

- Areas of Cultural Heritage Sensitivity
- Jointly managed parks and reserves (Gunaikurnai Land and Waters Aboriginal Corporation and Parks Victoria)

### Inset map

#### Registered Aboriginal Parties

- Gunaikurnai Land and Waters Aboriginal Corporation
- Other Registered Aboriginal Parties

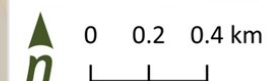
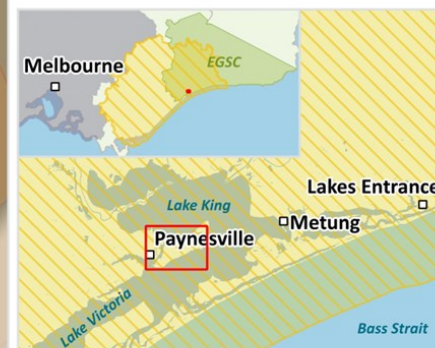


Figure 32. Registered Aboriginal Parties, culturally sensitive areas and Joint Management areas for Raymond Island.

# Raymond Island mapping: Environmental values



Figure 33. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Raymond Island.

# Raymond Island mapping: Environmental overlays

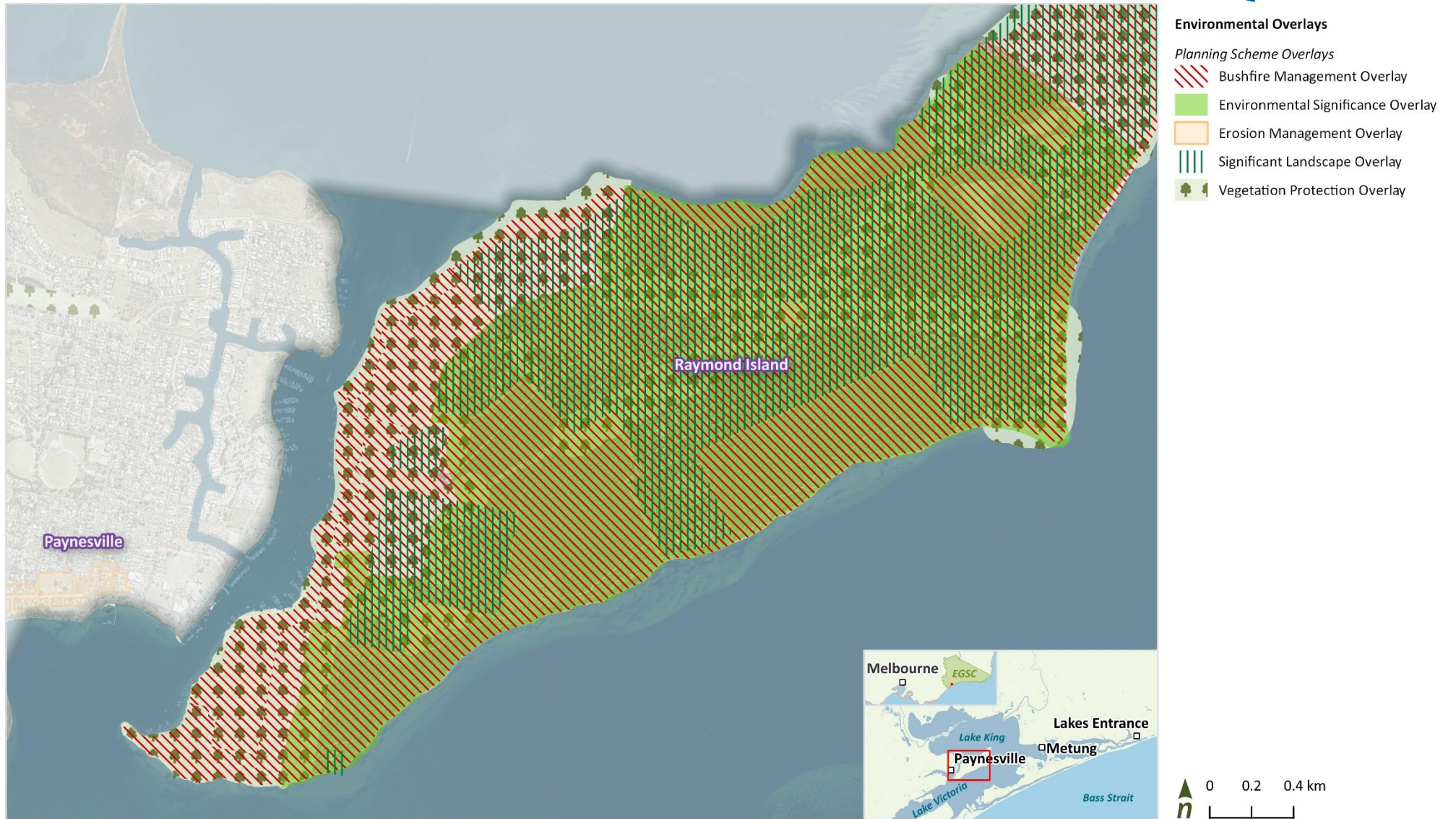


Figure 34. Environmental and land management planning overlays for Raymond Island.

# Raymond Island mapping: Coastal hazards



### Coastal Hazards

Gippsland Lakes/90 Mile Beach LCHA\*:

10% AEP Gippsland Lakes flood extent

- 0.0 m sea level rise (2014 baseline)
- 0.2 m sea level rise
- 0.4 m sea level rise
- 0.8 m sea level rise

Lake shoreline erosion hazard extent

- 0.8 m sea level rise

AEP: Annual Exceedence Probability (AEP) is the probability of an event occurring in any given year.

Data sources:  
\*Water Technology 2014 - Gippsland Lakes and 90 Mile Beach Local Coastal Hazard Assessment (LCHA) Project

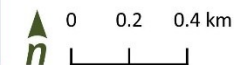


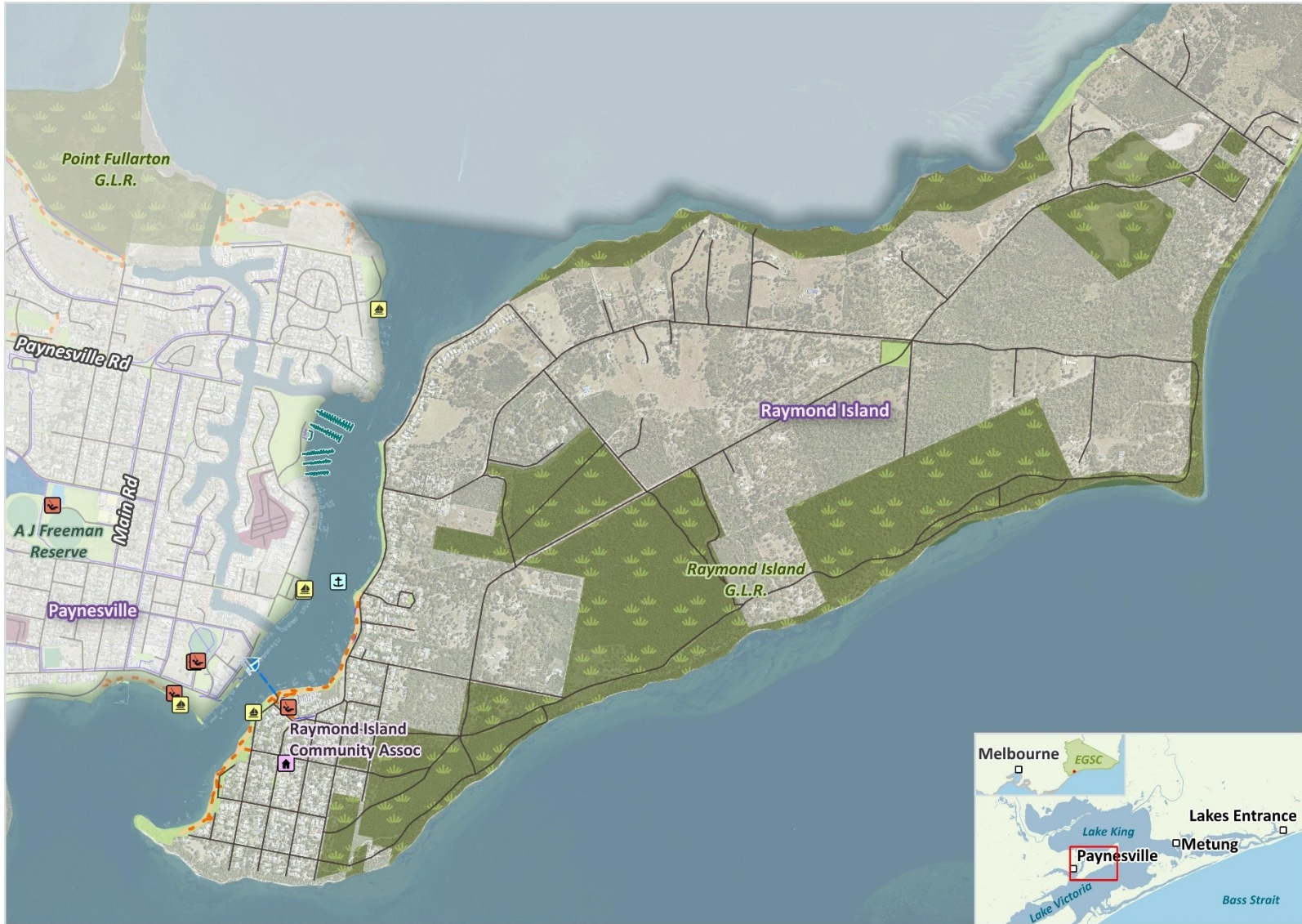
Figure 35. Coastal hazard mapping from the Gippsland Lakes/90 Mile Beach LCHA for Raymond Island.

# Raymond Island mapping: Coastal protection and drainage infrastructure



Figure 36. Coastal protection and drainage infrastructure for Raymond Island.

# Raymond Island mapping: Recreation and transport



## Recreation and Transport

- Boating**
  - Boat mooring
  - Boat ramp
  - Marinas and jetties
- Facilities**
  - Playground
  - Community facility
  - Caravan park
  - Education complex
- Open space**
  - Bowling green
  - Reserve (park)
  - Sports ground
  - Tennis court
  - Protected areas
- Transport**
  - Roads
  - Ferry route
  - Footpath
  - Trail

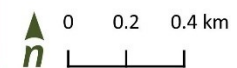
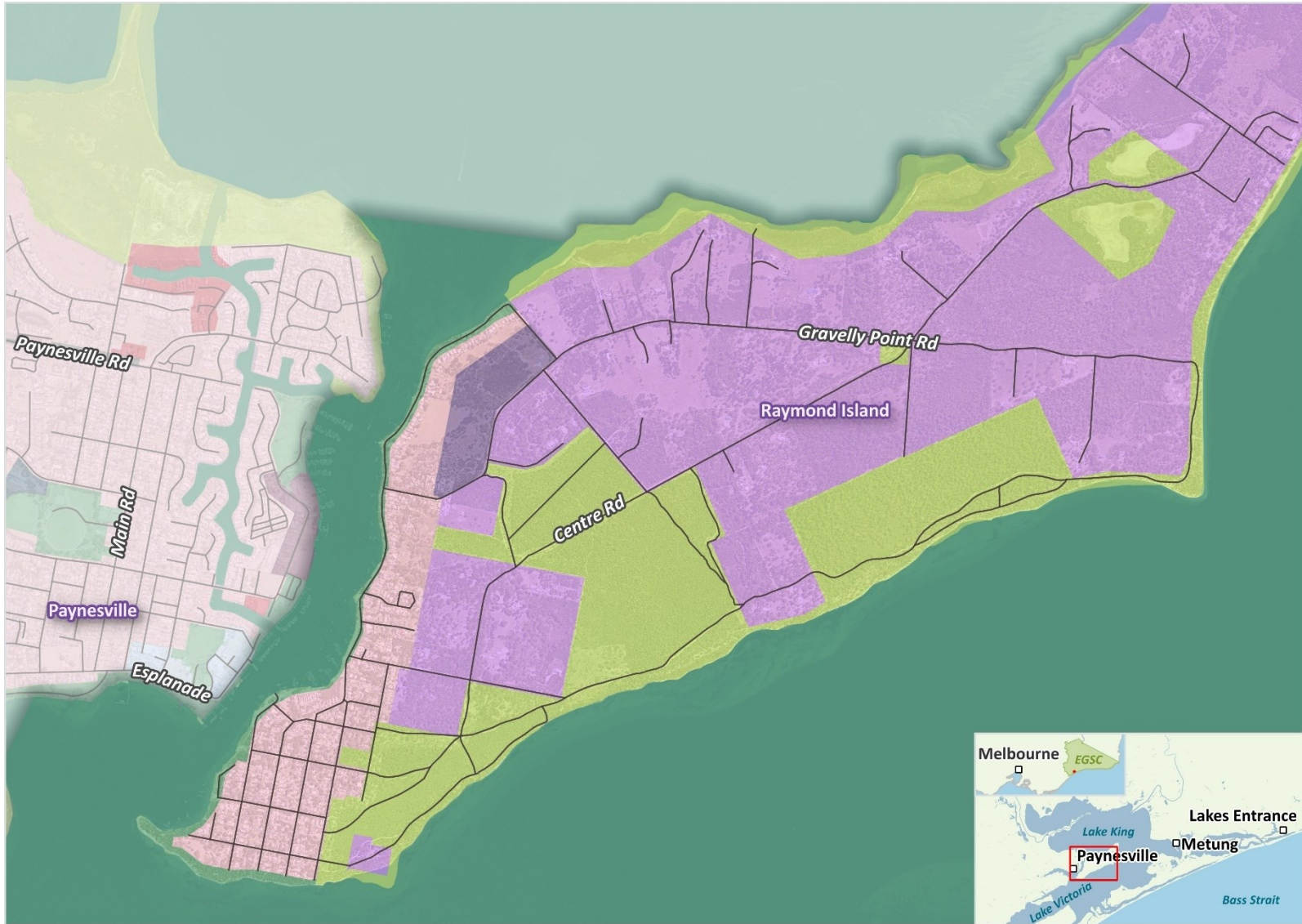


Figure 37. Recreation facilities and transport networks for Raymond Island.

# Raymond Island mapping: Planning scheme zones



### Planning Scheme Zones

- Commercial 1 zone
- General residential zone - Schedule 1
- Industrial 3 zone
- Low density residential zone
- Mixed use zone
- Public conservation and resource zone
- Public park and recreation zone
- Rural living zone- Schedule 2
- Transport zone 2 - Principal road network

### Transport

— Roads

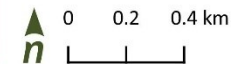





Figure 38. Planning scheme zones for Raymond Island.

# Raymond Island mapping: Planning overlays



- Planning Overlays**
-  Property boundaries
  - Planning Scheme Overlays**
  -  Heritage Overlay
  -  Environmental Audit Overlay
  -  Land Subject To Inundation Overlay
  -  Design and Development Overlay

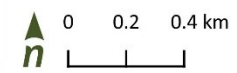


Figure 39. Other planning scheme overlays for Raymond Island.

# Raymond Island mapping: Land management arrangements



- Land Tenure**
- Public Land Management*
- East Gippsland Shire Council
  - Parks Victoria
  - Department of Energy, Environment and Climate Action
  - Department of Transport
  - Trustees Committee Of Management
  - Jointly managed parks and reserves (Gunaikurnai Land and Waters Aboriginal Corporation)
- Other features*
- Roads
  - Property boundaries
  - Built up areas

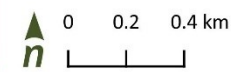


Figure 40. Public land management arrangements for Raymond Island.



## 5.6 Management actions

Table 11 details the CMMP management actions for Raymond Island.

Figure 41 presents site-specific management actions and maps activity and recreation nodes.

Table 11. Raymond Island management actions

Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 1: Acknowledge Traditional Owners' rights, aspirations and knowledge</b>	RI1.1	Guided by GLaWAC, support identification, management and protection of cultural heritage values across Raymond Island. In alignment with Shire Wide actions, this includes: <ul style="list-style-type: none"> <li>Supporting GLaWAC to identify unrecorded cultural heritage sites.</li> <li>Continuing to implement appropriate planning overlays and controls such as Cultural Heritage Management Plans to protect cultural heritage.</li> <li>Collaborating with GLaWAC to better understand cultural values and inform future protection.</li> <li>Incorporating culturally-sensitive design into all works across Council-managed coastal reserves.</li> </ul>	Ongoing	Participate	GLaWAC
	RI1.2	In collaboration with GLaWAC and where desired by Traditional Owners, investigate initiatives to share Aboriginal stories, knowledge, and significant places across the island. Includes opportunities to incorporate cultural values along the foreshore to create a sense of place to support cultural, and spiritual needs of Aboriginal people through: <ul style="list-style-type: none"> <li>Implementing interpretive signage to share values, knowledge and stories.</li> <li>Guided by GLaWAC, investigating the process and opportunities for Gunaikurnai street renaming throughout Raymond Island to represent Traditional Owner history and living culture.</li> </ul>	3-5 years	Lead	GLaWAC
	RI1.3	Support and collaborate with GLaWAC, Parks Victoria and other stakeholders to <ul style="list-style-type: none"> <li>Investigate the process for establishing an Indigenous Protected Area within Raymond Island.</li> <li>Investigate opportunities for strategic purchase of land parcels or land management transfers to GLaWAC throughout Raymond Island.</li> <li>Investigate potential funding pathways and co-investment opportunities.</li> <li>Provide strategic planning advice and two-way knowledge transfer.</li> </ul>	3-5 years	Participate	GLaWAC, Parks Victoria
<b>Objective 2: Protect and enhance the marine and coastal environment</b>	RI2.1	Continue to support GLaWAC, DEECA and Parks Victoria to manage koala populations in line with the Victorian Koala Management Strategy 2023, including: <ul style="list-style-type: none"> <li>Participation in the annual Raymond Island Koala Program to monitor the koala population.</li> <li>Managing population spikes and resultant overgrazing and defoliation of eucalypts.</li> <li>Supporting initiatives to increase extent of koala habitat and improve habitat connectivity</li> </ul> Aligns with Shire wide Action EG5.2.	Ongoing	Participate	GLaWAC, DEECA and Parks Victoria



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 3: Respect natural processes and strengthen resilience to climate change</b>	RI3.1	Investigate options to manage emerging coastal hazard risks across Raymond Island, including measures to avoid risk and the use of nature-based solutions.	3-5 years	Lead	GLaWAC, Parks Victoria, DEECA, EGCSMA, research institutes
	RI3.2	In collaboration with DEECA, monitor and assess coastal protection structures across Raymond Island, including seawalls, revetments and other structures. Consider opportunities for enhancing ecological outcomes (e.g. living seawalls) or alternatives to protection infrastructure through hybrid/nature-based solutions and adaptation planning. Embed State policy to consider adaptation options in order of preference. Aligns with Action EG3.5.	0-3 years	Participate	DEECA
<b>Objective 4: Use and develop sustainably</b>	RI4.1	In alignment with Action EG4.1, utilise activity and recreation nodes to clearly delineate distinct purposes and uses within foreshore zones, and ensure efficient development through co-location, partnership use, and consolidation of community assets. Includes delineation of: <ul style="list-style-type: none"> <li>• Raymond Island Ferry Terminal and Boat Ramp as main activity node.</li> </ul>	0-3 years	Lead	All other land managers
	RI4.2	In alignment with East Gippsland Housing and Settlement Strategy (2023), continue to foster Rural Town character and prioritisation of natural setting through: <ul style="list-style-type: none"> <li>• Maintenance of existing foreshore facilities and investment in facilities, based on assessment of need.</li> <li>• Only small-scale housing development within existing residentially zoned areas.</li> <li>• Promoting adherence to township boundaries, planning overlays and land use planning.</li> </ul>	Ongoing	Lead	
	RI4.3	Progress and complete upgrade works to foreshore precincts and facilities that are currently underway including Koala Trail and Discovery Experience. Review designs and planning to ensure proposed works and upgrades align with CMMP objectives, principles, actions and State policy. Ensure that foreshore facilities (e.g. picnic facilities, toilets, water-access facilities) continue to be upgraded over time as infrastructure ages.	Ongoing	Lead	GLaWAC, Parks Victoria
	RI4.4	Continue to operate the Raymond Island Ferry service and monitor usage, service levels, user feedback and costs to ensure service is run as effectively and efficiently as possible to service Raymond Island residents and visitors.	Ongoing	Lead	
	RI4.5	Investigate opportunities to upgrade tourism and recreational facilities with ecologically and culturally sensitive design. Ensure clear definition between tourism areas, such as tracks and facilities, private land and bushland reserves to limit impacts on sensitive ecosystems.	0-3 years, then ongoing	Lead	GLaWAC, Parks Victoria
<b>Objective 5: Take a stewardship approach, build understanding and knowledge, engage and collaborate</b>	RI5.1	Continue to support and collaborate with local volunteer community environment groups e.g. Raymond Island Landcare, the Koala Island Foundation. Includes: <ul style="list-style-type: none"> <li>• Promoting community group activities in the coastal and marine space.</li> <li>• Fostering open communication and engagement channels with community groups.</li> <li>• Continuing to seek opportunities to increase community involvement, including through community grants and Council partnerships.</li> <li>• Promoting and increasing citizen science opportunities (including fauna monitoring - Action RI2.1).</li> </ul>	Ongoing	Lead	All other management agencies, environmental and community groups and organisations



Long-term objective	No.	Action	Timeframe	Council role	Partners
Objective 5: Take a stewardship approach, build understanding and knowledge, engage and collaborate (cont.)	R15.2	<p>In alignment with Shire wide Action EG5.3, review consolidate and update foreshore signage across Raymond Island to:</p> <ul style="list-style-type: none"> <li>• Ensure consistency.</li> <li>• Promote connectivity and wayfinding.</li> <li>• Communicate land tenure and management arrangements (private vs. public land).</li> <li>• Celebrate unique environments, history and culture, including identification of ecologically sensitive environments.</li> <li>• Support implementation of activity and recreation nodes (Action R14.1).</li> </ul> <p>Includes delivery through Koala Trail and Discovery Experience works and ensuring new signs are sympathetic to the natural setting.</p>	3-5 years	Lead	Other land managers, GLaWAC
	R15.3	<p>Clarify and improve communication of distinct land and asset management roles and responsibilities within Raymond Island. Define and communicate management boundaries and public versus private land.</p>	Ongoing	Lead	GLaWAC, Parks Victoria

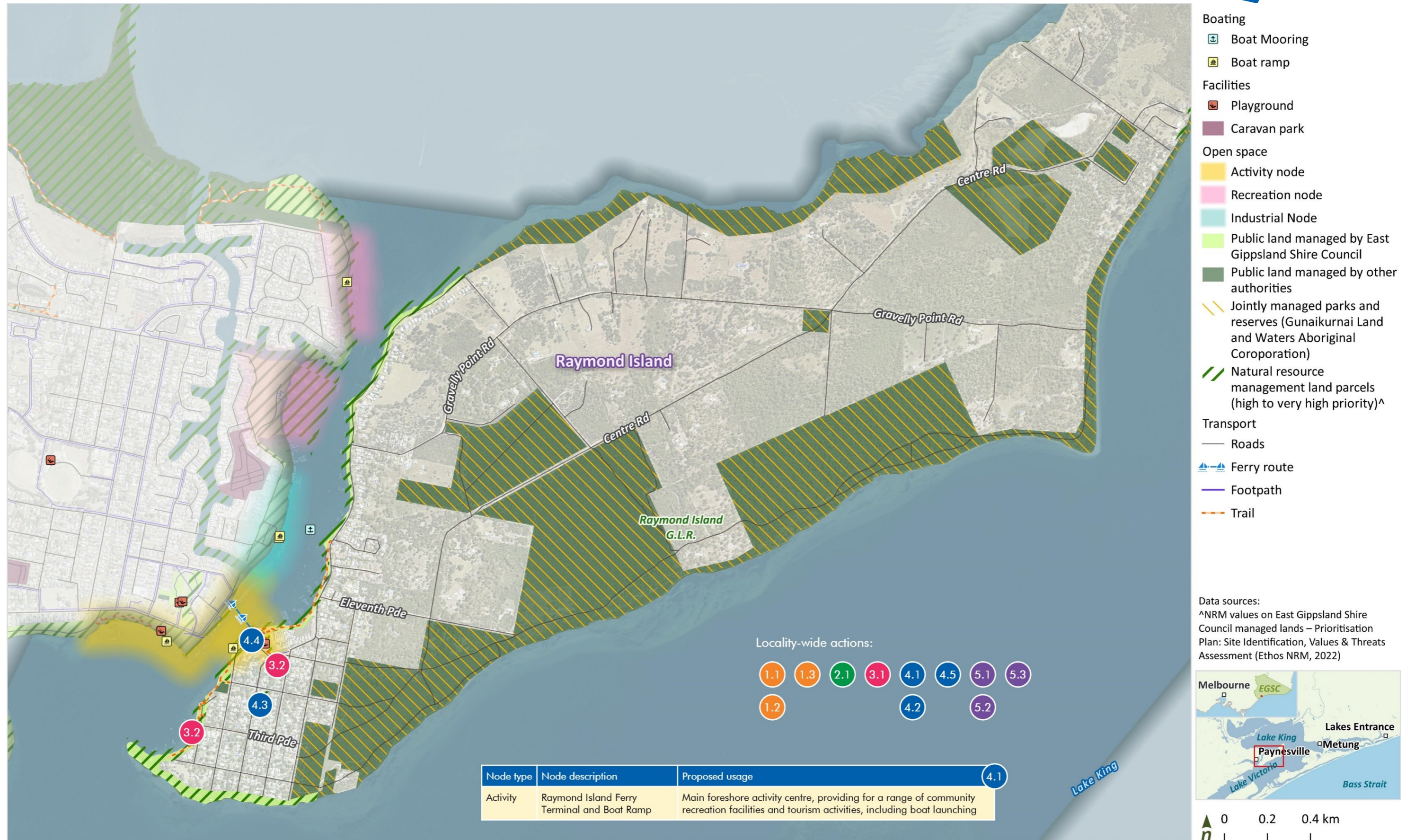


Figure 41. Raymond Island management actions and nodes

## 6 Eagle Point

Eagle Point is a small town on the western shore of Lake King, 9 km south of Bairnsdale. Close to the Mitchell River Silt Jetties, Eagle Point is named after the White-bellied Sea Eagles that frequent the area. The lifestyle-based town is known for its surrounding natural environment, caravan park, jetties, and water access.

Council have recently made increased efforts to improve and expand recreational and community facilities and amenities to accommodate the growing population and tourism needs. These upgrades provide a Foreshore Hub as a focal point for the town, while maintaining the natural surrounds and character.

### 6.1 Community and connection to coast

Eagle Point has a small, but growing population of around 1,300. The population has nearly doubled in 10 years (2011-2021). 45% growth is projected across the broader Paynesville, Newlands Arm and Eagle Point region by 2041<sup>2</sup>. The community hosts retirees and families, with a high proportion of holiday homes.

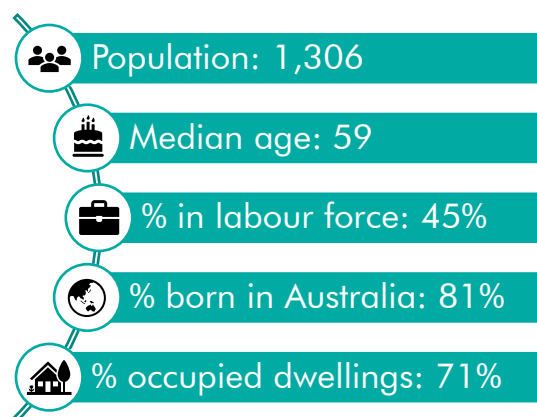


Figure 42. Key statistics for Eagle Point (ABS, 2021).

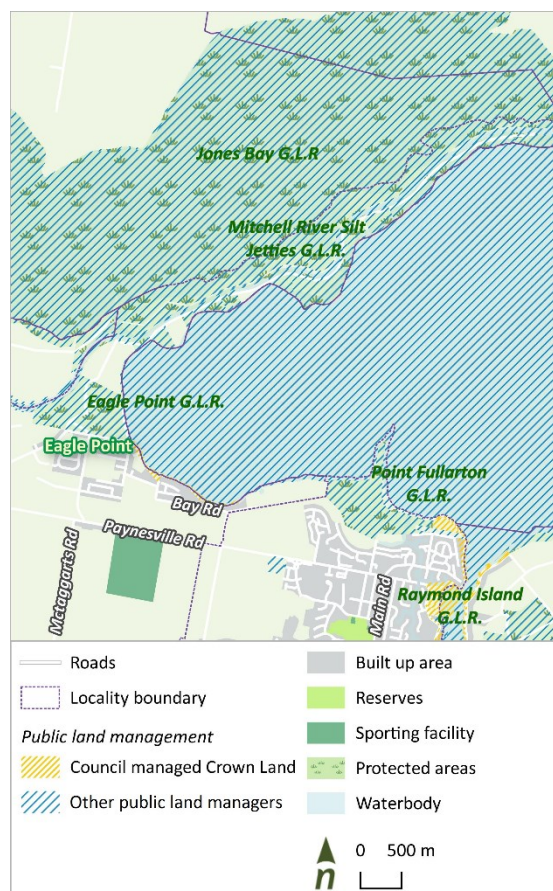


Figure 43. Eagle Point locality.

The Eagle Point Structure Plan (2019) guides broader development of the township, including township boundaries and sensitive development of the area.

The Gunaikurnai people are the Traditional Owners of the areas around Eagle Point, represented by GLaWAC. GLaWAC have indicated the Mitchell River Silt Jetties are an extremely important and sensitive site, and they record atrocities committed in the surrounding areas (Parks Victoria, 2015) It is likely that the Gunaikurnai people would have used the silt jetties for access to Lake King, areas of Jones Bay, the Mitchell River and the resources that these areas held (Parks Victoria, 2015).

<sup>2</sup> <https://forecast.id.com.au/east-gippsland/about-forecast-areas?WebID=180>



## 6.2 The coastal environment

The Eagle Point foreshore fronts the western shores of Lake King. The Mitchell River Silt Jetties sit to the north and Point Fullarton to the south. The Silt Jetties form the longest digitate delta in the southern hemisphere and are a site of international geomorphological significance.

The surrounding reserves, including Eagle Point Flora and Fauna Reserve (EPFFR) to the north, host a variety of nationally listed ecological communities including:

- Gippsland red gum grassy woodland and associated native grassland (critically endangered)
- Natural damp grassland of the Victorian coastal plain
- Subtropical and temperate coastal saltmarsh

Along with egrets, ibis, gulls and other waterbirds, a variety of threatened birdlife frequent the Eagle Point area including:

- White-bellied Sea Eagle
- Caspian and Whiskered Terns
- Powerful Owl
- Pacific Golden Plover
- Musk Duck

The EPBC Act listed Regent Honeyeater, Australasian Bittern and Diamond Firetail have also been recorded in the area<sup>3</sup>.



## 6.3 Coastal processes and hazards

The Eagle Point foreshore is low-lying in areas, with higher ground behind. Inundation currently impacts the swampy environments along Bay Road and the Eagle Point to Paynesville walking track. Past flooding events, such as in 2007, have inundated properties, car parks, boat ramps, and access roads, also isolating residents across the Silt Jetties.



Inundation is likely to increase with sea level rise, impacting on private properties along Bay Road, Boat Ramp Road and towards Point Fullarton. Areas across the Silt Jetties and EPFFR are also vulnerable to inundation from combined flows from the Mitchell River and coastal influences, especially during storm events. The main Foreshore Hub and township sit on higher terrain, less prone to inundation.

Changes in water salinity across the Lakes causes vegetation dieback and increased coastal erosion. The Eagle Point foreshore already sees erosion of the sandy foreshore. Beach renourishment and formal and informal protection structures are currently utilised to manage coastal hazard risks.



<sup>3</sup> <https://naturekit.biodiversity.vic.gov.au/>



## 6.4 Coastal uses, reserves and facilities

The Eagle Point foreshore is popular for its views of the natural surrounds, fishing, water activities, holiday accommodation and camping. Along the foreshore, there are extensive attractions available for residents and visitors including:

- The Eagle Point and Lake King Waterfront Caravan Parks
- Boating infrastructure such as boat ramps and public and private jetties
- Surrounding reserves and parks such as the Mitchell River Silt Jetties, Macleod Morass Wildlife and Eagle Point Flora and Fauna Reserves
- The Eagle Point to Paynesville walking track

The hub of the community surrounds the Caravan Park, school and foreshore reserve. Council recently completed works to develop a Foreshore Hub including events spaces for community use, Caravan Park offices, a café, decking, toilets and opportunities for commercial ventures such as water sports hire.

## 6.5 Coastal and marine management

Council manages the Eagle Point foreshore reserve from School Road through to the eastern township boundary along Bay Road. Parks Victoria are the land managers for the Eagle Point Flora and Fauna Reserve and foreshore around Point Fullarton.

The Eagle Point Structure Plan and Eagle Point Marine and Coastal Management Plan (both 2019) guide development and foreshore management. The Marine and Coastal Management Plan provides strategies, objectives and actions to:

- Improve connectivity and walkability through pathways
- Maintain and improve recreational facilities and signage
- Integrate activity areas and define a central community precinct
- Maintain and protect environmental values, preserve native vegetation and manage private encroachment
- Plan for and manage climate change impacts
- Recognise and protect cultural values
- Engage with community groups

Recently completed major Council-led projects across Eagle Point include the Eagle Point Foreshore Hub Development and Eagle Point to Paynesville Master Plan.

Table 12 summarises community values, challenges and opportunities across Eagle Point, with focus areas for future management.

Figure 44 to Figure 52 map key features, values, and management arrangements across the foreshore.

Eagle Point Foreshore Hub entrance

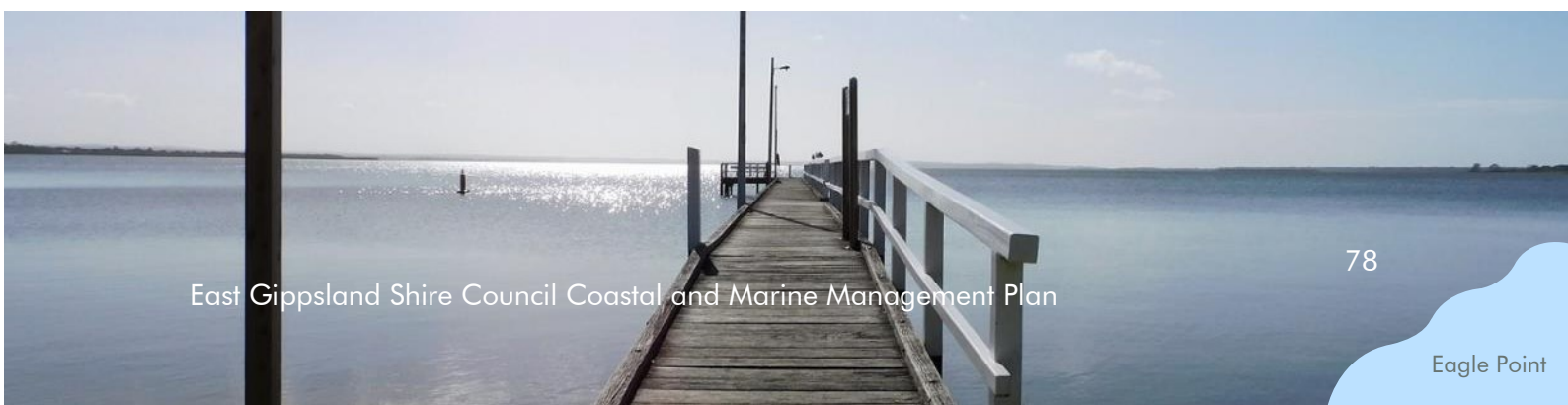





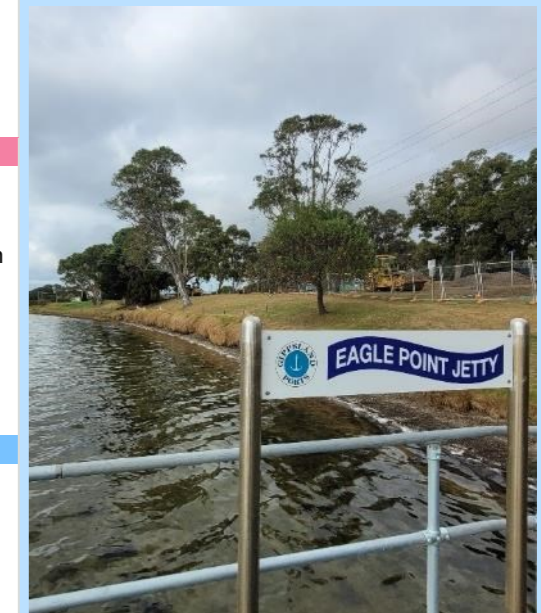
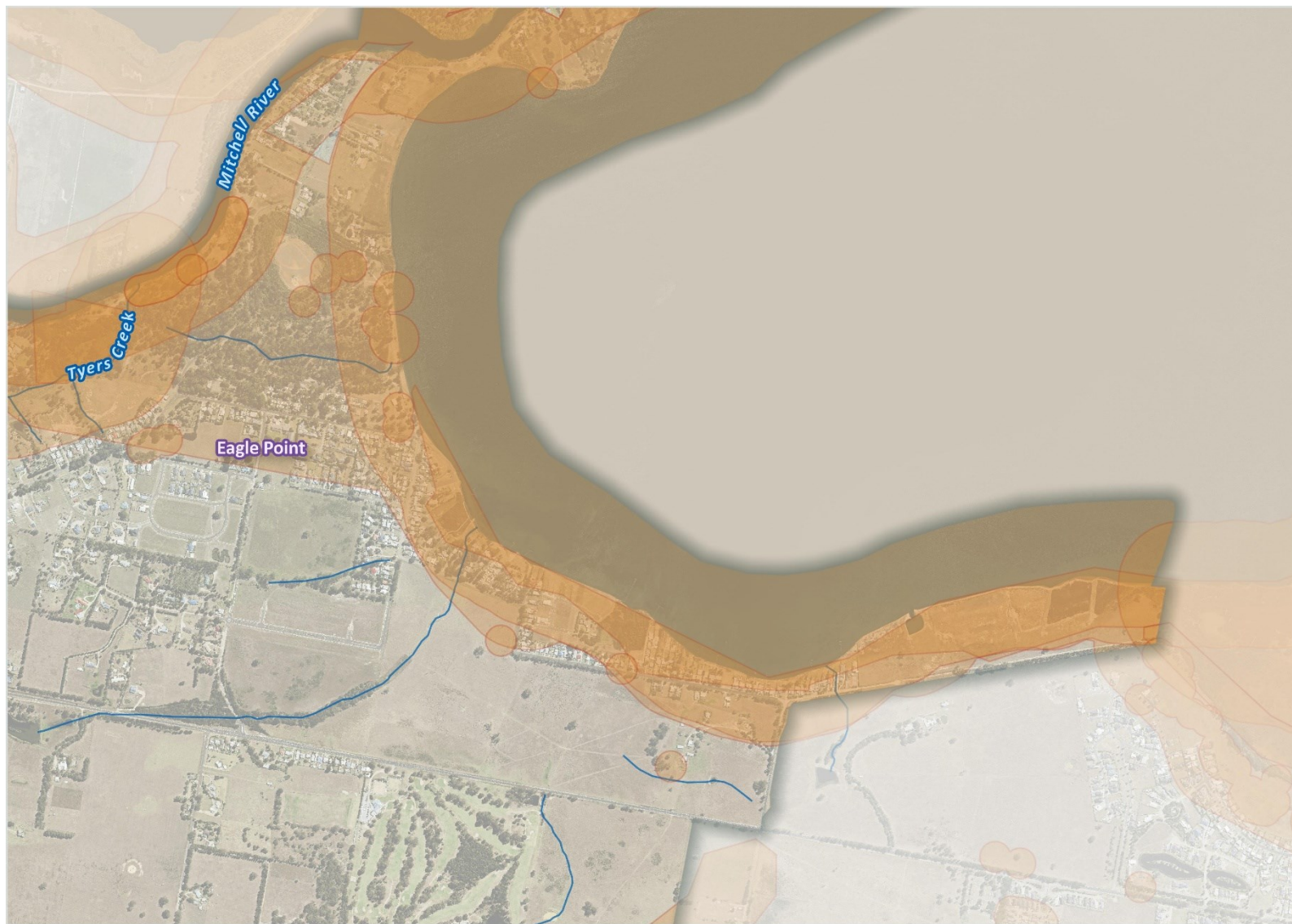


Table 12. Values, challenges and opportunities for Eagle Point coastal and marine management, with focus areas for future management.

		Eagle Point			
		Values	Challenges	Opportunities	Focus for management
	Traditional Owners' rights, aspirations and knowledge	<ul style="list-style-type: none"> <li>Tatungalung people and broader Gunaikurnai connection to Country</li> <li>Evidence of use and occupation of camping grounds – middens, artefact scatters, scar trees</li> <li>Other significant Aboriginal Heritage places and sites (recorded and unrecorded)</li> <li>Other cultural heritage values of the natural landscape - the Bluff, the Mitchell River, remnant vegetation and the Mitchell River Silt Jetties</li> </ul>	<ul style="list-style-type: none"> <li>Limited understanding/ knowledge of Eagle Point's cultural values and sites, with potential for this knowledge to be lost over time</li> <li>Lack of clarity around roles, responsibilities and relationships in managing cultural heritage and values</li> </ul>	<ul style="list-style-type: none"> <li>Identify unrecorded Aboriginal Heritage sites</li> <li>Initiatives to share Aboriginal stories and knowledge, where desired by Traditional Owners</li> <li>Continue appropriate planning overlays and controls to protect sites</li> </ul>	<ul style="list-style-type: none"> <li>Improved connectivity and safety in walking tracks, on-land facilities, in-water uses and between different user groups</li> <li>Water quality and stormwater management through best-practice water sensitive urban design and education</li> <li>Continued natural value management and protection</li> </ul>
	The marine and coastal environment	<ul style="list-style-type: none"> <li>High value natural vegetation and habitat across foreshore reserves – Eagle Point Flora Fauna Reserve</li> <li>Important vegetation communities - estuarine wetlands, limestone box forest, coastal saltmarsh and redgum grassy woodland</li> <li>Rare and threatened species – White-bellied Sea Eagle, Australasian Bittern terns, owls, bats, plovers</li> <li>Good water quality and stormwater management</li> <li>Surrounding ecosystems, reserves and geological features – Macleod Morass, The Bluff and Silt Jetties</li> </ul>	<ul style="list-style-type: none"> <li>Invasive species, weeds and pests – e.g. rabbits</li> <li>Pressures from vehicles and erosion on vegetation</li> <li>Private land encroachment into foreshore reserves</li> <li>Gaps in remnant vegetation and lack of protection and regeneration of remnant trees</li> <li>Stormwater quality, sewage releases and pollution from urban development zones, including inappropriate drainage and discharge points and lack of monitoring</li> <li>Seaweed build up and management with impacts on aesthetics</li> </ul>	<ul style="list-style-type: none"> <li>Enhance remnant vegetation and manage weeds</li> <li>Continued protection of natural values through access management, pest control and education</li> <li>Improved monitoring and communication around stormwater and sewage discharge.</li> <li>Erosion management along the foreshore to enhance vegetation value</li> </ul>	<ul style="list-style-type: none"> <li>Investigate coastal hazard impacts, connectivity through walking tracks and public land encroachment</li> <li>Investigate and increase understanding of cultural heritage and ensure protection.</li> </ul>
	Natural processes and climate change	<ul style="list-style-type: none"> <li>Nearby natural geomorphological features including The Bluff and the Mitchell River Silt Jetties</li> <li>Safe swimming areas</li> <li>Current erosion management and protection structures</li> </ul>	<ul style="list-style-type: none"> <li>Coastal flooding and erosion impacts - walking tracks, recreational assets, vegetation, residences</li> <li>Increase in coastal hazard impacts - sea level rise</li> <li>Potential impacts from coastal acid sulphate soils</li> <li>Bushfire risk management, particularly at EPFFR</li> <li>Erosion and flooding of nearby areas, increasing with sea level rise – e.g. Mitchell River Silt Jetties</li> </ul>	<ul style="list-style-type: none"> <li>Beach renourishment to maintain sandy beach</li> <li>Maintain coastal protection structures</li> <li>Investigate potential coastal hazard impacts, adaptation options and nature-based solutions</li> <li>Update / enforce coastal hazard planning overlays</li> <li>Best-practice water sensitive urban design and monitoring to improve stormwater quality and discharge points</li> </ul>	
	Sustainable use and development	<ul style="list-style-type: none"> <li>Serene natural setting and quiet village character</li> <li>Walking tracks - foreshore connectivity to Paynesville</li> <li>Ramp/jetty facilities to support water-based activities - boating, kayaks, jet skiing and windsurfing</li> <li>Facilities to support other recreational activities - walking, fishing, and safe swimming</li> <li>Tourism and recreational attractions - camping and caravan parks, Foreshore Hub</li> <li>Good water quality for swimming and safe boating</li> <li>Facilities to support recreational activities toilets, tennis courts, playgrounds, BBQs, picnic shelters</li> </ul>	<ul style="list-style-type: none"> <li>Residential development expansion and associated environmental and cultural impacts</li> <li>The quality of infrastructure along the foreshore</li> <li>Lack of access, connectivity and safety across walking and cycling tracks</li> <li>Conflicts between water-users – jet skis and safe swimming</li> </ul>	<ul style="list-style-type: none"> <li>Improve connectivity and safety of walking tracks, including upgraded connection to Paynesville.</li> <li>Improved communication of boating zones and safety requirements</li> <li>Communication and enforcement of Crown land encroachment</li> <li>Complete foreshore upgrades, as planned</li> </ul>	
	Stewardship, knowledge, engagement and collaboration	<ul style="list-style-type: none"> <li>Community groups – Eagle Point Landcare and active management of the Eagle Point Flora and Fauna Reserve</li> <li>Broader public benefit for foreshore reserves</li> </ul>	<ul style="list-style-type: none"> <li>Lack of signage, both interpretive and wayfinding</li> <li>Private frontage encroachment and unclear property boundaries</li> </ul>	<ul style="list-style-type: none"> <li>Upgrades to signage</li> <li>Improve engagement with and education of private landowners</li> </ul>	



# Eagle Point mapping: Traditional Owners and cultural values



### Traditional Owners and Cultural Values

Areas of Cultural Heritage Sensitivity

#### Other Features

Creeks and waterways

### Inset map

#### Registered Aboriginal Parties

Gunaikurnai Land and Waters Aboriginal Corporation

Other Registered Aboriginal Parties

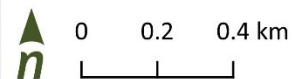


Figure 44. Registered Aboriginal Party areas, culturally sensitive areas and Joint Management areas for Eagle Point.

# Eagle Point mapping: Environmental values

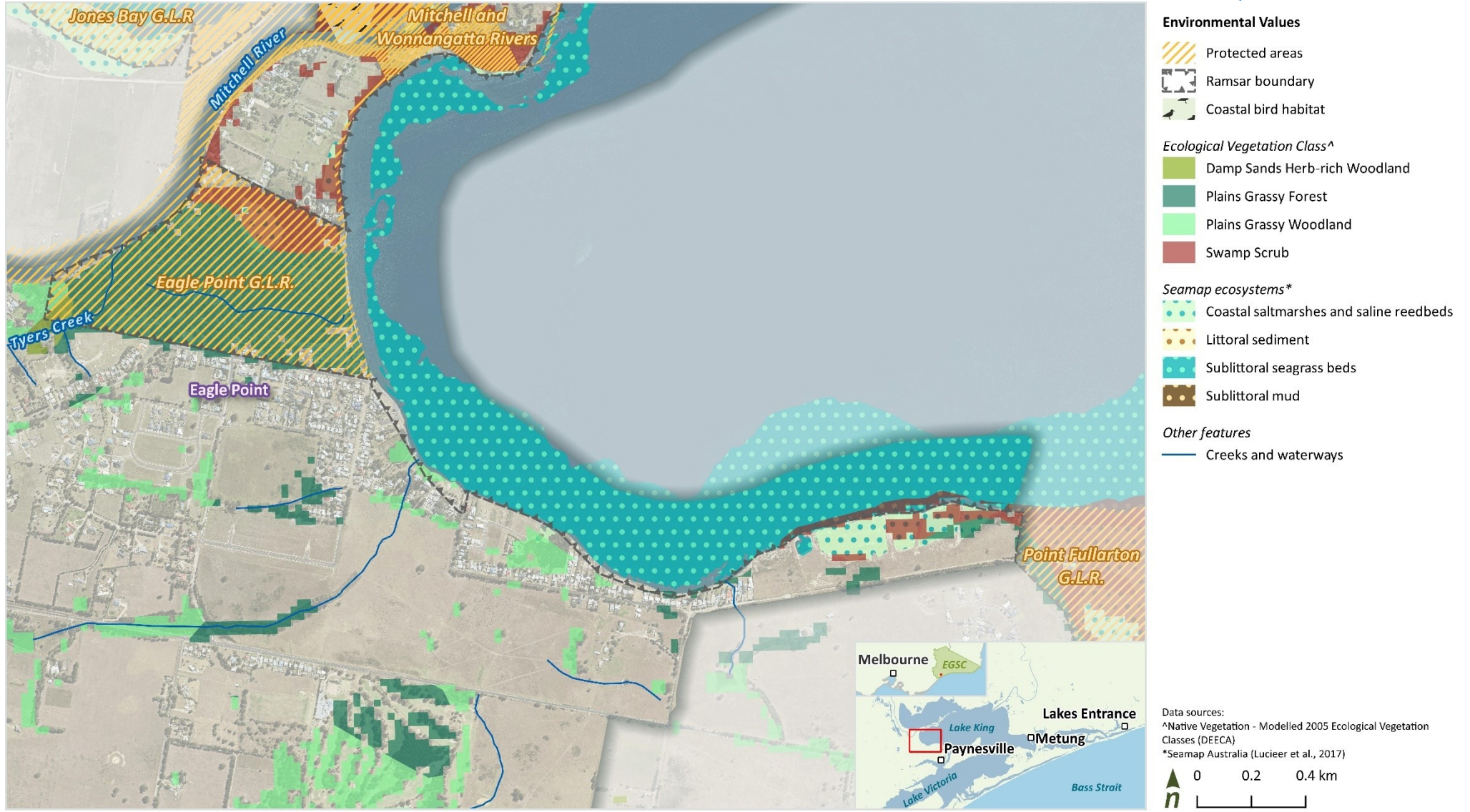
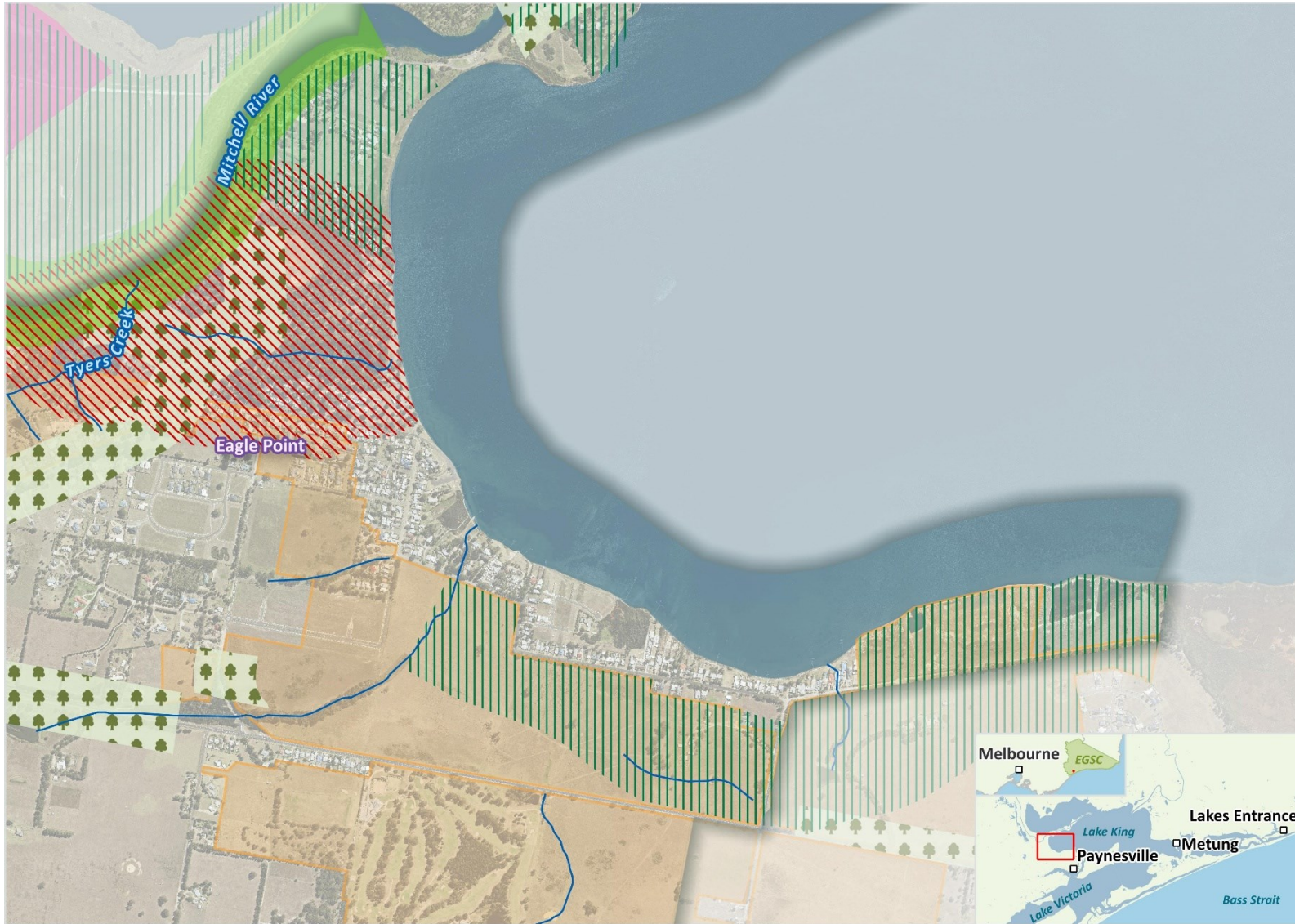








Figure 45. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Eagle Point.

# Eagle Point mapping: Environmental overlays




### Environmental Overlays

#### Planning Scheme Overlays

-  Bushfire Management Overlay
-  Environmental Significance Overlay
-  Erosion Management Overlay
-  Salinity Management Overlay
-  Significant Landscape Overlay
-  Vegetation Protection Overlay

#### Other features

-  Creeks and waterways

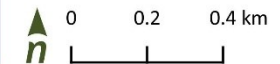
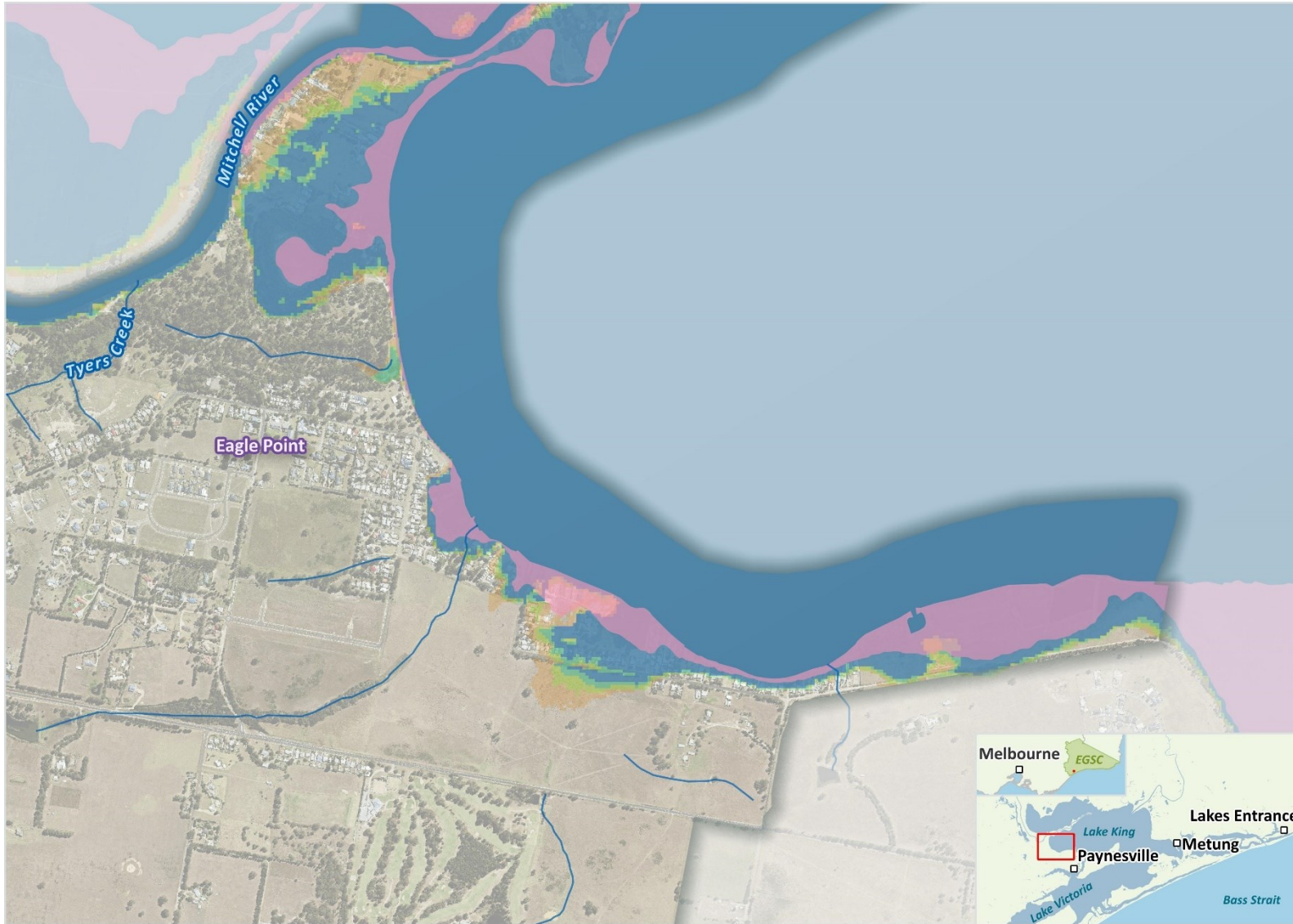


Figure 46. Environmental and land management planning overlays for Eagle Point.

# Eagle Point mapping: Coastal hazards



### Coastal Hazards

#### Gippsland Lakes/90 Mile Beach LCHA\*:

#### 10% AEP Gippsland Lakes flood extent

- 0.0 m sea level rise (2014 baseline)
- 0.2 m sea level rise
- 0.4 m sea level rise
- 0.8 m sea level rise

#### Lake shoreline erosion hazard extent

- 0.8 m sea level rise

#### Other features

- Creeks and waterways

AEP: Annual Exceedence Probability (AEP) is the probability of an event occurring in any given year.

Data sources:  
\*Water Technology 2014 - Gippsland Lakes and 90 Mile Beach Local Coastal Hazard Assessment (LCHA) Project

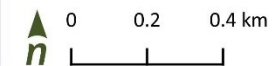
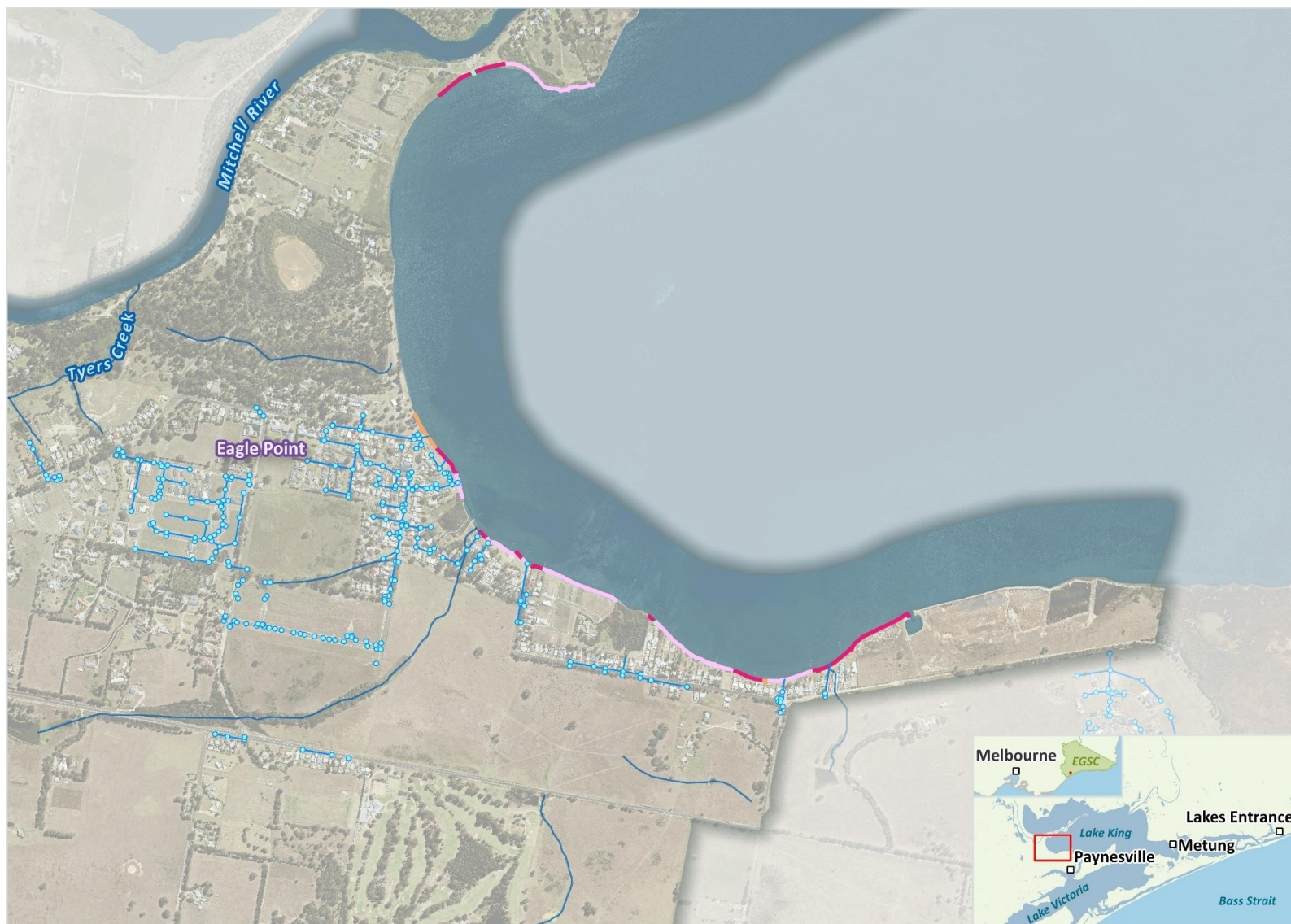


Figure 47. Coastal hazard mapping from the Gippsland Lakes/90 Mile Beach LCHA for Eagle Point.

# Eagle Point mapping: Coastal protection and drainage infrastructure



- Coastal Infrastructure**
- Protection Structures*
- Groyne
  - Revetment
  - Seawall
  - Unknown
- Drainage*
- Stormwater pit
  - Stormwater pipe
- Other features*
- Creeks and waterways

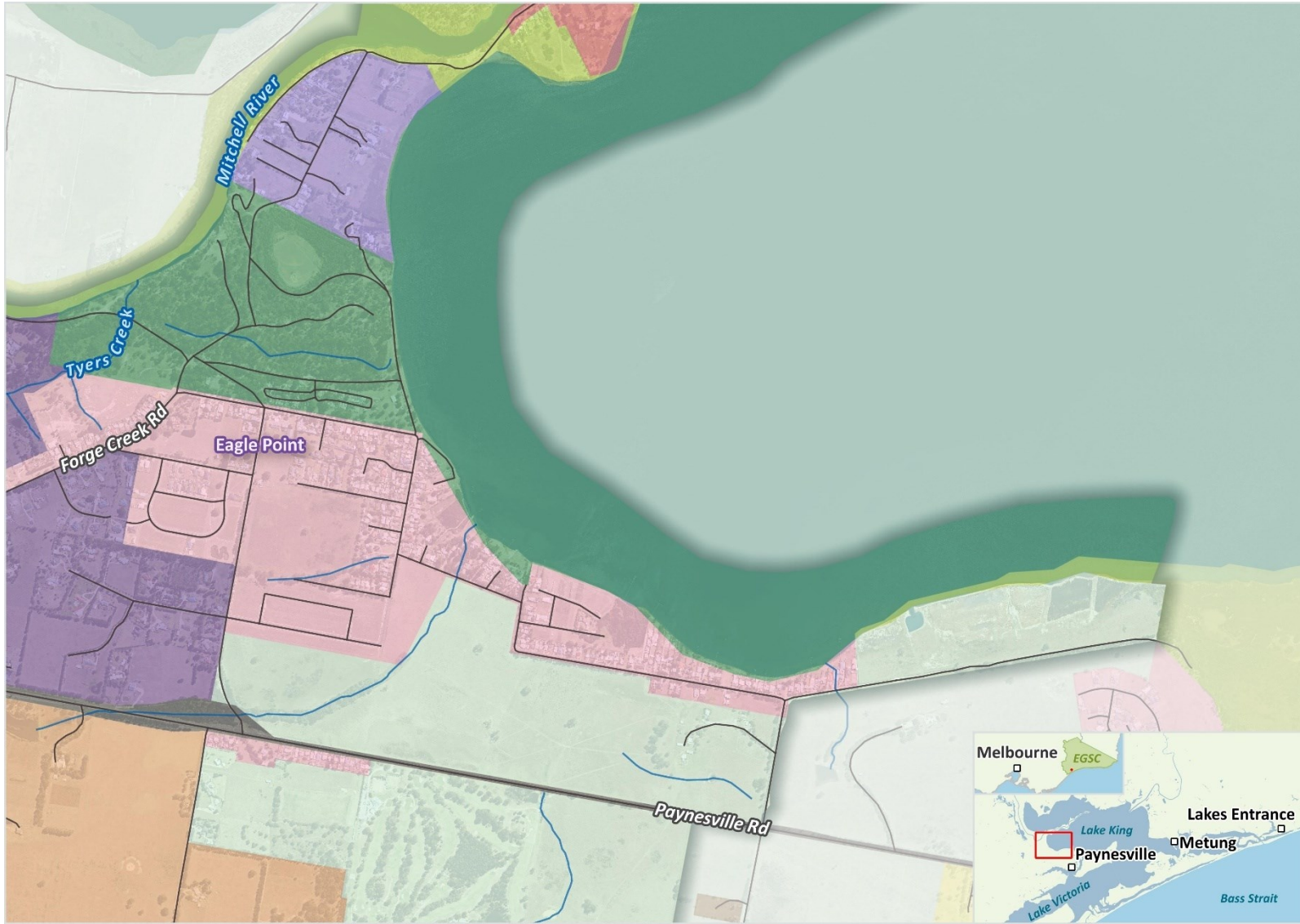
Figure 48. Coastal protection and drainage infrastructure for Eagle Point.

# Eagle Point mapping: Recreation and transport



Figure 49. Recreation facilities and transport networks for Eagle Point.

# Eagle Point mapping: Planning scheme zones



### Planning Scheme Zones

- Farming zone - Schedule 1
- General residential zone - Schedule 1
- Low density residential zone
- Public conservation and resource zone
- Public park and recreation zone
- Public use zone - Cemetery/crematorium
- Public use zone - Service and utility
- Rural conservation zone - Schedule 3
- Rural living zone - Schedule 1
- Rural living zone - Schedule 3
- Transport zone 2 - Principal road network

### Transport

— Roads

### Other features

— Creeks and waterways

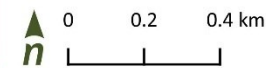


Figure 50. Planning scheme zones for Eagle Point.

# Eagle Point mapping: Planning overlays



- Planning Overlays**
- Property boundaries
- Planning Scheme Overlays**
- Land Subject To Inundation Overlay
  - Design and Development Overlay
- Other features**
- Creeks and waterways

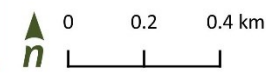
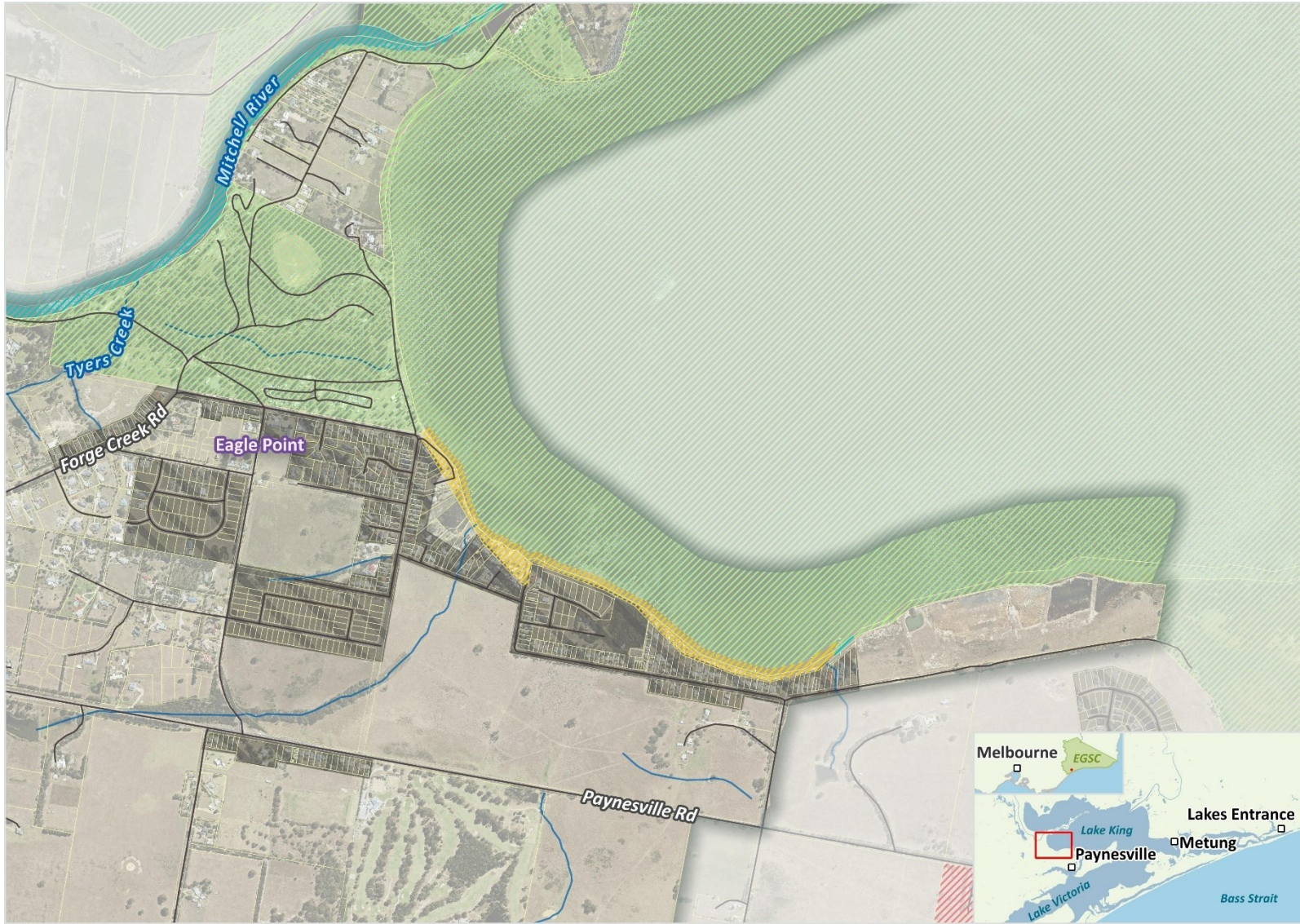


Figure 51. Other planning scheme overlays for Eagle Point.

# Eagle Point mapping: Land management arrangements



- Land Tenure**
- Public Land Management*
- East Gippsland Shire Council
  - Parks Victoria
  - Department of Energy, Environment and Climate Action
  - Department of Health
- Other features*
- Creeks and waterways
  - Roads
  - Property boundaries
  - Built up areas

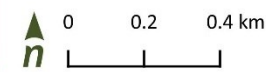


Figure 52. Public land management arrangements for Eagle Point.



## 6.6 Management actions

Table 13 details the CMMP management actions for Eagle Point.

Figure 53 presents site-specific management actions and maps activity and recreation nodes.

Table 13. Eagle Point management actions

Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 1: Acknowledge Traditional Owners' rights, aspirations and knowledge</b>	EP1.1	Guided by GLaWAC, support identification, management and protection of cultural heritage values across Eagle Point coastal areas. In alignment with Shire Wide actions, this includes: <ul style="list-style-type: none"> <li>Supporting GLaWAC to identify unrecorded cultural heritage sites.</li> <li>Continuing to implement appropriate planning overlays and controls such as Cultural Heritage Management Plans to protect cultural heritage.</li> <li>Collaborating with GLaWAC to better understand cultural values and inform future protection.</li> <li>Incorporating culturally-sensitive design into all works across Council-managed coastal reserves.</li> </ul>	Ongoing	Participate	GLaWAC
	EP1.2	In collaboration with GLaWAC and Action EG1.3, investigate development and implementation of initiatives, such as signage, to share Aboriginal stories, knowledge, and significant places within the Eagle Point region e.g. the Bluff, the Mitchell River Silt Jetties.	3-5 years	Lead	GLaWAC
<b>Objective 2: Protect and enhance the marine and coastal environment</b>	EP2.1	In collaboration with EGCMA and Parks Victoria, investigate how loss of coastal habitat resulting from changing inundation regimes with sea level rise, coastal erosion, lack of space for habitat migration and development pressures may be addressed. Consider the creation of space for nature, to aid ecosystem retreat with sea level rise, e.g. Point Fullarton and surrounds	0-3 years	Participate	EGCMA, Parks Victoria, research institutes, not-for-profits
<b>Objective 3: Respect natural processes and strengthen resilience to climate change</b>	EP3.1	In collaboration with DEECA, monitor and assess coastal protection structures across Eagle Point, including seawalls, revetments and other structures. Consider opportunities for enhancing ecological outcomes (e.g. living seawalls) or alternatives to protection infrastructure through hybrid/nature-based solutions and adaptation planning. Embed State policy to consider adaptation options in order of preference. Aligns with Action EG3.5.	0-3 years	Participate	DEECA
	EP3.2	Monitor for impacts of disturbance of coastal acid sulphate soils and take action as appropriate. Adhere to legislation and guidance on management of acid sulphate soils in any new developments of infrastructure upgrades.	Ongoing	Lead	DEECA, EPA
<b>Objective 4: Use and develop sustainably</b>	EP4.1	In alignment with Action EG4.1, utilise activity and recreation nodes to clearly delineate distinct purposes and uses within foreshore zones, and ensure efficient development through co-location, partnership use, and consolidation of community assets. Includes delineation of: <ul style="list-style-type: none"> <li>Eagle Point Foreshore Hub as main activity node.</li> <li>Eagle Point Boat Ramp as key recreation node.</li> </ul>	Ongoing	Lead	All other land managers
	EP4.2	In alignment with East Gippsland Housing and Settlement Strategy (2023), continue to foster Town character through: <ul style="list-style-type: none"> <li>Maintenance of existing foreshore facilities and investment in facilities, based on assessment of need.</li> <li>Sustainable growth within extent of existing urban zoning through infill development and subject to environmental risk (bushfire, flood, coastal hazard) constraints.</li> <li>Promoting adherence to township boundaries, planning overlays and land use planning.</li> </ul>	Ongoing	Lead	
	EP4.3	In collaboration with the East Gippsland Integrated Water Management Forum, develop a stormwater management plan to promote best-practice stormwater management across Eagle Point.	5+ years	Lead	DEECA, IWM Forum partners



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 4: Use and develop sustainably (cont.)</b>	EP4.4	<p>Increase and improve all-abilities foreshore connectivity and safety throughout Eagle Point and to Paynesville through:</p> <ul style="list-style-type: none"> <li>• Reviewing current pathways and connectivity (including recent updates as part of Foreshore Hub development).</li> <li>• Progressively updating and improving priority sections.</li> <li>• Implementing foreshore trail upgrades from Eagle Point to Paynesville, with consideration to sensitive environments of Point Fullarton and surrounds (coupled with Action PN4.10).</li> <li>• Wayfinding signage and communication of routes and activity/recreation nodes.</li> </ul> <p>Embed ecologically and culturally sensitive design, such as boardwalks, and maintenance of path stability and access with current and future coastal hazards in all works, in alignment with Action PN4.8.</p>	0-3 years	Lead	
<b>Objective 5: Take a stewardship approach, build understanding and knowledge, engage and collaborate</b>	EP5.1	<p>Continue to support and collaborate with local volunteer community environment groups, e.g. Eagle Point Paynesville Landcare Coastcare Group. Includes:</p> <ul style="list-style-type: none"> <li>• Promoting community group activities in the coastal and marine space.</li> <li>• Fostering open communication and engagement channels with community groups.</li> <li>• Supporting the role of the local Landcare Coastcare group to enable implementation of the Eagle Point Flora &amp; Fauna Reserve Management Plan.</li> <li>• Continuing to seek opportunities to increase community involvement, including through community grants and Council partnerships.</li> <li>• Promoting and increasing citizen science opportunities (including environmental monitoring).</li> </ul>	Ongoing	Lead	All other management agencies, environmental and community groups and organisations
	EP5.2	<p>In alignment with Shire wide Action EG5.3, review consolidate and update foreshore signage across Eagle Point to:</p> <ul style="list-style-type: none"> <li>• Ensure consistency.</li> <li>• Promote connectivity and wayfinding.</li> <li>• Celebrate unique environments, history and culture.</li> <li>• Support implementation of activity and recreation nodes (Action EP4.1).</li> </ul>	3-5 years	Lead	Other land managers, GLaWAC
	EP5.3	<p>In alignment with Shire wide Action EG5.8, review and prioritise encroachment cases across Eagle Point Work with landholders to address cases of encroachment, guided by Shire wide policy, framework and procedures.</p>	3-5 years	Lead	DEECA, Parks Victoria, other land managers

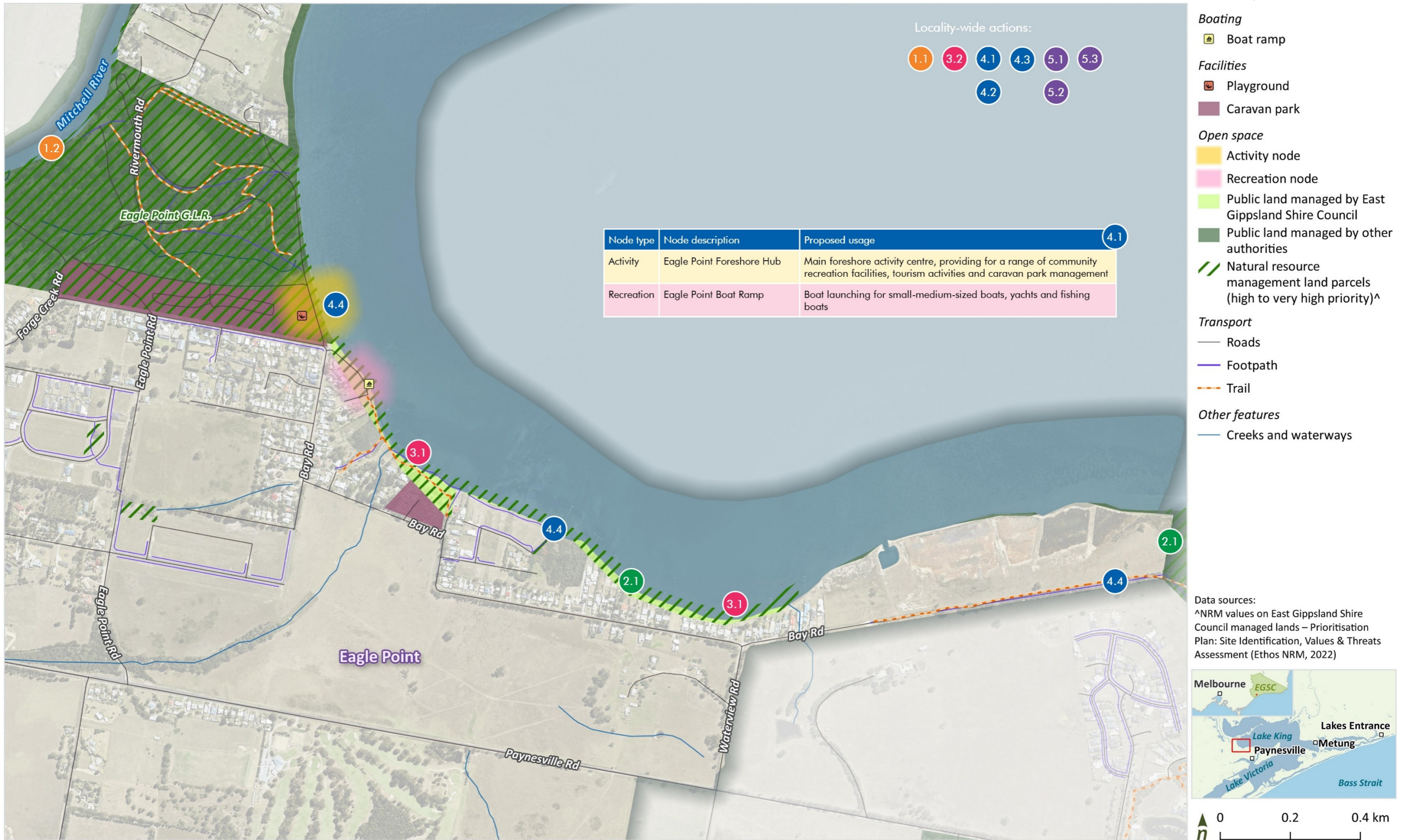


Figure 53. Eagle Point management actions and nodes

## 7 Metung

The Metung area encompasses the Tambo Bay, Tambo Bluff, Kings Cove, Chinaman’s Creek and Mosquito Point areas. The town spreads across historic coastal bluffs and the Shaving Point peninsula, bordered by Bancroft Bay and Lake King.

The appeal of the picturesque village is the lakeside views, surrounding natural wilderness and water access for fishing and boating. The tranquil town is a popular holiday and retirement spot with waterfront accommodation, restaurants, and boardwalks. Metung also hosts a hot springs, country club and golf course.

### 7.1 Community and connection to coast

Metung is a popular retirement, holiday and coastal lifestyle community. The community has a high median age and relatively low percentage in the workforce. The very high percentage of unoccupied dwellings also indicates many holiday home and non-resident property owners.

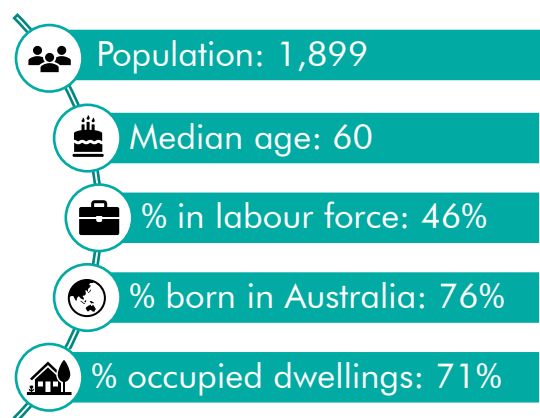


Figure 54. Key statistics for Metung (ABS, 2021).

The population is growing steadily with around 30% growth in population from the 2016 to 2021 censuses. Lower numbers of young families mean population growth is largely driven by migration.

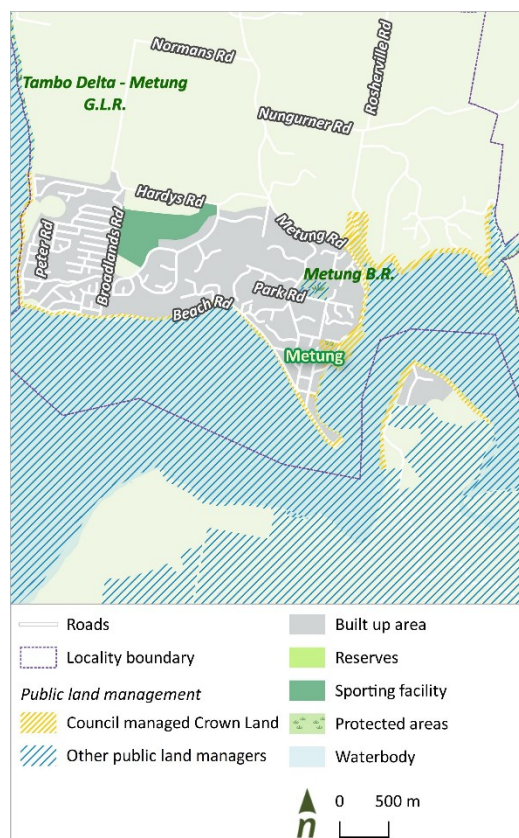


Figure 55. Metung locality.

The Gunaikurnai people are Traditional Owners of the areas around Metung, represented by GLaWAC. The area sits within Tatungalung Country. The town itself was developed on Traditional Owner camping grounds. The area holds many Aboriginal places and objects such as middens, scar trees and artefact scatters.

#### The story of legend rock

Legend Rock lies in the shallow waters of Bancroft Bay. It is an important part of Gunaikurnai mythology and holds great spiritual value to the Gunaikurnai people.

*One day, three fishermen caught many fish in their nets but didn't share their catch with the mob. The women, who were guardians of the social law, turned them into stone as punishment for their greed.*

The story reminds people of the laws of the land and gathering and sharing. There were originally three rocks in the formation. Two were destroyed in the 1960s during road construction. The final rock is now protected under the *Heritage Act 1995*.

*Gunaikurnai Whole of Country Plan (GLaWAC, 2015)*



## 7.2 The coastal environment

The coastlines around Metung and Tambo Bluff are historic coastal bluffs, formed at much higher sea levels. The Metung area sits within Bancroft Bay, part of the broader Lake King. The deepest point in the Gippsland Lake system is located at the tip of the Shaving Point peninsula.

The foreshore ranges from coastal cliffs around Tambo Bluff, to sandy and gravelly beaches along Beach Road. The artificial foreshore along Shaving Point and the main Metung township host various jetties and boardwalks. Jetties continue west into Chinaman's Creek and Boxes Creek.

Fronted by sublittoral seagrass beds, the Metung coastal zone also supports several important ecological communities:

- Endangered Warm Temperate Rainforest at Chinaman's Creek
- Limestone Box Forest, Gippsland Coastal Grey Box and Box-Ironbark
- Plains Grassy Forest
- Deep Freshwater Marshes across Dolphin Lagoon
- Saltmarsh and reedbeds at Mosquito Point



Listed fauna recorded in the area include:

- White-bellied Sea Eagle
- Regent Honeyeater
- Little and Plumed Egrets
- Fairy Tern
- Lace Monitor

The community actively contribute to enhancing these environments.

## 7.3 Coastal processes and hazards

With higher terrain of the historic coastal bluffs, the Metung region is less prone to inundation and flooding. The Shaving Point Peninsula and main township reserve could be vulnerable to inundation and erosion impacts into the future.

Values, uses and infrastructure potentially impacted in the long term could include Metung Road, waterfront properties and community infrastructure such as the boat ramp and jetties. Mosquito Point is likely to be impacted by inundation from storms and sea level rise into the future. The coastal lagoons at Tambo Bluff are also opened to the lake through erosion and large runoff volumes.



Cliff stability is a community concern. Around Tambo Bluff, the steeply sloping shoreline and cliffs show signs of erosion. An Erosion Management Overlay (EMO) applies to most of the Metung township and aims to minimise land disturbance and inappropriate development in areas prone to erosion.

There are many structures across the Metung foreshore to manage coastal hazards. These include seawalls along the eastern shore of the Metung township, several groynes along Beach Road and a breakwater at the end of Beach Road.



## 7.4 Coastal uses, reserves and facilities

Metung offers a peaceful retirement and holiday destination. The foreshore supports boating, fishing, leisure, and recreational activities, with facilities to support these including:

- Shaving Point Boat Ramp, public and private jetties, wharfs, marinas and moorings
- Walking trails and boardwalks
- Yacht and boating clubs
- Lookouts and viewing areas at 100 Steps and Chinamans' Creek
- Foreshore reserves, including the 'Village Green'.
- Picnic and playground facilities

The foreshore also hosts the Metung Market, fun runs, festivals, and fishing events such as the Bream Classic.

Other facilities and attractions across the town include the Hot Springs, cafes, restaurants, holiday villas, waterfront properties, day spas and retreats.

## 7.5 Coastal and marine management

Council hold foreshore management responsibility across the Metung area from Outlook Drive to Boxes Creek. The Metung Bushland Reserve is managed by Parks Victoria, the Kings Cove Marina is managed by DEECA and Gippsland Ports manages the Metung Town Wharf.

The Metung Urban Design Framework (2007) guides future development across Metung. This provided multiple objectives with the key themes and objectives to:

- Retain the landscape setting and 'village' character and create a cohesive, attractive village centre
- Support Metung's boating centre role and improve water access
- Improve safe pedestrian circulation







There are several recent or ongoing Council-led projects across Metung:

- Shaving Point boat ramp (completed) and park upgrades
- Chinaman's Creek toilet upgrades

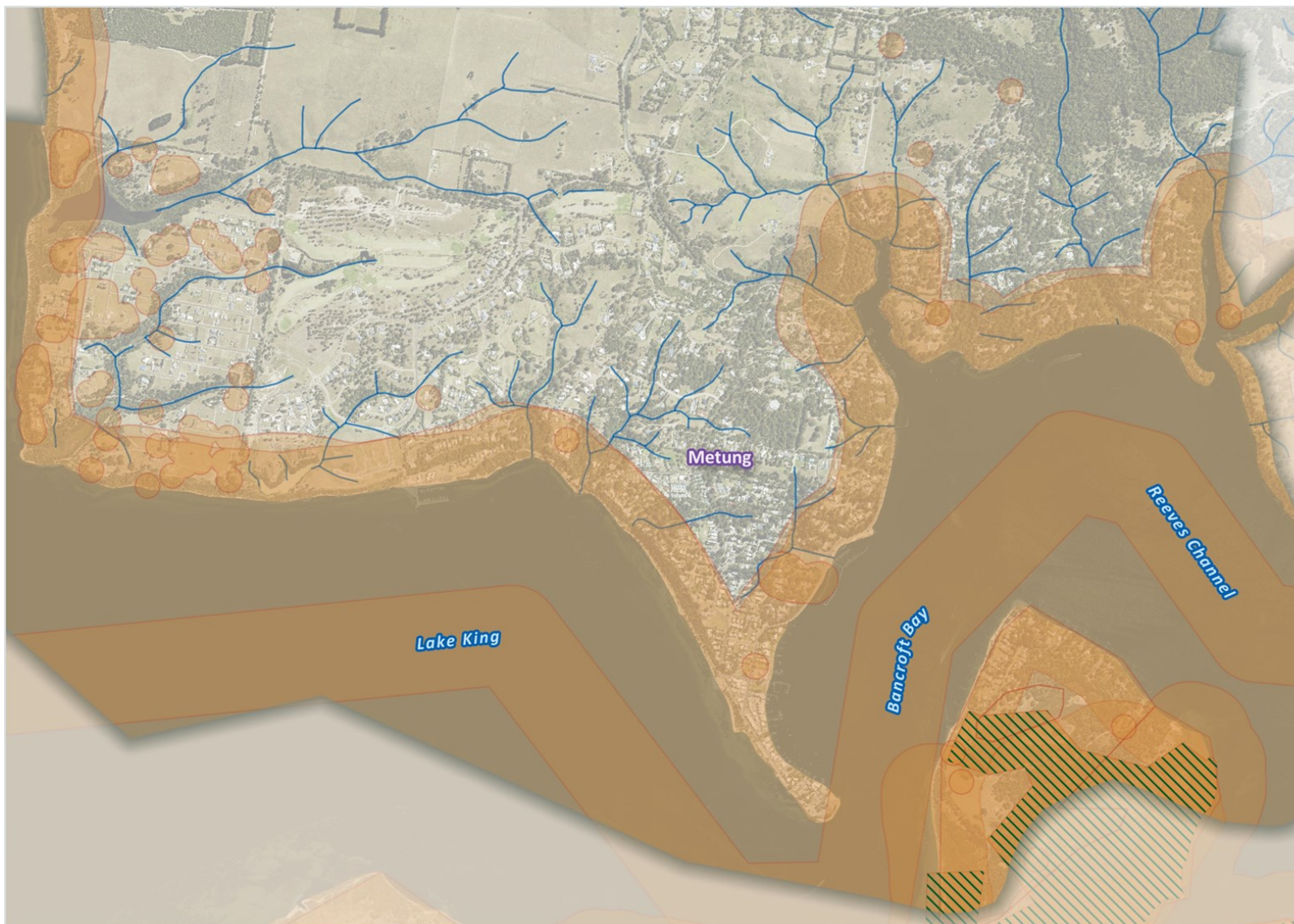
Table 14 summarises community values, challenges and opportunities across Metung, with focus areas for future management. Figure 56 to Figure 64 map key features, values, and management arrangements across the foreshore.



Table 14. Values, challenges and opportunities for Metung coastal and marine management, with focus areas for future management.

		Metung			
		Values	Challenges	Opportunities	Focus for management
	Traditional Owners' rights, aspirations and knowledge	<ul style="list-style-type: none"> <li>Tatungalung people and broader Gunaikurnai connection to Country</li> <li>Evidence of use and occupation of camping grounds – middens, artefact scatters, scar trees.</li> <li>Other significant Aboriginal Heritage places and sites (recorded and unrecorded)</li> <li>Legend Rock, stories and Bataluk Cultural Trail</li> </ul>	<ul style="list-style-type: none"> <li>Heritage sites being impacted or destroyed by other activities e.g. road and house construction and inappropriate recreational use</li> <li>Limited awareness and understanding of Metung's cultural values</li> <li>Outdated signage and lack of story telling</li> </ul>	<ul style="list-style-type: none"> <li>Identify unrecorded Aboriginal Heritage sites</li> <li>Initiatives to share Aboriginal stories and knowledge, where desired by Traditional Owners – includes updated signage of known stories and values</li> <li>Continue appropriate planning overlays and controls to protect sites</li> </ul>	<ul style="list-style-type: none"> <li>Protect and enhance existing natural foreshore values including remnant vegetation and coastal lagoons.</li> <li>Improve stormwater management and water-sensitive urban design, particularly in development areas.</li> <li>Better-define and communicate existing erosion and coastal hazard controls, including boundaries of public and private land.</li> <li>Enhance opportunities for community involvement in environmental monitoring and management</li> <li>Adaptation planning and clarity around potential risks, management strategies and adaptation pathways for managing coastal hazards, including inundation (flooding) and erosion.</li> <li>Investigate and increase understanding of cultural heritage and ensure protection.</li> </ul> 
	The marine and coastal environment	<ul style="list-style-type: none"> <li>High value natural vegetation and habitat across all foreshore reserves</li> <li>Important vegetation communities - warm temperate rainforest, limestone box forest, Gippsland coastal grey box, plains grassy forest, freshwater marshes, saltmarsh and reedbeds</li> <li>Rare and threatened species – e.g. Coast Grey Box, White-bellied Sea Eagle, Regent Honeyeater, Lace Monitor, owls, egrets and terns</li> <li>Natural bush setting and landscape</li> <li>Coastal lagoons - Bluff and Dolphin Lagoons</li> <li>Good water quality in lakes and lagoons to support environmental values</li> </ul>	<ul style="list-style-type: none"> <li>Coastal squeeze and reducing foreshore reserves with sea level rise and development pressures</li> <li>Stormwater quality, sewage releases and pollution from urban development zones</li> <li>Weeds, vegetation removal and pest animal impacts</li> <li>Pest animals (feral cats, foxes and deer)</li> <li>Boating and jet ski activities disrupting wildlife</li> </ul>	<ul style="list-style-type: none"> <li>Monitor water quality conditions in coastal lagoons</li> <li>Vegetation protection and enhancement, including weed and pest management</li> <li>Investigate ecosystem response to climate change and options of retreat and creating space for foreshore reserves</li> <li>Monitoring and communication of sewage release requirements and water quality</li> <li>Educate and engage private landowners on native plants, species selection and vegetation protection</li> </ul>	
	Natural processes and climate change	<ul style="list-style-type: none"> <li>Coastal bluff setting and terrain that limits inundation hazards in higher areas</li> </ul>	<ul style="list-style-type: none"> <li>Coastal squeeze from sea level rise and steep terrain, limiting foreshore open space</li> <li>Cliff erosion at Tambo Bluff and concerns of development impacts on cliff stability</li> <li>Coastal flooding along Beach Road</li> <li>Likely future inundation across Shaving Point, Mosquito Point</li> <li>Increase in coastal hazard impacts - sea level rise</li> </ul>	<ul style="list-style-type: none"> <li>Improve understanding of potential impacts of coastal hazards into the future</li> <li>Improve understanding of cliff stability and potential erosion impacts</li> <li>Communicate current erosion and coastal hazard planning requirements and overlays</li> <li>Consider hazard planning and resilient design in upcoming works</li> </ul>	
	Sustainable use and development	<ul style="list-style-type: none"> <li>Lakeside boardwalks and access along the coast</li> <li>Major boating facilities – Shaving Point boat ramp, Yacht Club, jetties, moorings, wharfs and marinas</li> <li>Waterfront properties and views</li> <li>Village character and landscape setting</li> <li>Festivals and events across the foreshore reserve</li> <li>Facilities to support recreational activities - fishing platforms, parking, toilets, playgrounds, BBQ and picnic facilities</li> </ul>	<ul style="list-style-type: none"> <li>Development pressures and water quality impacts (sediment runoff)</li> <li>Landscape setting (terrain), available space and connectivity constraints</li> <li>Inappropriate development, not in-keeping with natural setting</li> <li>Litter and inadequate bins around Shaving Point</li> <li>Balancing parking demands across different seasons</li> <li>Providing all abilities access</li> </ul>	<ul style="list-style-type: none"> <li>Improved stormwater controls, enforcement and water-sensitive urban design, particularly in development areas</li> <li>Increase boardwalks and all abilities connectivity, where terrain allows</li> <li>Improve foreshore facilities, bins, playgrounds, boating facilities, picnic areas, etc. including Shaving Point upgrades.</li> </ul>	
	Stewardship, knowledge, engagement and collaboration	<ul style="list-style-type: none"> <li>Community groups – Tambo Bluff Landcare</li> <li>Recreational clubs – Metung Yacht Club</li> <li>Community stewardship and care for the environment</li> <li>Citizen science programs</li> </ul>	<ul style="list-style-type: none"> <li>Poorly defined and understood land and asset management arrangements</li> <li>Confusing, outdated and surplus signage</li> </ul>	<ul style="list-style-type: none"> <li>Define and communicate land management boundaries and public vs. private land</li> <li>Support volunteers and citizen science opportunities</li> <li>Consolidate and update signage, sympathetic to natural settling</li> </ul>	

# Metung mapping: Traditional Owners and cultural values



### Traditional Owners and Cultural Values

- Areas of Cultural Heritage Sensitivity
- Jointly managed parks and reserves (Gunaikurnai Land and Waters Aboriginal Corporation and Parks Victoria)

### Other Features

- Creeks and waterways

### Inset map

#### Registered Aboriginal Parties

- Gunaikurnai Land and Waters Aboriginal Corporation
- Other Registered Aboriginal Parties

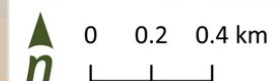
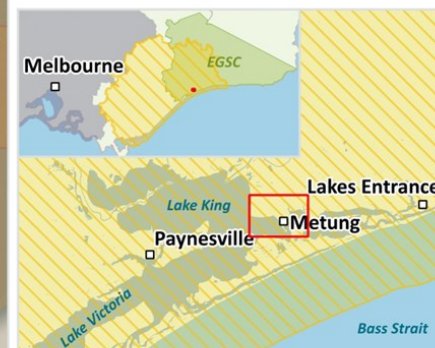


Figure 56. Registered Aboriginal Party areas, culturally sensitive areas and Joint Management areas for Metung.

# Metung mapping: Environmental values

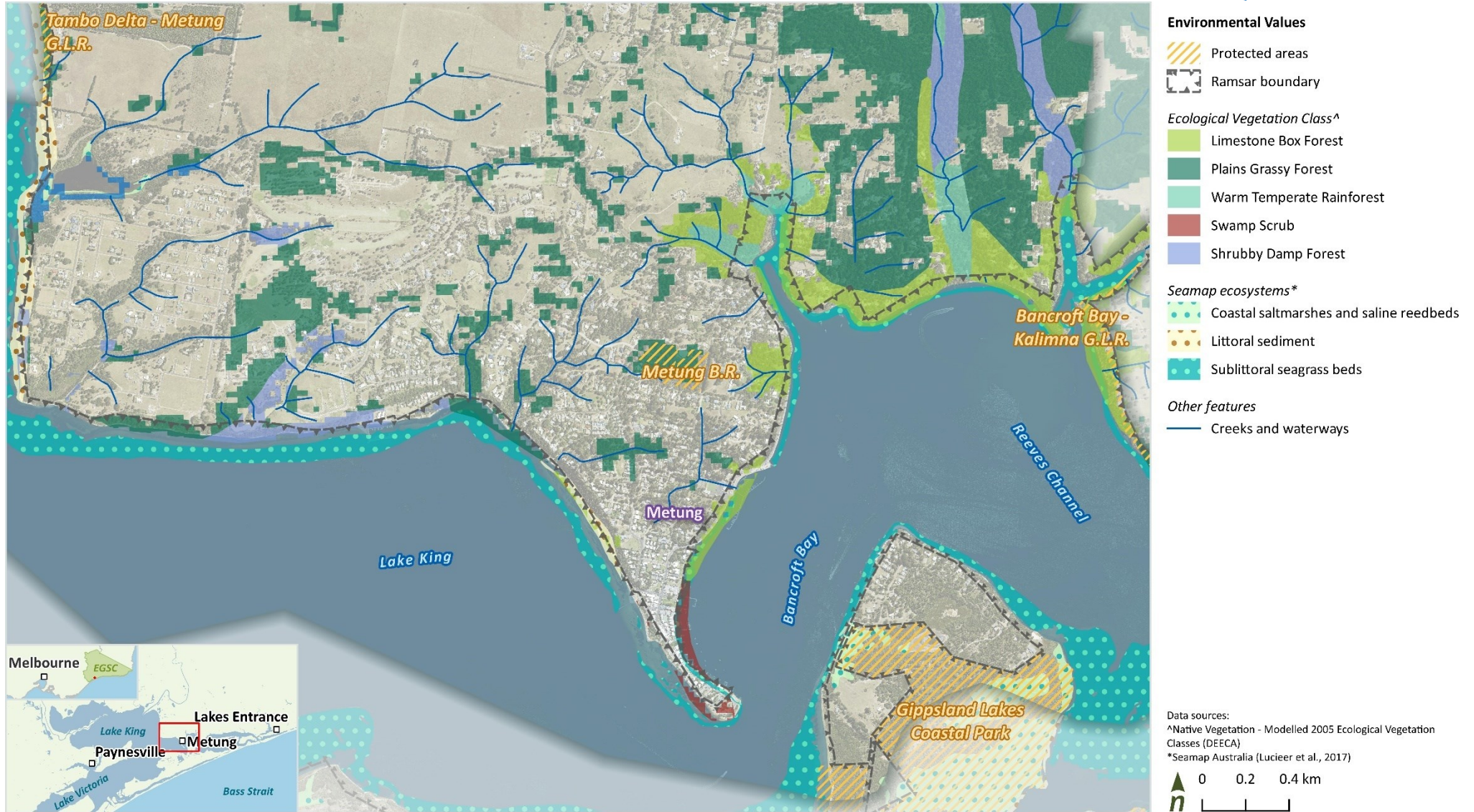
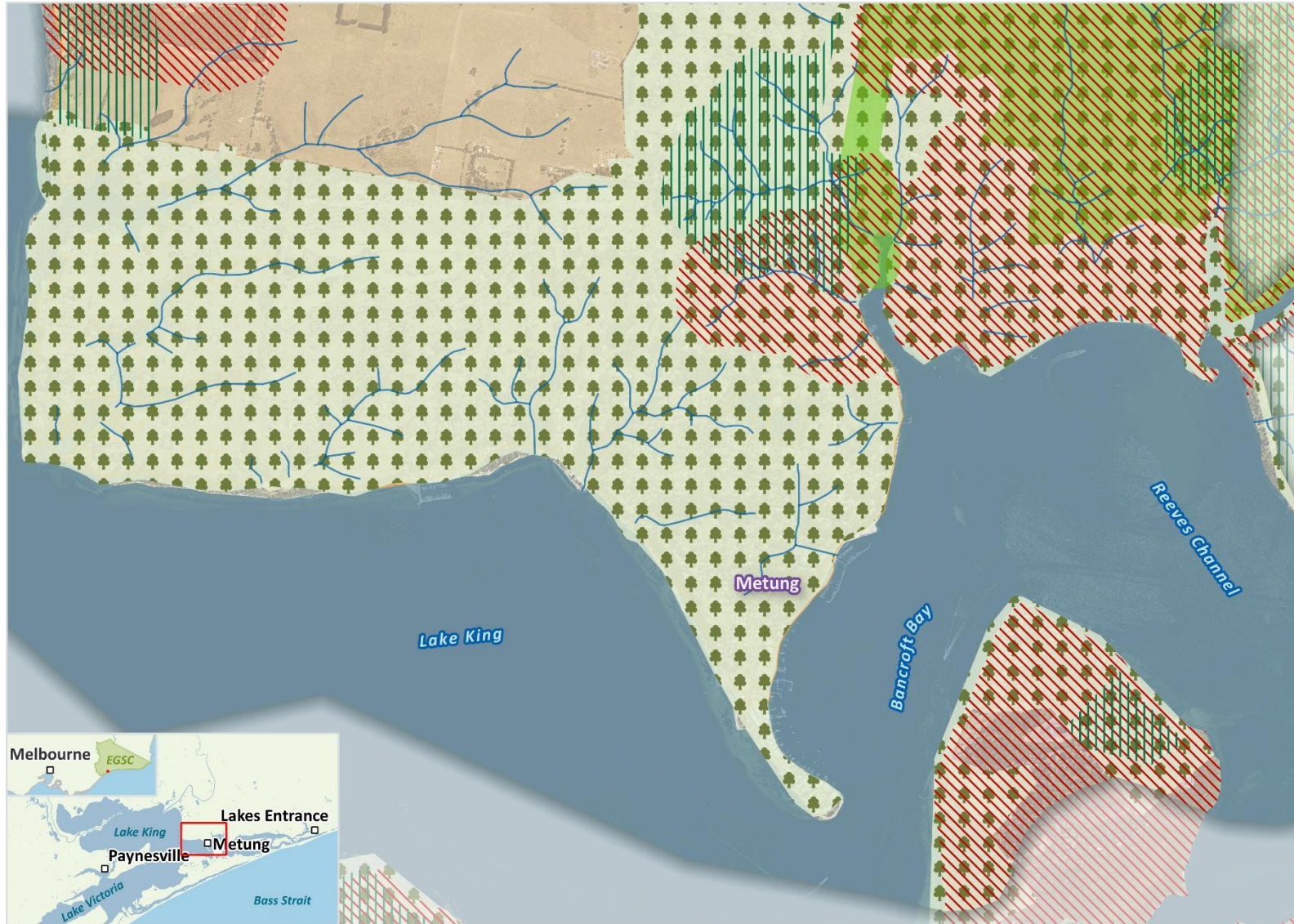







Figure 57. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Metung.

# Metung mapping: Environmental overlays




### Environmental Overlays

#### Planning Scheme Overlays

-  Bushfire Management Overlay
-  Environmental Significance Overlay
-  Erosion Management Overlay
-  Significant Landscape Overlay
-  Vegetation Protection Overlay

#### Other features

-  Creeks and waterways

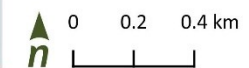


Figure 58. Environmental and land management planning overlays for Metung.

# Metung mapping: Coastal hazards



### Coastal Hazards

Gippsland Lakes/90 Mile Beach LCHA\*:

10% AEP Gippsland Lakes flood extent

- 0.0 m sea level rise (2014 baseline)
- 0.2 m sea level rise
- 0.4 m sea level rise
- 0.8 m sea level rise

Lake shoreline erosion hazard extent

- 0.8 m sea level rise

Other features

- Creeks and waterways

AEP: Annual Exceedence Probability (AEP) is the probability of an event occurring in any given year.

Data sources:

\*Water Technology 2014 - Gippsland Lakes and 90 Mile Beach Local Coastal Hazard Assessment (LCHA) Project

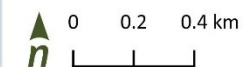


Figure 59. Coastal hazard mapping from the Gippsland Lakes/90 Mile Beach LCHA for Metung.

# Metung mapping: Coastal protection and drainage infrastructure

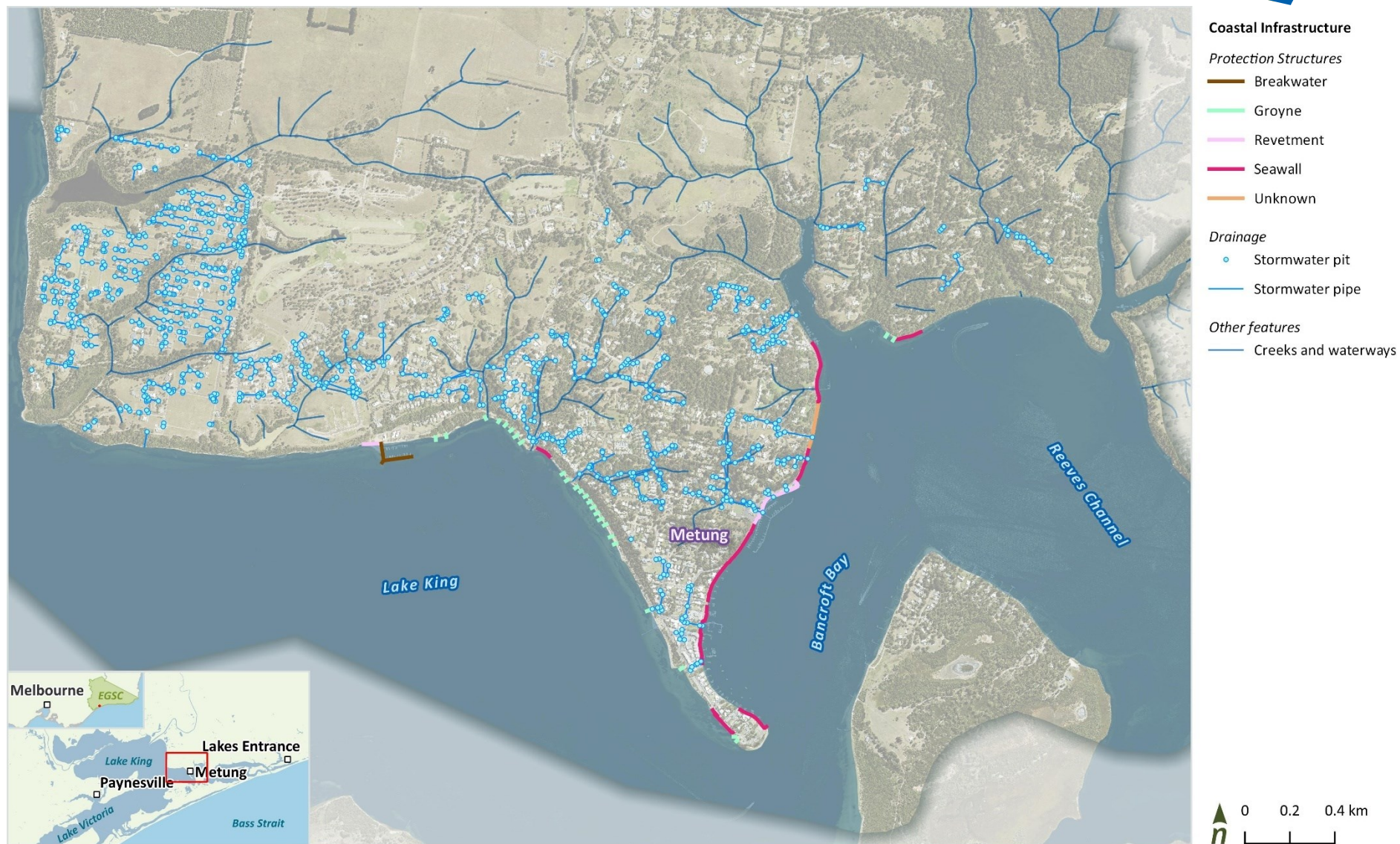


Figure 60. Coastal protection and drainage infrastructure for Metung.

# Metung mapping: Recreation and transport



### Recreation and Transport

#### Boating

- Boat mooring
- Boat ramp
- Marinas and jetties

#### Facilities

- Playground
- Caravan park
- Education complex

#### Open space

- Bowling green
- Golf course
- Reserve (park)
- Tennis court
- Protected areas

#### Transport

- Roads
- Footpath
- Trail

#### Other features

- Creeks and waterways

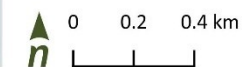
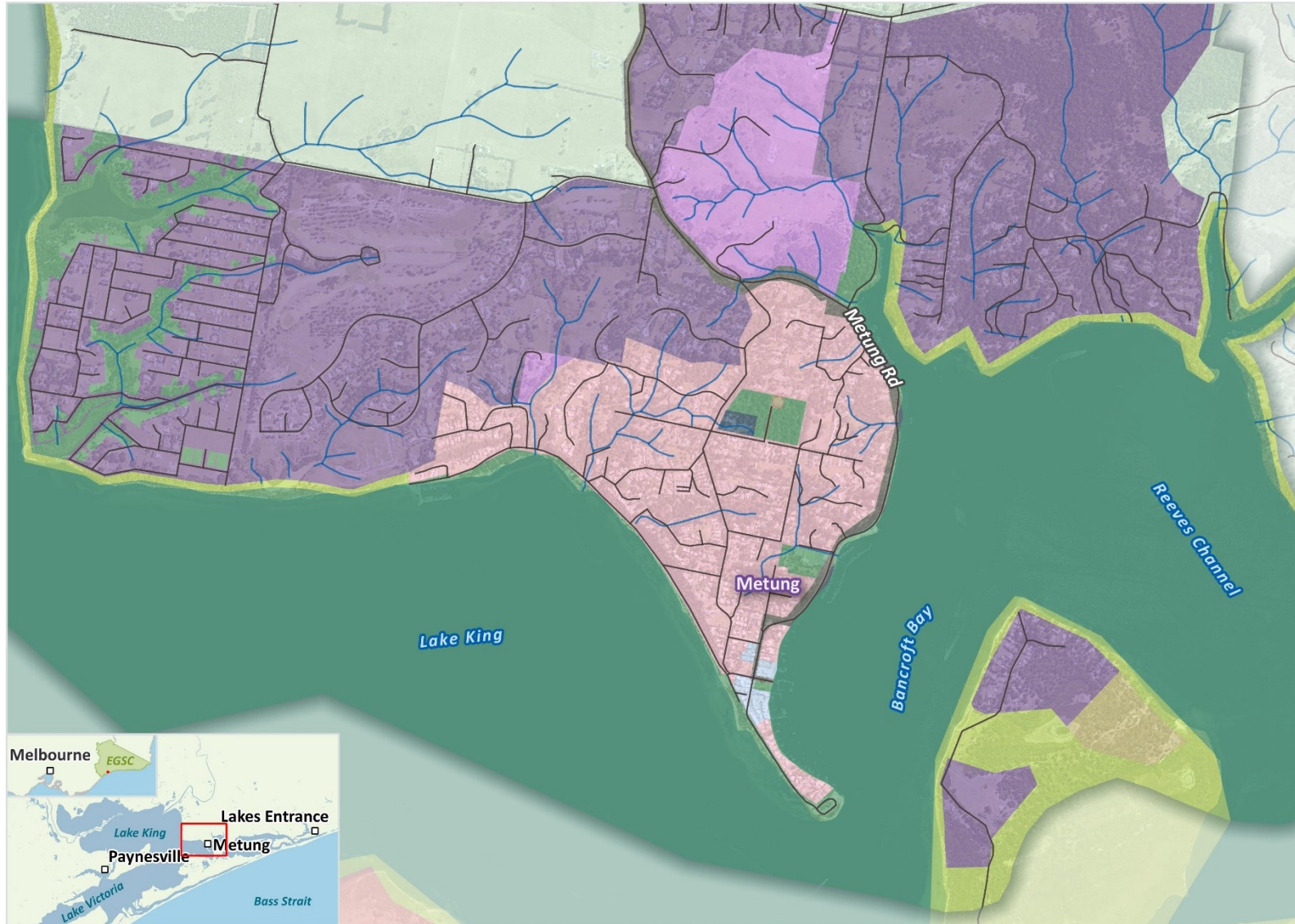


Figure 61. Recreation facilities and transport networks for Metung.

# Metung mapping: Planning scheme zones



### Planning Scheme Zones

- Commercial 1 zone
- Farming zone - Schedule 1
- General residential zone - Schedule 1
- Low density residential zone
- Public conservation and resource zone
- Public park and recreation zone
- Public use zone - Education
- Public use zone - Service and utility
- Rural conservation zone - Schedule 3
- Rural living zone- Schedule 2
- Transport zone 2 - Principal road network

### Transport

— Roads

### Other features

— Creeks and waterways

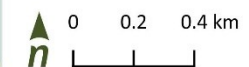
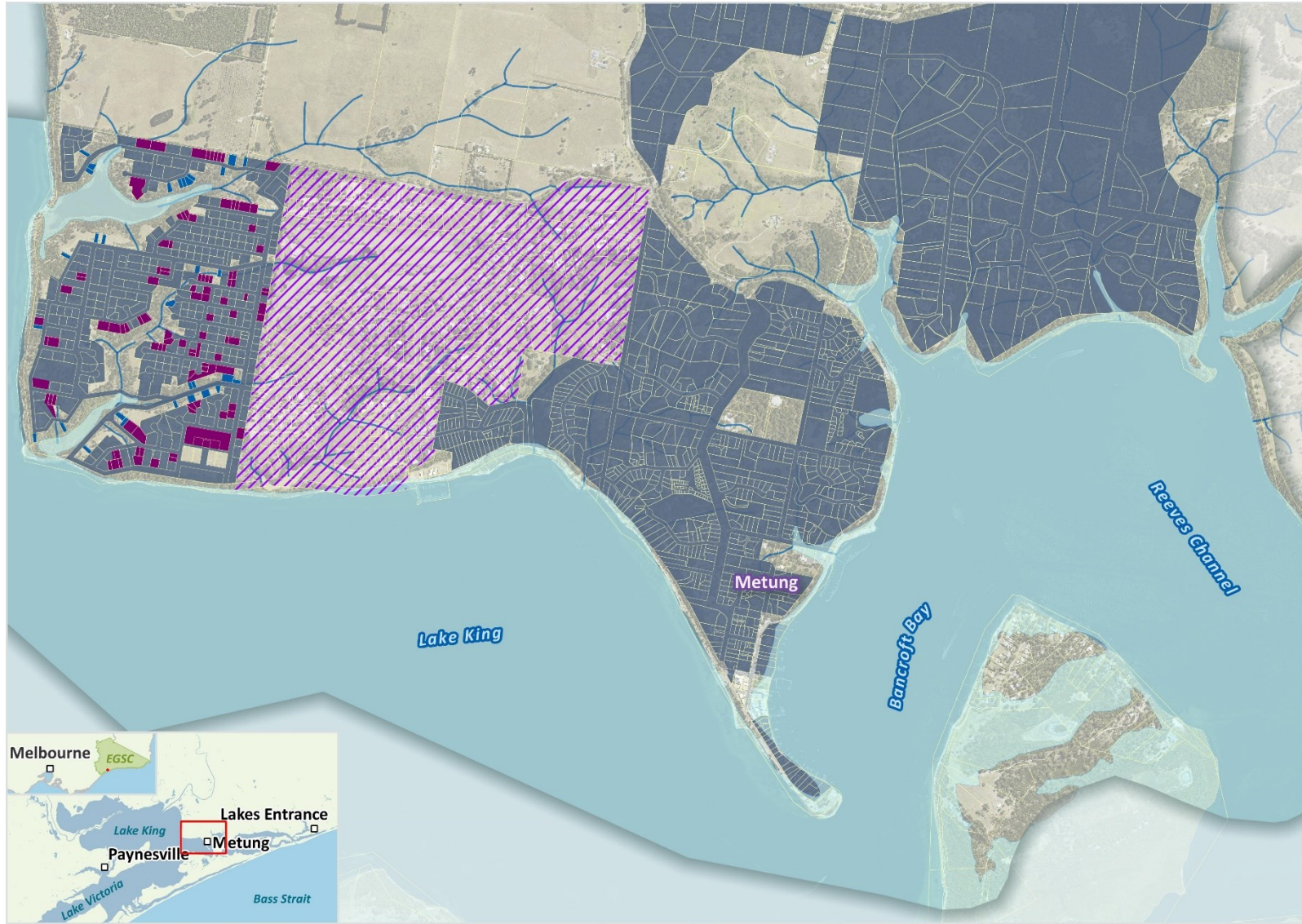


Figure 62. Planning scheme zones for Metung.

# Metung mapping: Planning overlays



- Planning Overlays**
- Property boundaries
- Planning Scheme Overlays**
- Incorporated Plan Overlay
  - Public Acquisition Overlay
  - Restructure Overlay
  - Land Subject To Inundation Overlay
  - Design and Development Overlay
- Other features**
- Creeks and waterways

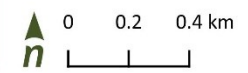
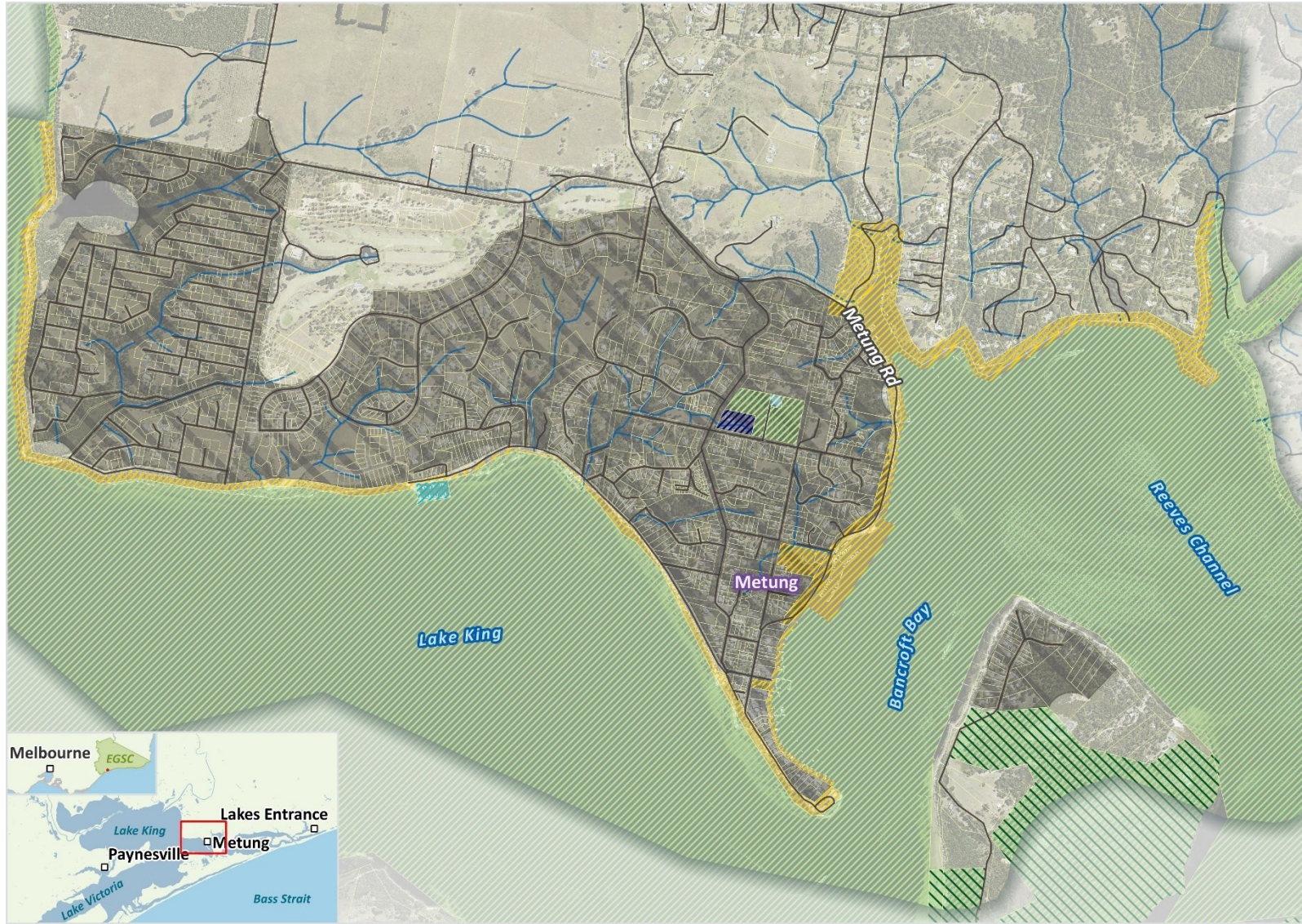


Figure 63. Other planning scheme overlays for Metung.

# Metung mapping: Land management arrangements



- Land Tenure**
- Public Land Management*
- East Gippsland Shire Council
  - Parks Victoria
  - Department of Energy, Environment and Climate Action
  - Department of Education and Training
  - Water Authority
  - Jointly managed parks and reserves (Gunaikurnai Land and Waters Aboriginal Corporation)
- Other features*
- Creeks and waterways
  - Roads
  - Property boundaries
  - Built up areas

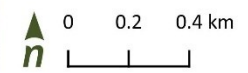


Figure 64. Public land management arrangements for Metung.



## 7.6 Management actions

Table 15 details the CMMP management actions for Metung.

Figure 65 presents site-specific management actions and maps activity and recreation nodes.

Table 15. Metung management actions

Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 1: Acknowledge Traditional Owners' rights, aspirations and knowledge</b>	ME1.1	Guided by GLaWAC, support identification, management and protection of cultural heritage values across Metung coastal areas. In alignment with Shire Wide actions, this includes: <ul style="list-style-type: none"> <li>Supporting GLaWAC to identify unrecorded cultural heritage sites.</li> <li>Continuing to implement appropriate planning overlays and controls such as Cultural Heritage Management Plans to protect cultural heritage.</li> <li>Collaborating with GLaWAC to better understand cultural values and inform future protection.</li> <li>Incorporating culturally-sensitive design into all works across Council-managed coastal reserves.</li> </ul>	Ongoing	Participate	GLaWAC
	ME1.2	In collaboration with GLaWAC and Action EG1.3, investigate development and implementation of initiatives, such as signage, to share Aboriginal stories and knowledge of the Metung region (e.g. Legend Rock). Consider how cultural heritage sites may form part of the Gippsland-wide Bataluk Cultural Trail and how this connection can be more clearly communicated to the community and visitors.	3-5 years	Lead	GLaWAC
<b>Objective 2: Protect and enhance the marine and coastal environment</b>	ME2.1	In collaboration with EGCMA and Parks Victoria, investigate how loss of coastal habitat resulting from changing inundation regimes with sea level rise, coastal erosion, lack of space for habitat migration and development pressures may be addressed. Consider the creation of space for nature, to aid ecosystem retreat with sea level rise, e.g. lagoon ecosystems	5+ years	Participate	EGCMA, Parks Victoria, research institutes, not-for-profits
	ME2.2	Support EGCMA and citizen science programs to monitor water quality throughout Metung's surrounding lakes and coastal lagoons (e.g. Bluff and Dolphin Lagoons) and utilise findings to inform best-practice Council stormwater management controls, water-sensitive upgrades, pollution management and development controls in alignment with Action ME4.4. Communicate and enforce requirements needed to improve water quality. Aligns with Shire wide Action EG5.2.	3-5 years	Participate	EGCMA, citizen science programs
<b>Objective 3: Respect natural processes and strengthen resilience to climate change</b>	ME3.1	Building from existing coastal hazard assessments to date, investigate opportunities for long-term strategic coastal hazard adaptation planning. Includes: <ul style="list-style-type: none"> <li>Reviewing available information, data and mapping for Metung and suitability for adaptation planning.</li> <li>Investigating potential adaptation planning funding applications for Metung (in alignment with Action EG3.2).</li> <li>Following Victoria's Resilient Coast framework and guidelines to develop long-term adaptation and resilience planning.</li> <li>Engaging and communicating throughout process, including stakeholder and rightsholder partnerships and community engagement.</li> </ul>	Ongoing	Lead	DEECA, EGCMA, GLaWAC Gippsland Ports, Parks Victoria, other land asset and infrastructure managers
	ME3.2	In collaboration with DEECA, monitor and assess coastal protection structures across Metung, including seawalls, revetments and other structures. Consider opportunities for enhancing ecological outcomes (e.g. living seawalls) or alternatives to protection infrastructure through hybrid/nature-based solutions and adaptation planning. Embed State policy to consider adaptation options in order of preference. Aligns with Action EG3.5.	0-3 years	Participate	DEECA



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 4: Use and develop sustainably</b>	ME4.1	In alignment with Action EG4.1, utilise activity and recreation nodes to clearly delineate distinct purposes and uses within foreshore zones, and ensure efficient development through co-location, partnership use, and consolidation of community assets. Includes delineation of: <ul style="list-style-type: none"> <li>• Metung Foreshore Reserve (Village Green) and Metung Pier surrounding Kurnai Avenue as main activity node.</li> <li>• Shaving Point Boat Ramp, Metung Marina and Chinamans Creek as key recreation nodes providing boating access, boat mooring, toilets and other recreation facilities.</li> </ul>	0-3 years	Lead	All other land managers
	ME4.2	In alignment with East Gippsland Housing and Settlement Strategy (2023), continue to foster Town character through: <ul style="list-style-type: none"> <li>• Maintenance of existing foreshore facilities and investment in facilities, based on assessment of need.</li> <li>• Sustainable growth within extent of existing urban zoning through infill development and subject to environmental risk (bushfire, flood, coastal hazard) constraints.</li> <li>• Promoting adherence to township boundaries, planning overlays and land use planning.</li> </ul>	Ongoing	Lead	
	ME4.3	Progress and complete upgrade works to foreshore precincts and facilities that are currently underway including Shaving Point Park Upgrade. Review designs and planning to ensure proposed works and upgrades align with CMMP objectives, principles, actions and State policy.	3-5 years	Lead	
	ME4.4	In collaboration with the East Gippsland Integrated Water Management Forum, develop a stormwater management plan to promote best-practice stormwater management in Tambo Bluff.	3-5 years	Lead	DEECA, IWM Forum partners
	ME4.5	Ensure resilient design of new/upgraded infrastructure and facilities, considering natural processes and current and future coastal hazards. Consider: <ul style="list-style-type: none"> <li>• Ecologically and culturally sensitive design e.g. boardwalks through hazard prone areas and/or sensitive cultural heritage sites or ecological communities.</li> <li>• Integrated water management approaches and water-sensitive urban design to reduce flood risk, improve stormwater quality, sediment runoff and discharge points.</li> <li>• Infrastructure design life and resilience to coastal hazard impacts, and adaptative management of facilities, recognising any emerging coastal hazard risk.</li> </ul>	Ongoing	Lead	
	ME4.6	Consolidate and promote all-abilities foreshore connectivity and safety throughout Metung, Tambo Bay, Tambo Bluff and Chinamans Creek through: <ul style="list-style-type: none"> <li>• Reviewing current pathways and connectivity.</li> <li>• Progressively updating and improving priority sections, including ongoing maintenance.</li> <li>• Wayfinding signage and communication of routes and activity/recreation nodes.</li> </ul> Embed ecologically and culturally sensitive design where possible. Consider maintenance of path stability and access with current and future coastal hazards in all works, in alignment with Action ME4.5.	3-5 years	Lead	



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 5: Take a stewardship approach, build understanding and knowledge, engage and collaborate</b>	ME5.1	Continue to support and collaborate with local volunteer community environment groups e.g. Tambo Bluff Landcare Coastcare. Includes: <ul style="list-style-type: none"> <li>Promoting community group activities in the coastal and marine space.</li> <li>Fostering open communication and engagement channels with community groups.</li> <li>Continuing to seek opportunities to increase community involvement, including through community grants and Council partnerships.</li> <li>Promoting and increasing citizen science opportunities (including environmental monitoring - Action ME2.2).</li> </ul>	Ongoing	Lead	All other management agencies, environmental and community groups and organisations
	ME5.2	In alignment with Shire wide Action EG5.3, review, consolidate and update foreshore signage across Metung to: <ul style="list-style-type: none"> <li>Ensure consistency and consolidate volume of signage.</li> <li>Communicate land and asset management arrangements and private vs. public land boundaries.</li> <li>Promote connectivity and wayfinding.</li> <li>Celebrate unique environments, history and culture.</li> <li>Support implementation of activity and recreation nodes (Action ME4.1).</li> </ul>	3-5 years	Lead	Other land managers, GLaWAC
	ME5.3	In alignment with Shire wide Action EG5.6, investigate initiatives to engage private landowners in environmental management and restoration through education on the values of native ecosystems for local resilience, and the importance of their protection e.g. against inappropriate recreational use.	Ongoing	Lead	Private landholders

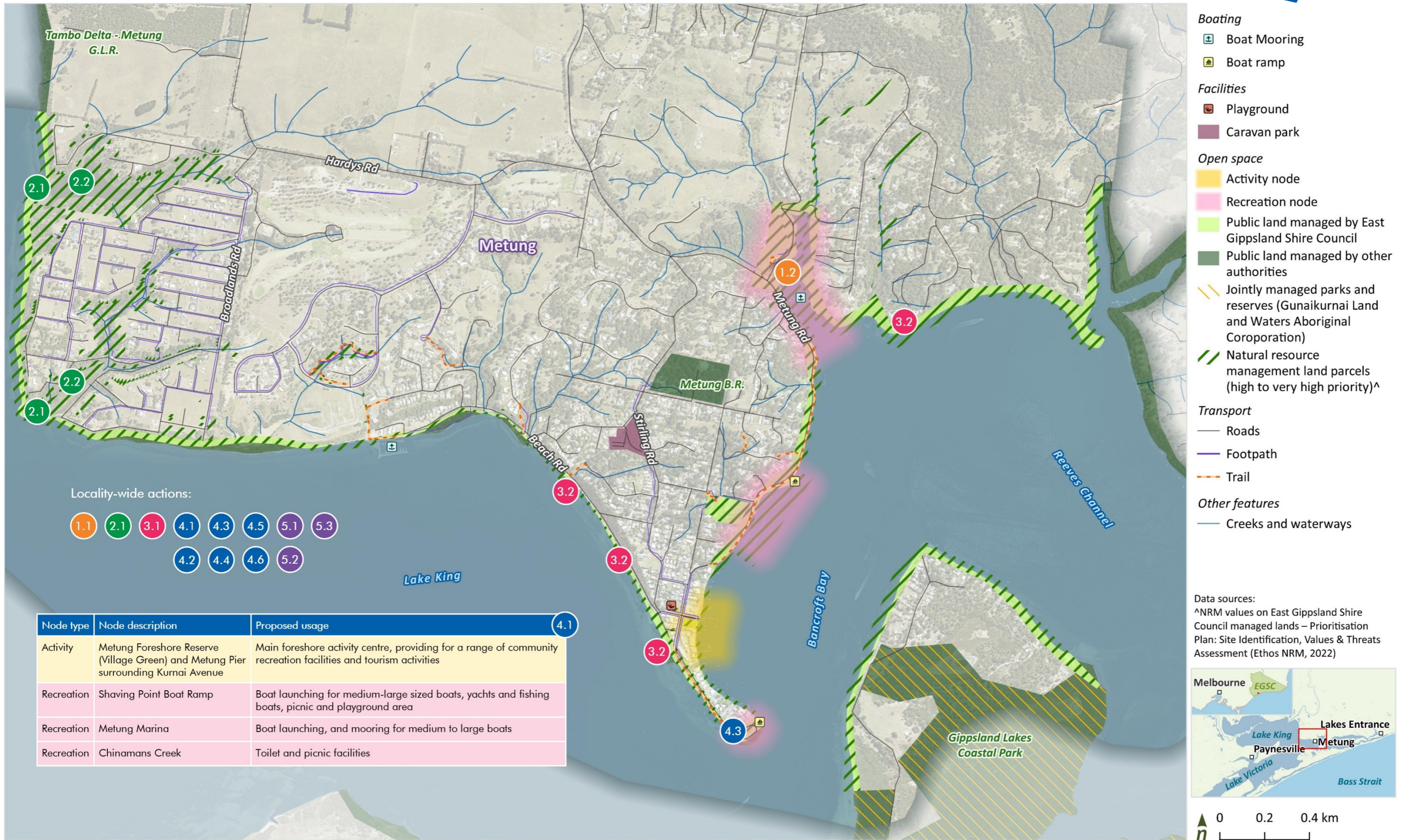


Figure 65. Metung management actions and nodes



## 8 Nungurner

Nungurner is a small rural community located in a bushland setting. It is located on the Reeve Channel, across from Flannagan Island and neighbours Metung to the west. The scenic foreshore provides access to picnic areas, trails, toilets, a jetty, and small boat ramp. The area is surrounded by large tracts of native vegetation.

### 8.1 Community and connection to coast

Nungurner has a small population, with only 327 residents at the 2021 census. The small settlement has low-density residential developments with high occupancy. The community is a mix of families and retirees, with a younger median age than surrounding towns. The community has close ties with Metung, Kalimna and the broader Lakes Entrance region.

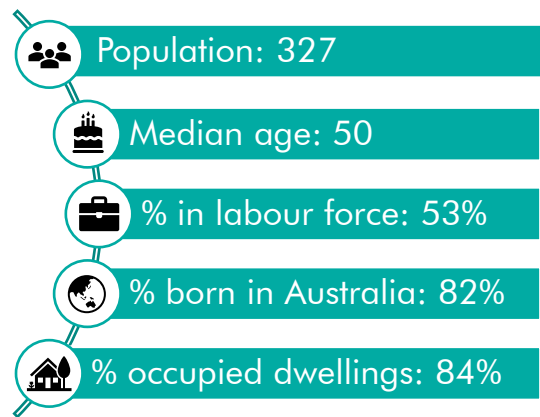


Figure 66. Key statistics for Nungurner (ABS, 2021).

Living in a rural setting, the community value the surrounding environment. The Nungurner Community Landcare Group (NCLG) and Nungurner Community and Coast Action Group (NCCAG) both work on community projects to enhance the natural environment.

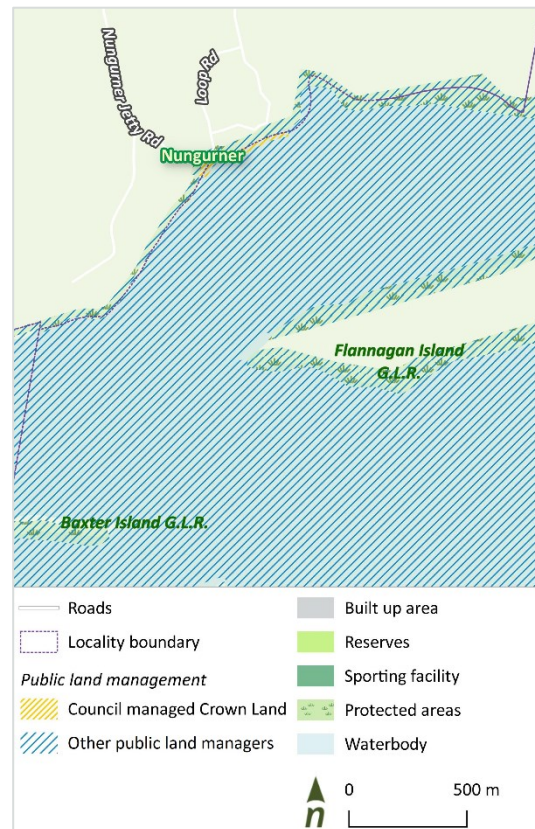


Figure 67. Nungurner locality.

The Gunaikurnai people are the Traditional Owners of the areas around Nungurner, represented by GLaWAC. The areas sits within Tatungalung Country. GLaWAC have collaborated with Council, community groups and other agencies on various projects in the region.





## 8.2 The coastal environment

The coastline of Nungurner fronts Reeves Channel and slopes into vegetated hills. Seagrass beds surround the shore, and significant ecological communities include:

- Plains Grassy Forest
- Limestone Box Forest
- Warm Temperate Rainforest
- Littoral Rainforest and Coastal Vine Thickets (EPBC-listed)

Native vegetation and tree cover characterises the rural settlement, with bushland style gardens across residential properties. The community strongly values the flora and bushland character surrounding it. However, these ecological communities are threatened by lack of habitat connectivity, weed infestations and pest animal impacts.

## 8.3 Coastal processes and hazards

Nungurner's coastline is relatively high and hilly, meaning a relatively minimal risk of inundation for majority of the settlement. Into the future, flooding up into creek lines and across the foreshore may increase slightly. Some erosion is evident along the foreshore and could increase with sea level rise. An existing seawall extends from the jetty parking area west for around 200 metres.

The environmental setting means limited facilities and assets are likely to be exposed to coastal hazards. Public and privately owned coastal structures such as jetties and boat ramps could be impacted.

## 8.4 Coastal uses, reserves and facilities

As a small coastal settlement, facilities in Nungurner are limited, these include:

- Nungurner jetty
- Historic Jetty and Boat Shed
- A boat ramp for small watercraft
- Pathways along the foreshore
- A picnic area and toilet facilities

There are no commercial uses in Nungurner, which relies on Metung, Lakes Entrance and Bairnsdale to access services.

## 8.5 Coastal and marine management

Council manage around 500 m of foreshore reserve. Parks Victoria manage Reeves Channel and remaining foreshores. Gippsland Ports manage the main town jetty, with Parks Victoria managing the historic jetty and Nungurner Boat Shed.






The Nungurner Urban Design Framework (2007) guided development and coastal and marine management in Nungurner. Four key objectives of the plan are to:

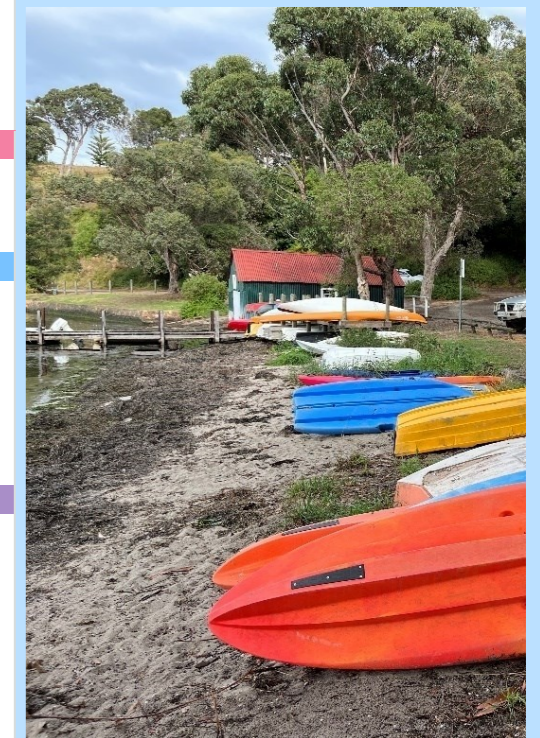
- Maintain Nungurner's low-density bushland character
- Create an attractive foreshore that caters to residents and visitors
- Enhance safe walking connection
- Improve stormwater management.

Table 6 summarises community values, challenges and opportunities across Nungurner, with focus areas for future management. Figure 68 to Figure 76 map key features, values, and management arrangements across the foreshore.

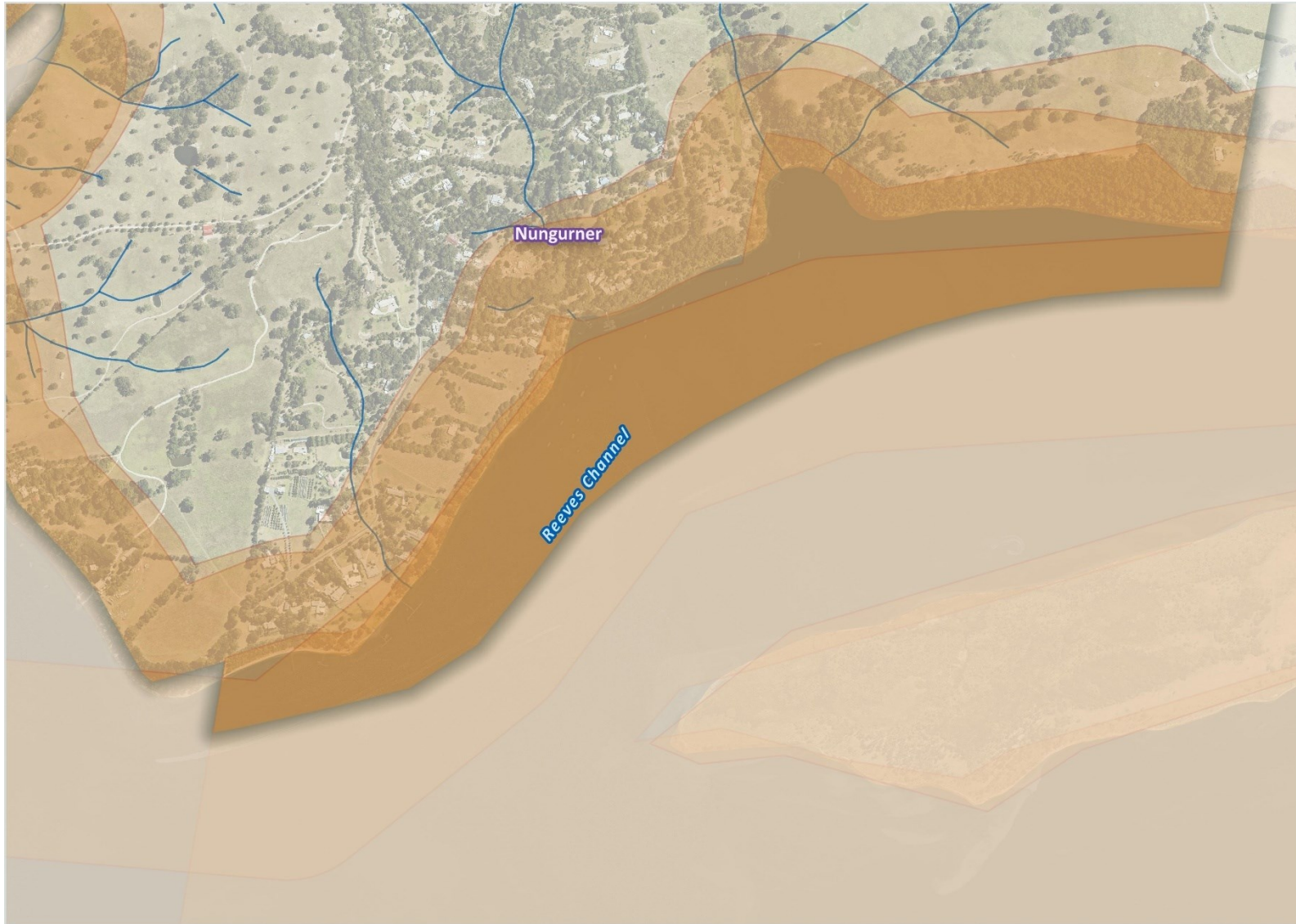


Table 16. Values, challenges and opportunities for Nungurner coastal and marine management, with focus areas for future management.

		Nungurner			
		Values	Challenges	Opportunities	Focus for management
	Traditional Owners' rights, aspirations, and knowledge	<ul style="list-style-type: none"> <li>Tatungalung people and broader Gunaikurnai connection to Country</li> <li>Evidence of use and occupation</li> <li>Sharing information on Traditional Owner practices (existing interpretive signage and collaboration with community groups)</li> <li>Other significant Aboriginal Heritage places and sites (recorded and unrecorded)</li> </ul>	<ul style="list-style-type: none"> <li>Limited awareness and understanding of Nungurner's cultural values</li> <li>Recreational land use and shoreline erosion impacts on cultural values</li> </ul>	<ul style="list-style-type: none"> <li>Further initiatives to share Aboriginal stories and knowledge, where desired by Traditional Owners</li> <li>Strengthen existing relationships with community groups</li> <li>Collaborate with GLaWAC to Investigate cultural heritage values and improve understanding – both tangible and intangible</li> </ul>	<ul style="list-style-type: none"> <li>Maintaining natural values, including vegetation protection and enhancement</li> <li>Maintaining settlement character and rural bushland setting</li> <li>Upgrading aging infrastructure</li> <li>Investigating opportunities for nature based coastal protection methods</li> </ul>
	The marine and coastal environment	<ul style="list-style-type: none"> <li>High value natural vegetation and habitat across Nungurner foreshore reserve</li> <li>Important vegetation communities – seagrasses, estuarine wetland, littoral rainforest, warm temperate rainforest, limestone box forest and damp sands herb rich woodlands</li> <li>Rare and threatened species - Long Nosed Bandicoot, White-bellied Sea Eagle, Little Egret and Hooded Plover</li> <li>Active environmental groups involved in weed removal, revegetation and pest control</li> </ul>	<ul style="list-style-type: none"> <li>Feral predator, pest and weed threats</li> <li>Removal of vegetation for agriculture</li> </ul>	<ul style="list-style-type: none"> <li>Initiatives to protect endangered species, native vegetation and ecosystems</li> <li>Educate and engage private landowners on native plants, species selection and vegetation protection</li> </ul>	<ul style="list-style-type: none"> <li>Investigate and increase understanding of cultural heritage and ensure protection.</li> </ul>
	Natural processes and climate change	<ul style="list-style-type: none"> <li>Hilly terrain and minimal areas of inundation</li> </ul>	<ul style="list-style-type: none"> <li>Erosion around Nungurner Jetty</li> <li>Condition of seawall protection west of boat ramp</li> </ul>	<ul style="list-style-type: none"> <li>Aging infrastructure upgrades or removal</li> <li>Nature-based coastal hazard management options</li> </ul>	
	Sustainable use and development	<ul style="list-style-type: none"> <li>Informal walking tracks</li> <li>Historic value of boat shed and old jetty</li> <li>Facilities for small watercraft and access to water – kayaks, canoes, small sailing boats.</li> <li>Waterfront parking, picnic facilities and toilets</li> <li>Peaceful settlement surrounded by bushland</li> </ul>	<ul style="list-style-type: none"> <li>Maintenance of historic heritage assets</li> <li>Aging facilities</li> <li>Pressure from development not in-keeping with settlement character</li> </ul>	<ul style="list-style-type: none"> <li>Upgrade facilities over time</li> <li>Planning arrangements to maintain settlement character, natural bush setting and native vegetation</li> </ul>	
	Stewardship, knowledge, engagement and collaboration	<ul style="list-style-type: none"> <li>Community groups - Nungurner Community Landcare Group, Nungurner Community and Coast Action Group</li> </ul>		<ul style="list-style-type: none"> <li>Increase opportunities for community involvement, in collaboration with Traditional Owners, as desired</li> </ul>	



# Nungurner mapping: Traditional Owners and cultural values



### Traditional Owners and Cultural Values

Areas of Cultural Heritage Sensitivity

### Other Features

Creeks and waterways

### Inset map

#### Registered Aboriginal Parties

Gunaikurnai Land and Waters Aboriginal Corporation

Other Registered Aboriginal Parties

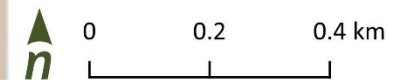


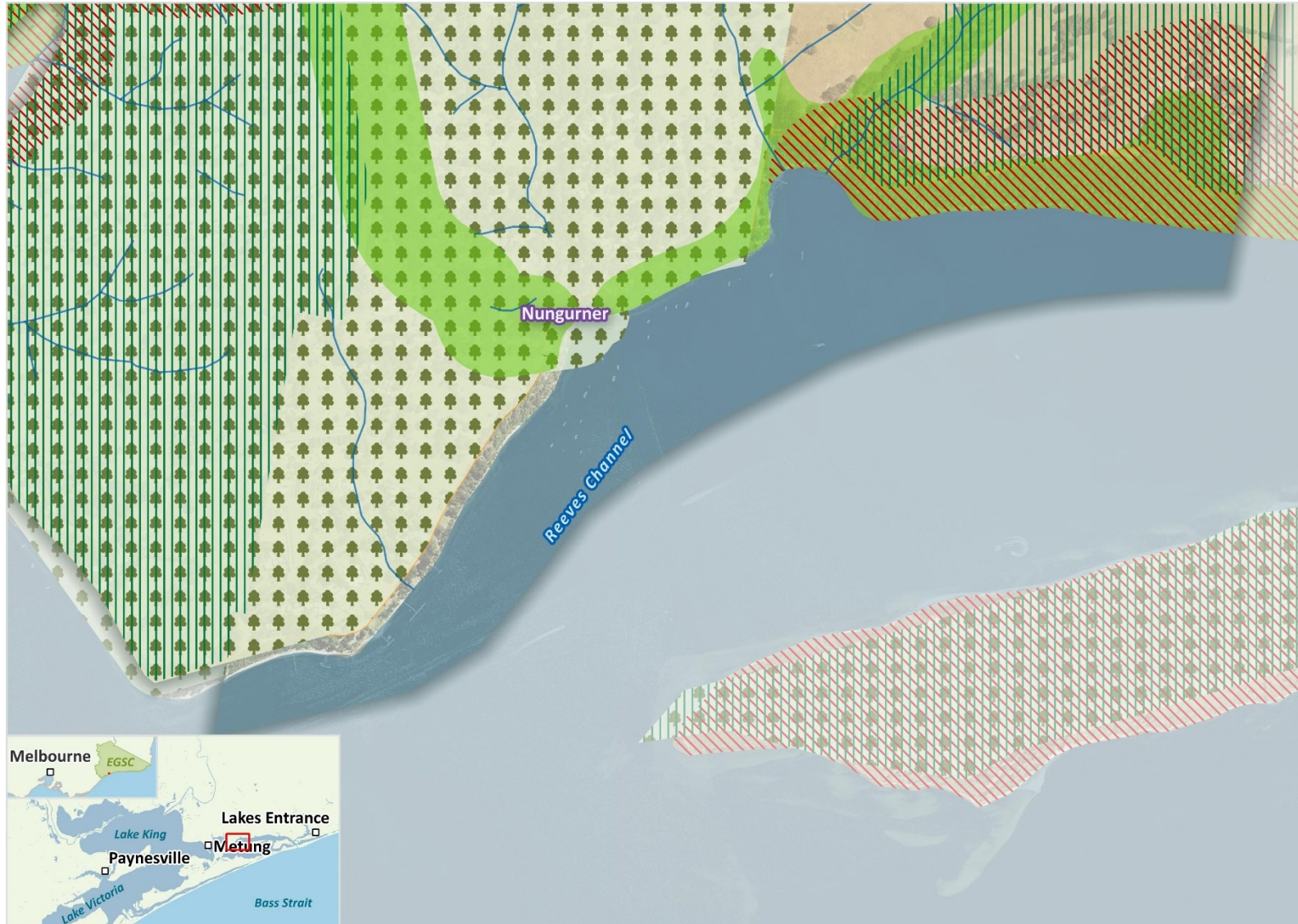
Figure 68. Registered Aboriginal Party areas, culturally sensitive areas, and Joint Management areas for Nungurner.

# Nungurner mapping: Environmental values








Figure 69. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Nungurner.

# Nungurner mapping: Environmental overlays




### Environmental Overlays

#### Planning Scheme Overlays

-  Bushfire Management Overlay
-  Environmental Significance Overlay
-  Erosion Management Overlay
-  Significant Landscape Overlay
-  Vegetation Protection Overlay

#### Other features

-  Creeks and waterways

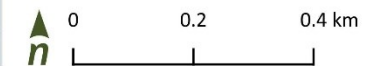


Figure 70. Environmental and land management planning overlays for Nungurner.



**Coastal Hazards**

Gippsland Lakes/90 Mile Beach LCHA\*:

*10% AEP Gippsland Lakes flood extent*

- 0.0 m sea level rise (2014 baseline)
- 0.2 m sea level rise
- 0.4 m sea level rise
- 0.8 m sea level rise

*Lake shoreline erosion hazard extent*

- 0.8 m sea level rise

*Other features*

- Creeks and waterways

AEP: Annual Exceedence Probability (AEP) is the probability of an event occurring in any given year.

Data sources:  
\*Water Technology 2014 - Gippsland Lakes and 90 Mile Beach Local Coastal Hazard Assessment (LCHA) Project

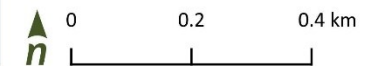


Figure 71. Coastal hazard mapping from the Gippsland Lakes/90 Mile Beach LCHA for Nungurner.

# Nungurner mapping: Coastal protection and drainage infrastructure



- Coastal Infrastructure**
- Protection Structures*
- Groyne
  - Seawall
- Drainage*
- Stormwater pit
  - Stormwater pipe
- Other features*
- Creeks and waterways

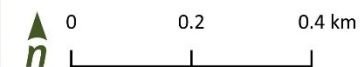


Figure 72. Coastal protection and drainage infrastructure for Nungurner.

# Nungurner mapping: Recreation and transport



### Recreation and Transport

#### Boating

- Boat ramp

#### Open space

- Reserve (park)
- Protected areas

#### Transport

- Roads

#### Other features

- Creeks and waterways

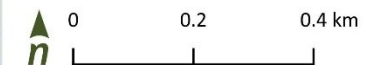
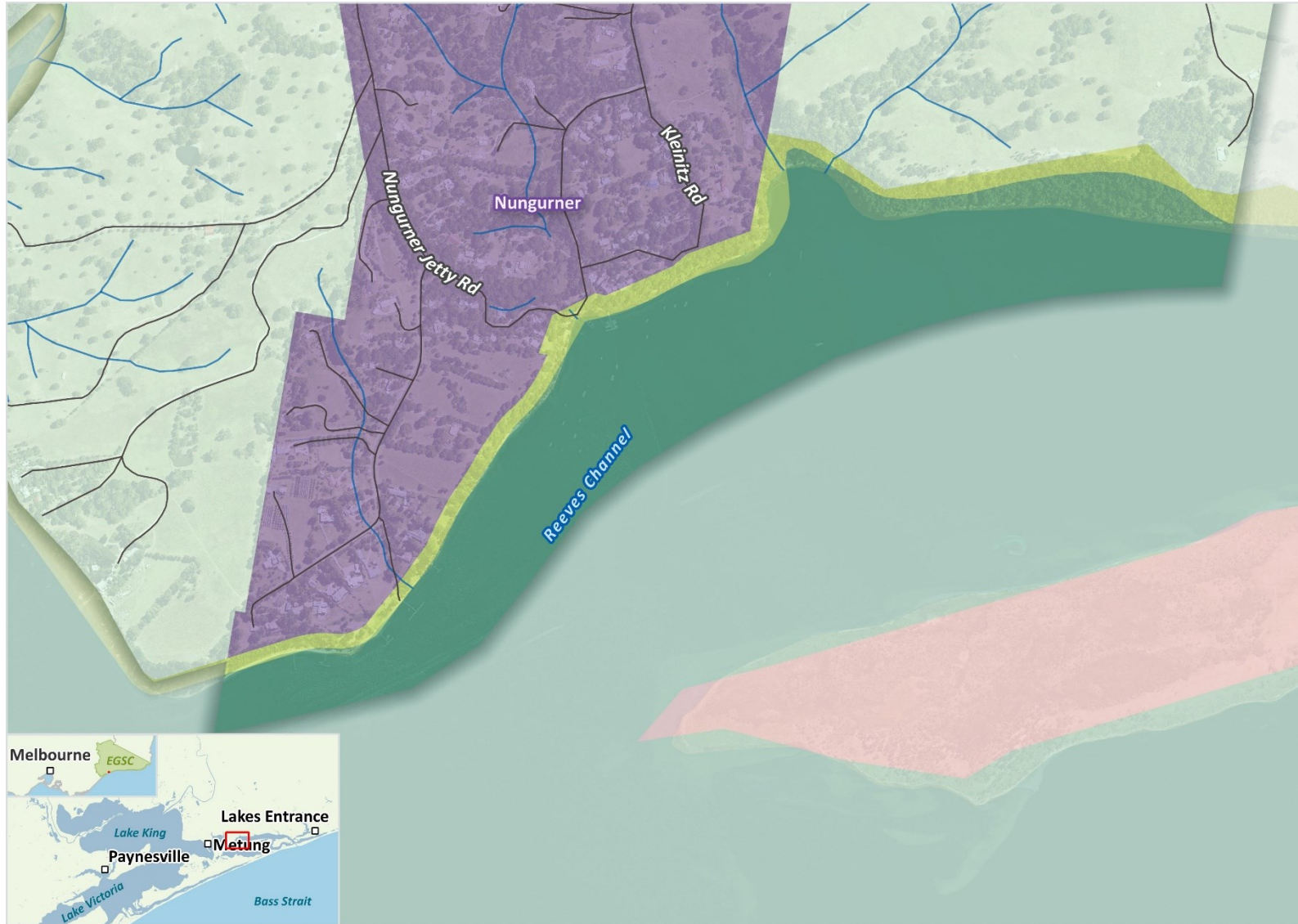


Figure 73. Recreation facilities and transport networks for Nungurner.

# Nungurner mapping: Planning scheme zones



### Planning Scheme Zones

- Farming zone - Schedule 1
- Low density residential zone
- Public conservation and resource zone
- Public park and recreation zone
- Rural conservation zone - Schedule 3

### Transport

— Roads

### Other features

— Creeks and waterways

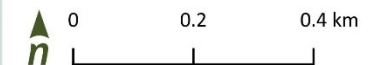


Figure 74. Planning scheme zones for Nungurner.

# Nungurner mapping: Planning overlays



### Planning Overlays

Property boundaries

### Planning Scheme Overlays

Land Subject To Inundation Overlay

Design and Development Overlay

### Other features

Creeks and waterways

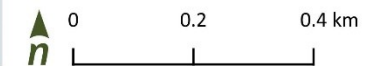


Figure 75. Other planning scheme overlays for Nungurner.

# Nungurner mapping: Land management arrangements



- Land Tenure**
- Public Land Management*
- East Gippsland Shire Council
  - Parks Victoria
- Other features*
- Creeks and waterways
  - Roads
  - Property boundaries

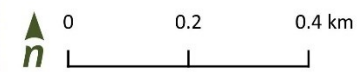


Figure 76. Public land management arrangements for Nungurner.



## 8.6 Management actions

Table 17 details the CMMP management actions for Nungurner.

Figure 77 presents site-specific management actions and maps activity and recreation nodes.

Table 17. Nungurner management actions

Long-term objective	No.	Action	Priority	Council role	Partners
<b>Objective 1: Acknowledge Traditional Owners' rights, aspirations and knowledge</b>	NU1.1	Guided by GLaWAC, support identification, management and protection of cultural heritage values across Nungurner coastal areas. In alignment with Shire Wide actions, this includes: <ul style="list-style-type: none"> <li>Supporting GLaWAC to identify unrecorded cultural heritage sites.</li> <li>Continuing to implement appropriate planning overlays and controls such as Cultural Heritage Management Plans to protect cultural heritage.</li> <li>Collaborating with GLaWAC to better understand cultural values and inform future protection.</li> <li>Incorporating culturally-sensitive design into all works across Council-managed coastal reserves.</li> </ul>	Ongoing	Participate	GLaWAC
	NU1.2	In collaboration with GLaWAC and where desired by Traditional Owners, strengthen existing relationships between members of GLaWAC and community groups through development of further joint initiatives to share Gunaikurnai stories and knowledge. Initiatives could serve to build awareness and understanding within the Nungurner community of the Aboriginal heritage and ongoing cultural values of Nungurner.	3-5 years	Lead	GLaWAC
<b>Objective 2: Protect and enhance the marine and coastal environment</b>	As per Shire wide actions				
<b>Objective 3: Respect natural processes and strengthen resilience to climate change</b>	NU3.1	Investigate options to manage emerging coastal hazard risks, including erosion, across the Nungurner foreshore, including measures to avoid risk and the use of nature-based solutions, such as revegetation. Monitor condition of seawall west of the Nungurner boat ramp. Consider nature-based coastal protection options for future replacement in the event of reaching end-of-life, where appropriate.	3-5 years	Lead	GLaWAC, Parks Victoria, DEECA, EGCSMA, research institutes
<b>Objective 4: Use and develop sustainably</b>	NU4.1	In alignment with Action EG4.1, utilise activity and recreation nodes to clearly delineate distinct purposes and uses within foreshore zones, and ensure efficient development through co-location, partnership use, and consolidation of community assets. Includes delineation of: <ul style="list-style-type: none"> <li>Nungurner Jetty and Boat Ramp as key recreation node, providing heritage features, water access, fishing and other recreational facilities.</li> </ul>	0-3 years	Lead	All other land managers
	NU4.2	In alignment with East Gippsland Housing and Settlement Strategy (2023), continue to foster Rural Town character and prioritisation of natural setting through: <ul style="list-style-type: none"> <li>Maintenance of existing foreshore facilities and investment in facilities, based on assessment of need.</li> <li>Only small-scale housing development within existing residentially zoned areas.</li> <li>Promoting adherence to township boundaries, planning overlays and land use planning.</li> </ul>	Ongoing	Lead	



Long-term objective	No.	Action	Priority	Council role	Partners
<b>Objective 4: Use and develop sustainably (cont.)</b>	NU4.3	Continue to partner with Parks Victoria to promote maintenance and celebration of historic heritage assets, e.g. Nungurner boat shed and old jetty.	5+ years	Participate	Heritage Victoria
<b>Objective 5: Take a stewardship approach, build understanding and knowledge, engage and collaborate</b>	NU5.1	Continue to support and collaborate with local volunteer community environment group e.g. Nungurner Community Landcare Group and Nungurner Community and Coast Action Group. Includes: <ul style="list-style-type: none"> <li>• Promoting community group activities in the coastal and marine space.</li> <li>• Fostering open communication and engagement channels with community groups.</li> <li>• Continuing to seek opportunities to increase community involvement, including through community grants and Council (or other land manager) partnerships.</li> </ul>	Ongoing	Lead	All other management agencies, environmental and community groups and organisations
	NU5.2	In alignment with Shire wide Action EG5.3, review, consolidate and update foreshore signage across Nungurner to: <ul style="list-style-type: none"> <li>• Ensure consistency.</li> <li>• Promote connectivity and wayfinding.</li> <li>• Celebrate unique environments, history and culture.</li> <li>• Support implementation of activity and recreation nodes (Action NU4.1).</li> </ul>	3-5 years	Lead	Other land managers, GLaWAC
	NU5.3	In alignment with Shire wide Action EG5.6, investigate initiatives to encourage engagement of private landowners with environmental management and restoration through education on values of native ecosystems for local resilience and the importance of their protection e.g. against inappropriate recreational use.	Ongoing	Lead	Private landholders

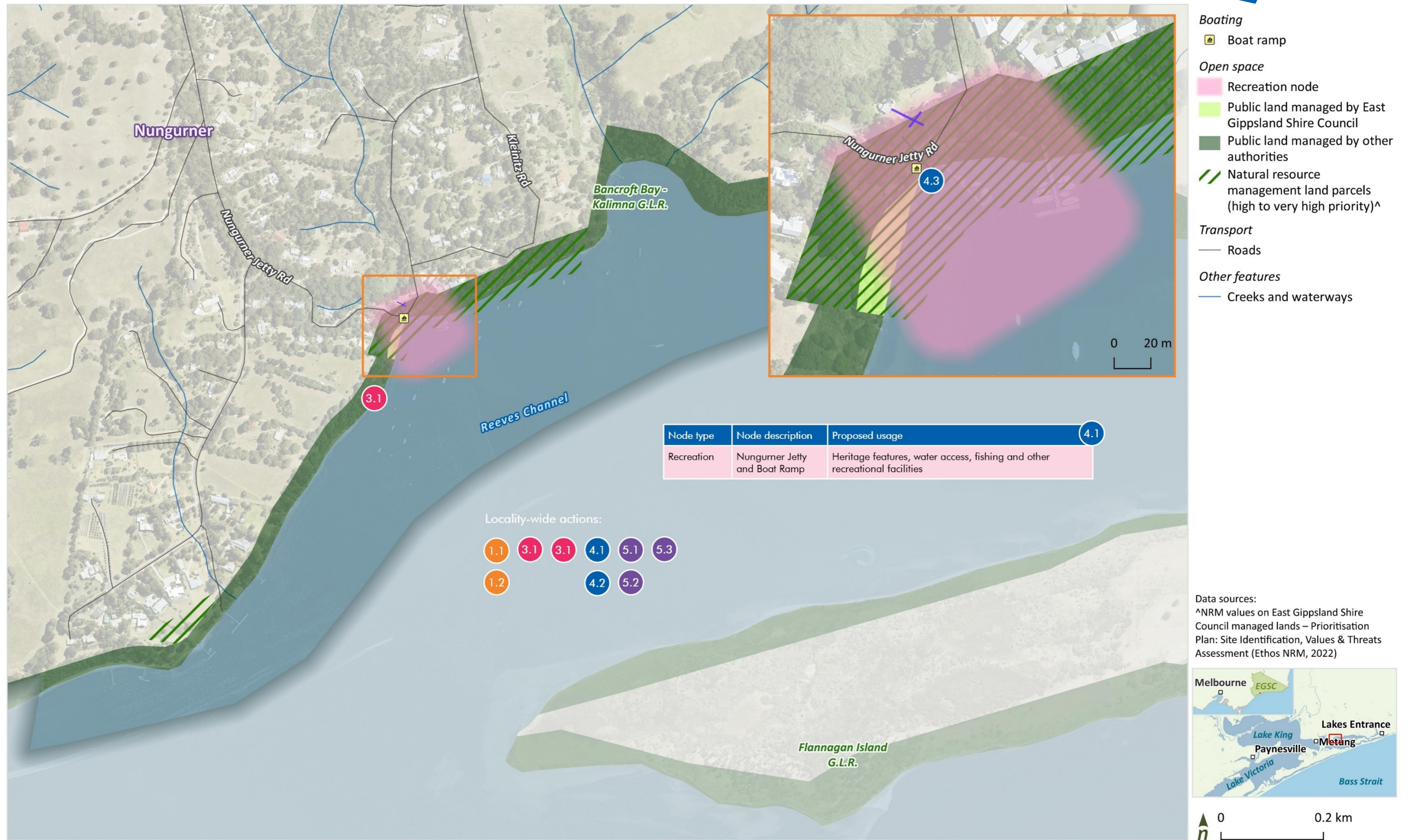


Figure 77. Nungurner management actions and nodes

## 9 Lakes Entrance

Lakes Entrance is one of the more developed areas of the Gippsland Lakes. It has a large population, with over 5,000 residents. Located at the entrance to the Gippsland Lakes and between the open Bass Strait, Cunningham Arm and North Arm, the town is surrounded by water.

Known as a holiday destination, it provides many attractions, caravan and camping resorts, recreational facilities, accommodation, and fishing and boating opportunities. The town's foreshore encompasses Bullock Island to the west, the northern township up North Arm, through to Lake Bunga in the east and areas across to the Outer Barrier.

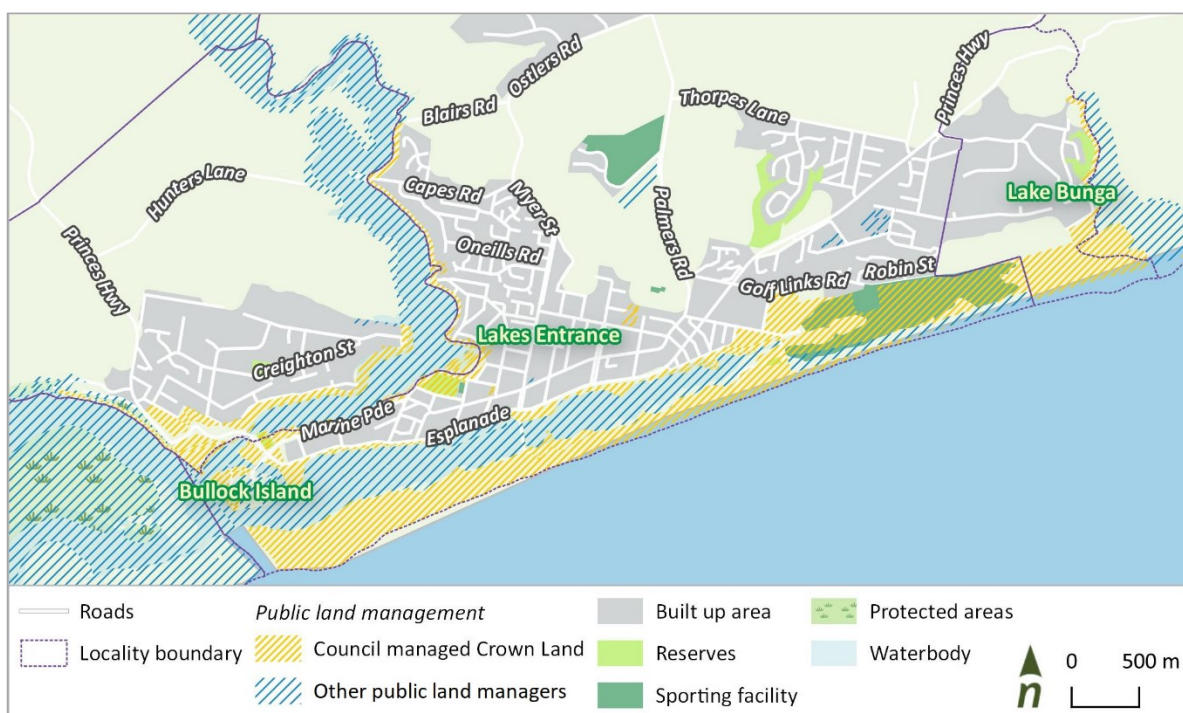


Figure 78. Lakes Entrance and Lake Bunga localities.

### 9.1 Community and connection to coast

Lakes Entrance is the largest coastal locality in the Shire. Popular with retirees, there is a low percentage in the labour force and over a third of the population over 65 years old.

The town's population is expected to grow by over 12% by 2041<sup>4</sup>. Life in Lakes Entrance is centred around access to water, water-based activities and commercial and recreational fishing and boating.

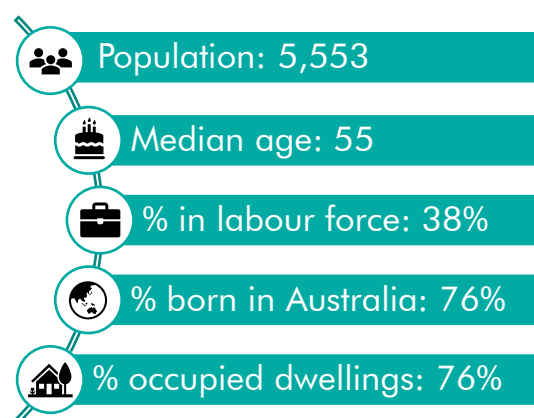


Figure 79. Key statistics for Lakes Entrance and Lake Bunga (ABS, 2021).

<sup>4</sup> <https://forecast.id.com.au/east-gippsland/about-forecast-areas?WebID=120>



The Gunaikurnai people are the Traditional Owners of the Lakes Entrance area, represented by GLaWAC. The area sits within Tatungalung Country, with Krauatungalung Country to the east. The town itself was developed on Traditional Owner camping grounds. Evidence of this use and occupation exists, with many Aboriginal places and objects such as middens, scar trees and artefact scatters.

Waterways and lakes systems were transport networks for the region's Traditional Owners. Ancestors would use bark canoes to travel waterways and open ocean coast, harvesting marine resources.



## 9.2 The coastal environment

The area includes the Outer Barrier dune system, the low-lying main township, Bullock Island and estuaries, inlets and arms of Lake Bunga and Eastern Beach. Lakebeds, waterways and surrounding environments support seagrass beds, saltmarsh, and reedbeds. Important ecological communities include:

- Warm Temperate Rainforest of Kalimna, Lake Bunga, North Arm
- Coastal Dune Scrub and Grassland across the Outer Barrier
- Damp Sands Herb-rich Woodland of coastal islands and estuaries
- Limestone Box Forest
- Coastal Lagoon Wetland across the Eastern Beach region
- Swamp Scrub across creek mouths

Natural values across Kalimna Gully, North Arm and Eastern Beach are particularly high (Ethos NRM, 2022).

## 9.3 Coastal processes and hazards

Lakes Entrance is low lying and very susceptible to flooding. Large areas of the township are only slightly above lake levels, meaning small increases in water level can inundate large areas. Lakes Entrance is currently subject to inundation in flood events (Water Technology, 2014) and the East Gippsland Floodplain Management Strategy (EGCMA, 2017) identifies the high flooding risk.

Inundation hazards are likely to increase with sea level rise, with some areas being permanently inundated. This may impact on significant areas of the township.

Increased erosion of the Outer Barrier is also likely to occur with sea level rise. A critical tipping point could occur between 0.4 and 0.8 m sea level rise, when barrier overwash is likely to increase in frequency, leading to significantly larger flooding extents (Water Technology, 2014).



The Esplanade, commercial jetties, the business district, and multiple roads are all low-lying and would be affected by storm tide inundation and sea level rise. The effectiveness and functionality of drainage networks also reduces as water levels rise.

Lakes Entrance has a range of coastal protection structures and drainage infrastructure to manage impacts of coastal hazards. These include seawalls and revetments across all of Bullock Island, much of the Cunninghame Arm and North Arm foreshores along the main township.



## 9.4 Coastal uses, reserves and facilities

Lakes Entrance is home to the largest commercial fishing fleet in Victoria and one of the largest in Australia, supplying catches to Sydney and Melbourne. It is an important centre for commercial and recreational fisheries and tourism.



The foreshore encompasses a myriad of boating infrastructure including jetties, wharfs, marinas and boat ramps. Bullock Island also hosts the Gippsland Ports offices, Lakes Entrance Fishing Co-op, TAFE Gippsland Seamec facilities along with recreational fishing facilities.

Tourists and residents enjoy a wide range of foreshore facilities including:

- Foreshore walkways and lookouts
- Caravan parks and recreation reserves at North Arm, throughout the township and at Eastern Beach
- Parks, playgrounds, picnic and toilet facilities

The Outer Barrier also provides a coastal bushwalk experience, with opportunities to watch the wildlife around the entrance including dolphins and seals. The Barrier is linked through the Myer Street Footbridge.

### Sand management and dredging

Hosting the largest commercial fishing fleet in Victoria, safe open ocean access is essential for the Lakes Entrance economy, local tourism and recreational users.

Since the permanent entrance was constructed in 1889, regular dredging has been undertaken to maintain safe access.

Gippsland Ports has responsibility to provide safe, navigable channels in the port, including at the entrance. [Further details on dredging operations and management of environmental impacts are provided at: gippslandports.vic.gov.au/ports-and-waterways/sand-management](https://gippslandports.vic.gov.au/ports-and-waterways/sand-management)





## 9.5 Coastal and marine management

Council manage the majority of the foreshore from the edge of the township on North Arm at Tarra Drive, around the township and through to Lake Bunga, including some foreshore along Bullock Island. Council are also responsible for coastal management across the Outer Barrier fronting the township.

Gippsland Ports are the Port manager and are responsible for managing a range of jetties and wharfs across Bullock Island, Cunninghame Quay, and North Arm

The Lakes Entrance Fishing Cooperative (LEFL) sits on DEECA-managed foreshore on Bullock Island. Parks Victoria manage many of the sand islands, Outer Barrier and waterways surrounding the township.

In recent years, many masterplans, designs and strategies have guided management:

- CBD improvement masterplan
- Bullock Island Masterplan
- Slipway Concept Design
- Krauatungalung Walk concept

There are several recent or ongoing Council-led projects across Lake Entrance:

- Streetscaping and traffic improvements
- Bullock Island Master Plan and Bridge Upgrade
- Jemmy's Point Loop Trail
- Slipway Redevelopment
- Foreshore Park Development
- Marine Parade Upgrade
- Krauatungalung Walk
- Apex Park Boat Ramp Carpark

Table 14 summarises community values, challenges and opportunities across Lakes Entrance, with focus areas for future management.

Figure 80 to Figure 88 map key features, values, and management arrangements across the foreshore.








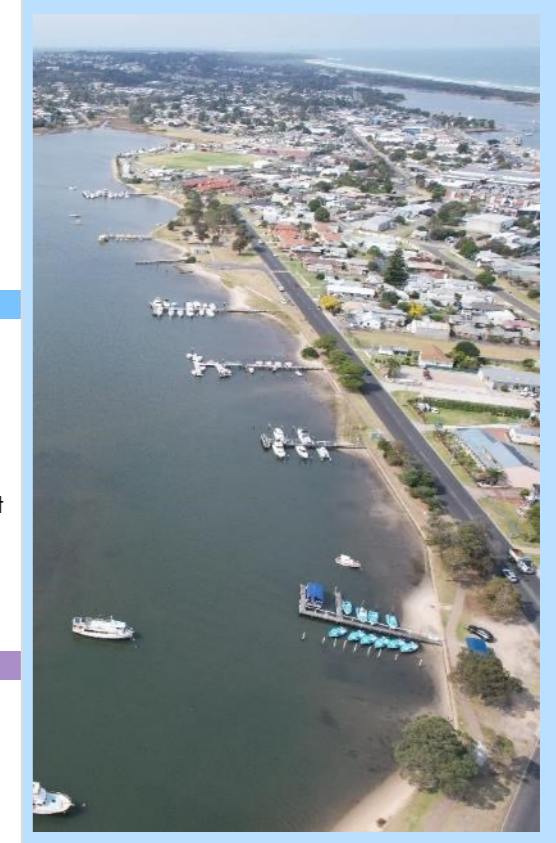
Lakes Entrance's coastal and marine management is guided by the Lakes Entrance Foreshore Management Plan (2012). The Plan defined activity nodes and natural precincts, with strategies to:

- Consolidate reserve boundaries, manage encroachment and, improve inter-agency work
- Enhance pedestrian, cyclist, and vehicle safety and connectivity
- Improve recreational facilities, boating amenities, camping and caravan parks and signage
- Enhance flora and fauna and manage pest plants and animals
- Manage hazards/emergencies such as fire, erosion and flooding.
- Manage cultural heritage values



Table 18. Values, challenges and opportunities for Lakes Entrance coastal and marine management, with focus areas for future management.

		Lakes Entrance			
		Values	Challenges	Opportunities	Focus for management
	Traditional Owners' rights, aspirations, and knowledge	<ul style="list-style-type: none"> <li>Tatungalung and Krauatungalung people and broader Gunaikurnai connection to Country</li> <li>Evidence of use and occupation of camping grounds – middens, artefact scatters, scar trees.</li> <li>Other significant Aboriginal Heritage places and sites (recorded and unrecorded)</li> <li>Existing partnerships with Council, including in delivery of Krauatungalung Walk</li> </ul>	<ul style="list-style-type: none"> <li>Heritage sites being impacted or destroyed by other activities e.g. road and house construction and inappropriate recreational use</li> <li>Managing practicalities of implementing Krauatungalung Walk and protecting natural values through implementation.</li> </ul>	<ul style="list-style-type: none"> <li>Identify unrecorded Aboriginal Heritage sites and continue appropriate planning overlays and controls to protect sites</li> <li>Initiatives to share Aboriginal stories and knowledge, where desired by Traditional Owners</li> <li>Continued partnerships to deliver the Krauatungalung Walk projects</li> </ul>	<ul style="list-style-type: none"> <li>Adaptation planning and clarity around potential risks, management strategies and adaptation pathways for managing coastal hazards.</li> <li>Integrated Water Management and water-sensitive urban design to reduce flooding risk and improve stormwater quality</li> </ul>
	The marine and coastal environment	<ul style="list-style-type: none"> <li>High value natural vegetation and habitat across foreshore reserves – Kalimna and Jemmys Point, North Arm foreshore and Lake Bunga.</li> <li>Important vegetation communities – warm temperate rainforest, coastal dune scrub, damp sands herb-rich woodland, limestone box forest, coastal lagoon wetland, and swamp scrub</li> <li>Rare and threatened species - Burrnan Dolphins, Musk Duck, Spotted-tail Quoll, terns and plovers.</li> <li>Surrounding sand islands, Outer Barrier and bird habitat, including Ramsar-listed wetlands</li> </ul>	<ul style="list-style-type: none"> <li>Increased salinity, coastal erosion, changing lake conditions, and lack of space for ecosystem retreat</li> <li>Stormwater quality, litter and pollution from urban, agricultural and industrial zones, includes boat wastewater releases (commercial and residents)</li> <li>Increasing development and population growth pressures on natural values</li> <li>Litter, including fishing line and discarded nets</li> <li>Conflicts between dogs and bird nesting habitats</li> <li>Feral predator, pest and weed threats</li> <li>Declining water quality – salinity and algae blooms</li> </ul>	<ul style="list-style-type: none"> <li>Investigate options for tourism operator permits and licensing to improve compliance</li> <li>Initiatives to protect endangered species, native vegetation and ecosystems - weed management and revegetation of native species</li> <li>Improve litter education, increase jetty bins and signage and investigate options for floating sea bins</li> <li>Apply water-sensitive urban design, communicate emergency wastewater discharge arrangements, use of recycled water, and runoff controls from urban areas, agricultural and industrial zones</li> </ul>	<ul style="list-style-type: none"> <li>Strategic planning and communication of activity, recreation and industrial nodes and environmentally sensitive areas</li> <li>Improve communication of management roles, responsibilities and investigate enforcement opportunities to improve environmental compliance across the Gippsland Lakes.</li> <li>Promote equitable use and sustainable marine and coastal industries, including commercial fishing and eco-tourism.</li> </ul>
	Natural processes and climate change	<ul style="list-style-type: none"> <li>Proximity to water and coastal landscapes as a major attraction to the town</li> <li>Areas of higher ground, with reduced coastal hazard risk</li> </ul>	<ul style="list-style-type: none"> <li>Coastal hazard impacts across large coastal areas</li> <li>Current inundation across main township in storm events – stormwater drainage issues</li> <li>Erosion and permanent inundation across Bullock Island, Outer Barrier and main township</li> <li>Significant increase in coastal hazard impacts likely – sea level rise</li> <li>Community concerns of entrance dredging impacts</li> </ul>	<ul style="list-style-type: none"> <li>Undertake long-term strategic adaptation planning</li> <li>Communicate latest coastal hazard mapping</li> <li>Update / enforce coastal hazard planning overlays</li> <li>Best-practice Integrated Water Management (IWM) and water sensitive urban design (WSUD) to mitigate flooding, improve stormwater quality and discharge points</li> <li>Resilient design of facilities to respect changing coastal processes and hazards</li> <li>Communication of entrance dredging procedures, impacts and monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Investigate and increase understanding of cultural heritage and ensure protection.</li> </ul>
	Sustainable use and development	<ul style="list-style-type: none"> <li>Central tourism hub across Gippsland</li> <li>Walking tracks, access and township connectivity</li> <li>Access to coastal reserves and public open space</li> <li>Major boating facilities – Esplanade marinas, jetties and moorings, boat ramps, pump out facilities</li> <li>Facilities to support recreational activities - caravan and camping parks, swimming, boating, fishing, walking, cycling, toilets, picnic and BBQ facilities.</li> <li>Strong maritime heritage and commercial fishing</li> </ul>	<ul style="list-style-type: none"> <li>Coastal inundation and flooding impacting foreshore facilities and township</li> <li>Poor public access and walking connectivity – Lakes Entrance Golf Course and along to Eastern Beach</li> <li>Facilities to support seasonal visitation fluctuations – parking, mooring and seating availability</li> <li>Tired, outdated or lack of public foreshore facilities</li> <li>Topographical constraint on development, particularly in the north</li> </ul>	<ul style="list-style-type: none"> <li>Monitor usage and plan facilities accordingly</li> <li>Sewage pump-out facility upgrades and improved messaging, communication and enforcement.</li> <li>Streetscaping and landscaping with upgraded facilities and native vegetation</li> <li>Ecological and water-sensitive development and resilient design that includes consideration of natural processes and current and future coastal hazards</li> <li>Recognise and facilitate sustainable port, commercial and tourism opportunities, including seasonal pop-ups</li> </ul>	
	Stewardship, knowledge, engagement and collaboration	<ul style="list-style-type: none"> <li>Community groups – Lakes Entrance Action Development Association, Lakes Entrance Landcare</li> <li>Recreational clubs - Lake Entrance Life Saving Club, Gippsland Lakes Fishing Club, Lakes Entrance Fishermen's Co-op</li> </ul>	<ul style="list-style-type: none"> <li>Poorly defined and understood land and asset management arrangements– e.g. jetty maintenance, environmental management and monitoring, water quality, enforcement etc.</li> </ul>	<ul style="list-style-type: none"> <li>Communicate ongoing work and clarify roles across Gippsland Lakes through GLCC work</li> <li>Investigate increased public access opportunities</li> </ul>	



# Lakes Entrance mapping: Traditional Owners and cultural values



### Traditional Owners and Cultural Values

- Areas of Cultural Heritage Sensitivity
- Jointly managed parks and reserves (Gunaikurnai Land and Waters Aboriginal Corporation and Parks Victoria)

### Other Features

- Creeks and waterways

### Inset map

#### Registered Aboriginal Parties

- Gunaikurnai Land and Waters Aboriginal Corporation
- Other Registered Aboriginal Parties

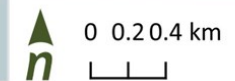


Figure 80. Registered Aboriginal Party areas, culturally sensitive areas and Joint Management areas for Lakes Entrance and Lake Bunga.

# Lakes Entrance mapping: Environmental values



- Environmental Values**
- Protected areas
  - Ramsar boundary
  - Coastal bird habitat
- Ecological Vegetation Class<sup>^</sup>**
- Coastal Dune Scrub/Coastal Dune Grassland Mosaic
  - Damp Sands Herb-rich Woodland
  - Limestone Box Forest
  - Lowland Forest
  - Plains Grassy Forest
  - Warm Temperate Rainforest
  - Swamp Scrub
  - Limestone Pomaderris Shrubland
  - Coastal Lagoon Wetland
- Seamap ecosystems<sup>\*</sup>**
- Coastal saltmarshes and saline reedbeds
  - Littoral sediment
  - Sublittoral seagrass beds
- Other features**
- Creeks and waterways

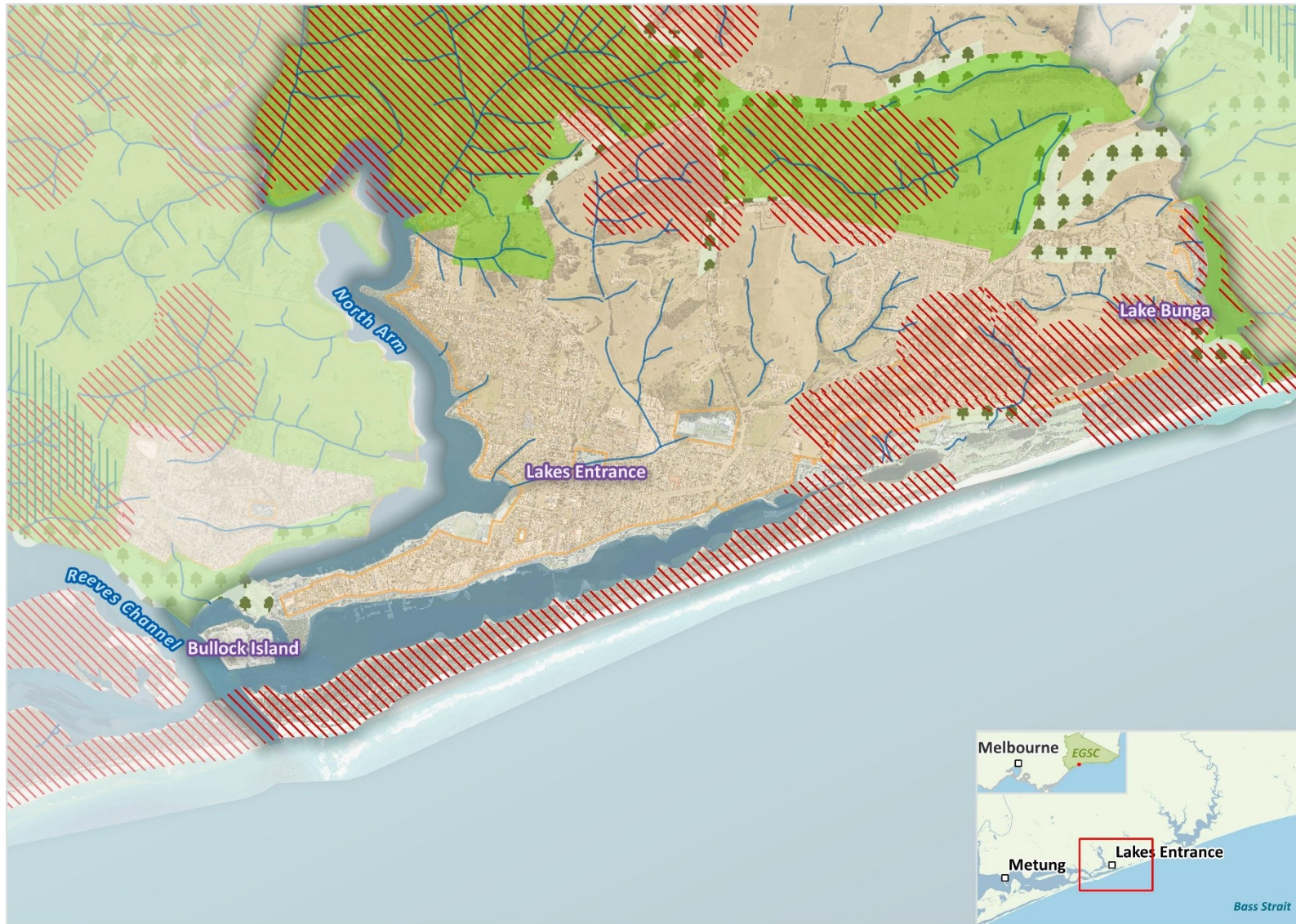


Data sources:  
<sup>^</sup>Native Vegetation - Modelled 2005 Ecological Vegetation Classes (DEECA)  
<sup>\*</sup>Seamap Australia (Lucieer et al., 2017)

0 0.2 0.4 km

Figure 81. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Lakes Entrance and Lake Bunga.

# Lakes Entrance mapping: Environmental overlays



### Environmental Overlays

#### Planning Scheme Overlays

- Bushfire Management Overlay
- Environmental Significance Overlay
- Erosion Management Overlay
- Significant Landscape Overlay
- Vegetation Protection Overlay

#### Other features

- Creeks and waterways

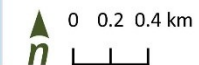
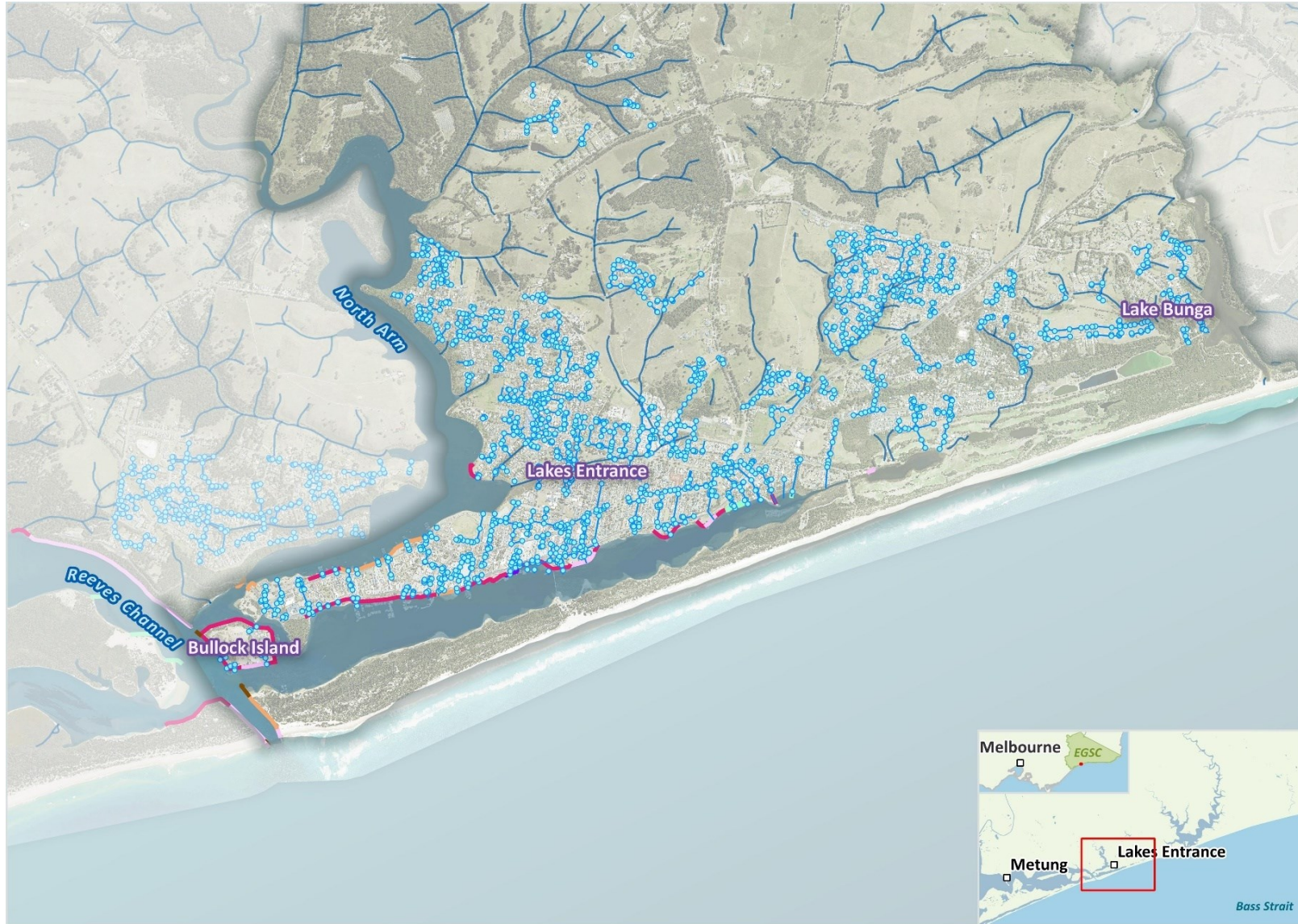


Figure 82. Environmental and land management planning overlays for Lakes Entrance and Lake Bunga.



Figure 83. Coastal hazard mapping from the Gippsland Lakes/90 Mile Beach LCHA and Statewide coastal hazard data as part of the Victorian Governments Future Coasts Project and Victorian Coastal Hazard Assessment for Lakes Entrance and Lake Bunga.

# Lakes Entrance mapping: Coastal protection and drainage infrastructure



### Coastal Infrastructure

#### Protection Structures

- Breakwater
- Groyne
- Revetment
- Seawall
- Non-commercial Wharf
- Unknown

#### Drainage

- Stormwater pit
- Stormwater pipe

#### Other features

- Creeks and waterways

Figure 84. Coastal protection and drainage infrastructure for Lakes Entrance and Lake Bunga.

# Lakes Entrance mapping: Recreation and transport



## Recreation and Transport

### Boating

- Boat mooring
- Boat ramp
- Slipway
- Marinas and jetties

### Facilities

- Playground
- Community facility
- Caravan park
- Education complex
- Landfill
- Quarry
- Treatment plant

### Open space

- Bowling green
- Golf course
- Netball court
- Reserve (park)
- Sports ground
- Tennis court
- Protected areas

### Transport

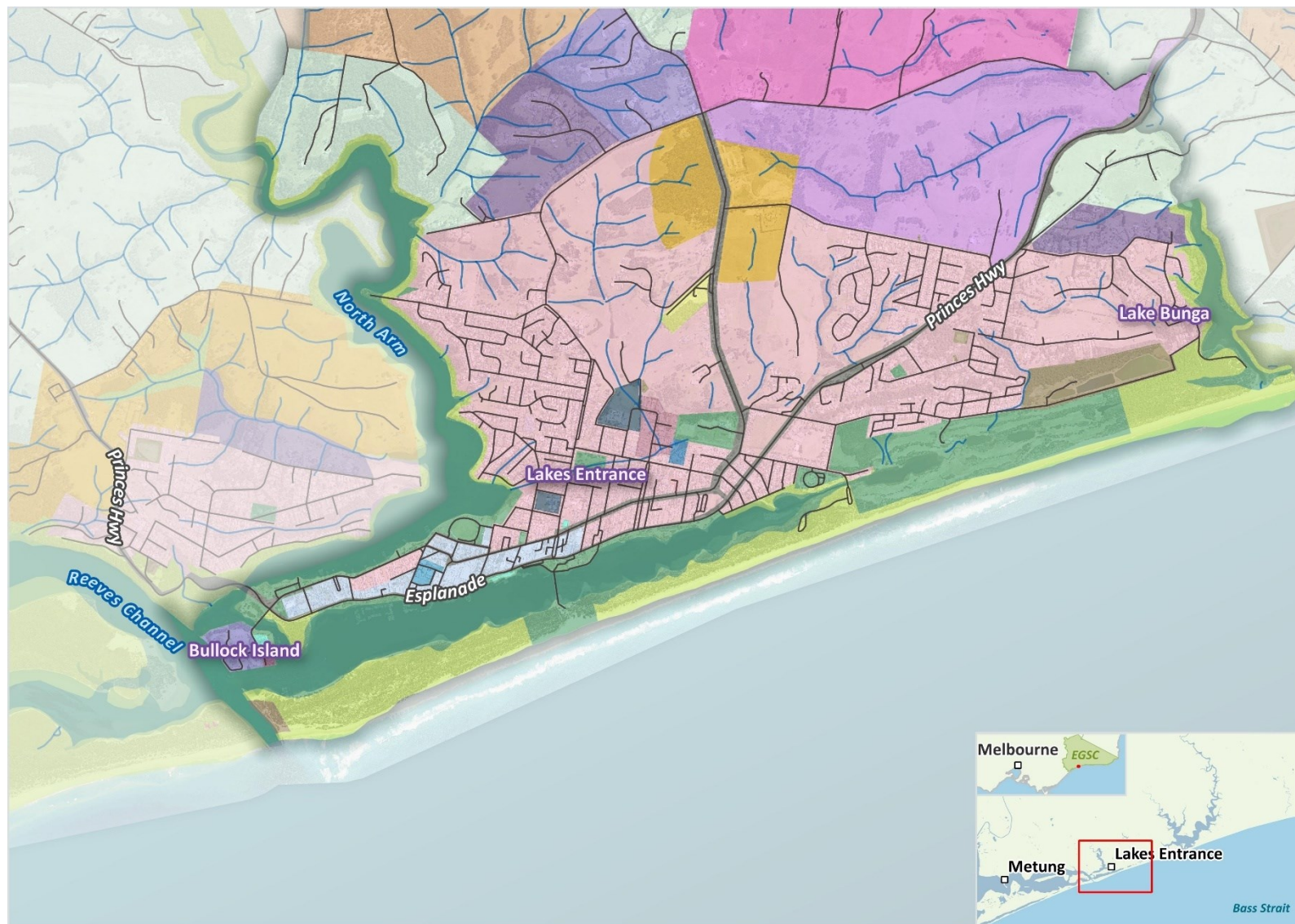
- Roads
- Footpath
- Trail

### Other features

- Creeks and waterways
- 0 0.2 0.4 km
- n

Figure 85. Recreation facilities and transport networks for Lakes Entrance and Lake Bunga.

# Lakes Entrance mapping: Planning scheme zones



### Planning Scheme Zones

- Commercial 1 zone
- Commercial 2 zone
- Farming zone - Schedule 1
- Farming zone - Schedule 3
- General residential zone - Schedule 1
- Industrial 1 zone
- Industrial 3 zone
- Low density residential zone
- Public conservation and resource zone
- Public park and recreation zone
- Public use zone - Cemetery/crematorium
- Public use zone - Education
- Public use zone - Local government
- Public use zone - Other public use
- Public use zone - Service and utility
- Rural conservation zone - Schedule 3
- Rural living zone - Schedule 2
- Special use zone - Schedule 1
- Transport zone 2 - Principal road network

### Transport

- Roads

### Other features

- Creeks and waterways

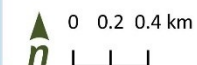
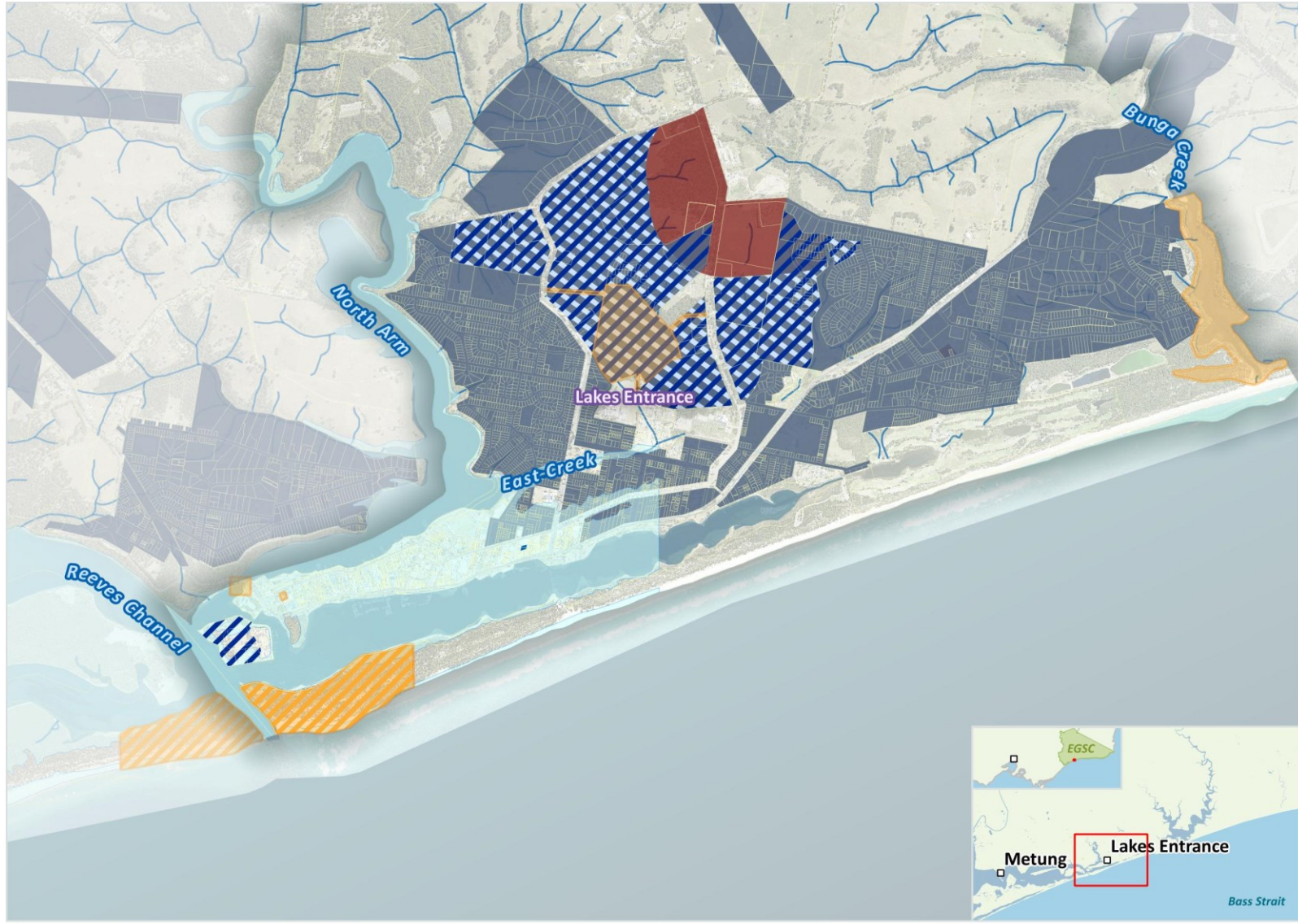


Figure 86. Planning scheme zones for Lakes Entrance and Lake Bunga.

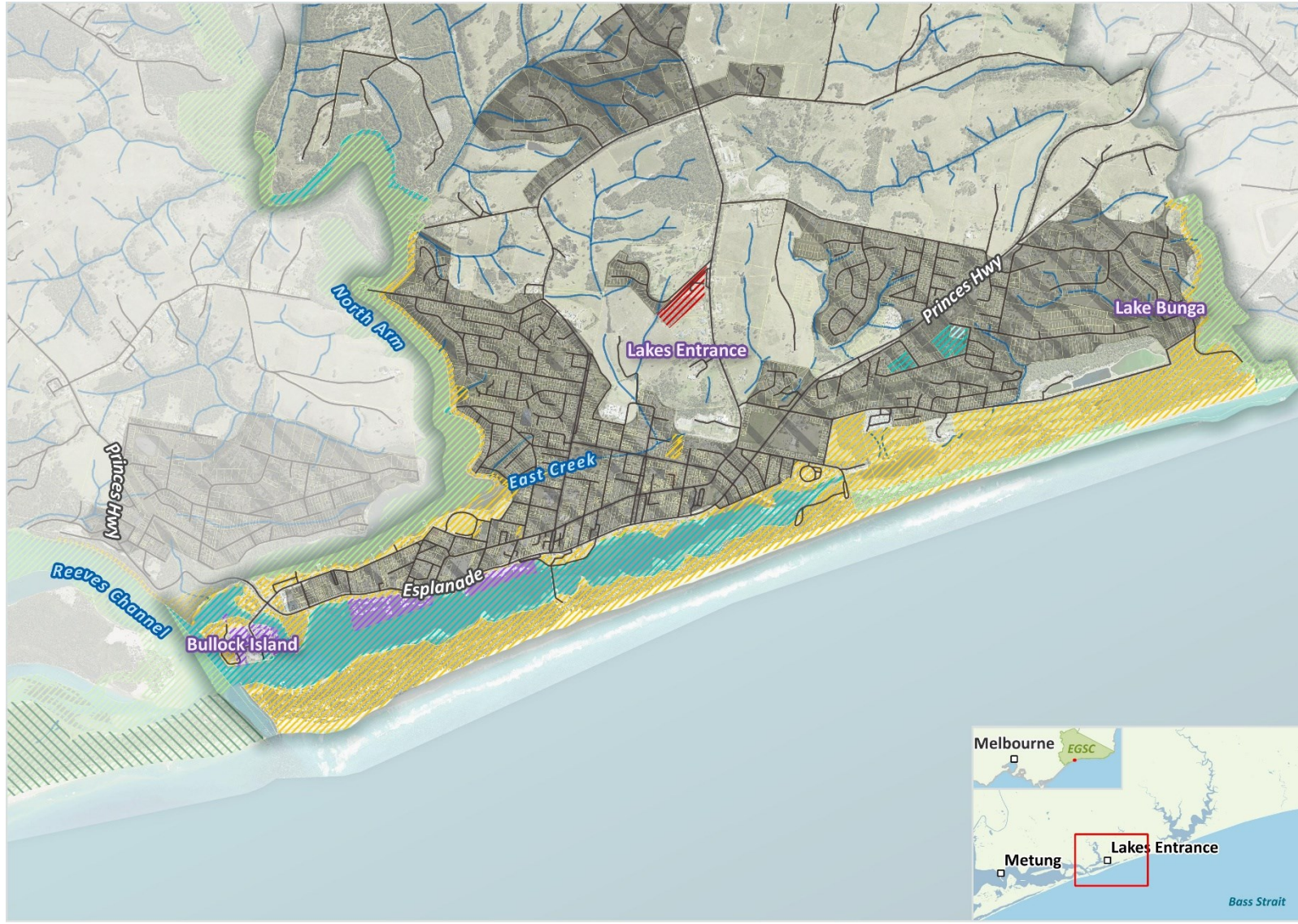
# Lakes Entrance mapping: Planning overlays



- Planning Overlays**
- Property boundaries
  - Heritage listings under the Victorian Heritage Inventory
- Planning Scheme Overlays**
- Development Contributions Plan Overlay
  - Development Plan Overlay
  - Heritage Overlay
  - Public Acquisition Overlay
  - Environmental Audit Overlay
  - Land Subject to Inundation Overlay
  - Design and Development Overlay
- Other features**
- Creeks and waterways

Figure 87. Other planning scheme overlays for Lakes Entrance and Lake Bunga.

# Lakes Entrance mapping: Land management arrangements



- Land Tenure**
- Public Land Management*
- East Gippsland Shire Council
  - Parks Victoria
  - Department of Energy, Environment and Climate Action
  - Department of Health
  - Department of Justice and Community
  - Department of Transport
  - Water Authority
  - Jointly managed parks and reserves (Gunaikurnai Land and Waters Aboriginal Corporation)
- Other features*
- Creeks and waterways
  - Roads
  - Property boundaries
  - Built up areas

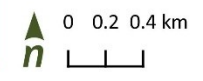


Figure 88. Public land management arrangements for Lakes Entrance and Lake Bunga.



## 9.6 Management actions

Table 19 details the CMMP management actions for Lakes Entrance.

Figure 89 presents site-specific management actions and maps activity, recreation and industrial nodes.

Table 19. Lakes Entrance management actions

Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 1: Acknowledge Traditional Owners' rights, aspirations and knowledge</b>	LE1.1	Guided by GLaWAC, support identification, management and protection of cultural heritage values across Lakes Entrance coastal areas. In alignment with Shire Wide actions, this includes: <ul style="list-style-type: none"> <li>Supporting GLaWAC to identify unrecorded cultural heritage sites.</li> <li>Continuing to implement appropriate planning overlays and controls such as Cultural Heritage Management Plans to protect cultural heritage.</li> <li>Collaborating with GLaWAC to better understand cultural values and inform future protection.</li> <li>Incorporating culturally-sensitive design into all works across Council-managed coastal reserves.</li> </ul>	Ongoing	Participate	GLaWAC
	LE1.2	Continue partnership with GLaWAC in delivery of Stages 1-4 of the all-abilities Krauatungalung Walk encircling the Cunninghame Arm. Ensure development reflects aspirations of Gunaikurnai peoples, incorporates objectives of the CMMP and provides for ongoing protection of natural values throughout the walk's construction.	0-3 years, then ongoing	Lead	GLaWAC
	LE1.3	In collaboration with GLaWAC and Action EG1.3, continue to investigate development and implementation of further initiatives to share Aboriginal stories and knowledge of the Lakes Entrance region. Includes communication and signage related to delivery of the Krauatungalung Walk (Action LE1.2).	3-5 years	Lead	GLaWAC
<b>Objective 2: Protect and enhance the marine and coastal environment</b>	LE2.1	Collaborate with BirdLife Australia, EGCMA and other stakeholders to promote important estuarine and coastal wetland habitats across the Gippsland Lakes and fringing wetlands. Support education on impacts of inappropriate recreational use, presence of dogs, and vegetation removal.	Ongoing	Participate	EGCMA, BirdLife Australia, environmental and community groups
	LE2.2	Investigate and implement litter management measures, with focus on discarded fishing line and nets.	3-5 years	Lead	Gippsland Ports
<b>Objective 3: Respect natural processes and strengthen resilience to climate change</b>	LE3.1	Building from existing coastal hazard assessments and adaptation planning to date, prioritise and undertake long-term strategic coastal hazard adaptation planning. Includes: <ul style="list-style-type: none"> <li>Reviewing available information, data and mapping for Lakes Entrance and suitability for adaptation planning.</li> <li>Prioritising adaptation planning funding applications for Lakes Entrance (in alignment with Action EG3.2).</li> <li>Following Victoria's Resilient Coast framework and guidelines to develop long-term adaptation and resilience planning.</li> <li>Engaging and communicating throughout process, including stakeholder and rightsholder partnerships and community engagement.</li> </ul>	0-3 years	Lead	DEECA, EGCMA, GLaWAC, Gippsland Ports, Parks Victoria, other land asset and infrastructure managers
	LE3.2	In collaboration with DEECA, monitor and assess coastal protection structures across Lakes Entrance, including seawalls, revetments and other structures. Consider opportunities for enhancing ecological outcomes (e.g. living seawalls) or alternatives to protection infrastructure through hybrid/nature-based solutions and adaptation planning. Embed State policy to consider adaptation options in order of preference. Aligns with Action EG3.5.	0-3 years	Participate	DEECA



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 4: Use and develop sustainably</b>	LE4.1	In alignment with Action EG4.1, utilise activity, recreation and industrial nodes to clearly delineate distinct purposes and uses within foreshore zones, and ensure efficient development through co-location, partnership use, and consolidation of community assets. Includes delineation of: <ul style="list-style-type: none"> <li>Lakes Entrance Esplanade (Princes Highway) and Marine Parade foreshore from Stock Street west as key activity node.</li> <li>Jemmys Lookout, Bullock Island, Lakes Entrance SLSC, and Eastern Beach (Lions Park) as key recreation nodes supporting a range of visitor experiences, water access and facilities to support recreational activities.</li> <li>Bullock Island marine industries and fishing co-op as an industrial node.</li> </ul>	0-3 years	Lead	All other land managers
	LE4.2	In alignment with East Gippsland Housing and Settlement Strategy (2023), continue to foster Service Town character through: <ul style="list-style-type: none"> <li>Provision and maintenance of foreshore facilities to meet community and visitor needs.</li> <li>Sustainable growth subject to environmental risk (bushfire, flood, coastal hazard) constraints.</li> <li>Promoting adherence to township boundaries, planning overlays and land use planning.</li> </ul>	Ongoing	Lead	
	LE4.3	Progress and complete upgrade works to foreshore precincts and facilities that are currently underway including: Streetscaping and traffic improvements, Jemmy's Point Loop Trail, Foreshore Park Development, Marine Parade Upgrade and Apex Park Boat Ramp Carpark, and Krauatungalung Walk. Review designs and planning to ensure proposed works and upgrades align with CMMP objectives, principles, actions and State policy.	Ongoing	Lead	DEECA, GLaWAC
	LE4.4	In collaboration with the East Gippsland Integrated Water Management Forum, contribute to a Lakes Entrance Integrated Water Management Plan and develop a stormwater management plan to guide best-practice stormwater management.	3-5 years	Participate	DEECA, IWM Forum partners
	LE4.5	Ensure resilient design of new/upgraded infrastructure and facilities, considering natural processes and current and future coastal hazards. Consider: <ul style="list-style-type: none"> <li>Ecologically and culturally sensitive design e.g. boardwalks through hazard prone areas and/or sensitive cultural heritage sites or ecological communities.</li> <li>Integrated water management approaches and water-sensitive urban design to reduce flood risk, improve stormwater quality, sediment runoff and discharge points.</li> <li>Infrastructure design life and resilience to coastal hazard impacts, and adaptative management of facilities, recognising any emerging coastal hazard risk.</li> </ul>	Ongoing	Lead	
	LE4.6	In alignment with Shire wide Action EG4.3, review licensing and leasing arrangements across Lakes Entrance, with a focus on commercial operations and longer term operations, including camping or accommodation requirements/locations. Consider coastal-dependent activities with functional need to be near the coast.	0-3 years	Lead	DEECA



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 5: Take a stewardship approach, build understanding and knowledge, engage and collaborate</b>	LE5.1	Continue to support and collaborate with local volunteer community environment groups e.g. Lakes Entrance Landcare, Friends of the Gippsland Lakes, Gippsland Environment Group. Includes: <ul style="list-style-type: none"> <li>Promoting community group activities in the coastal and marine space.</li> <li>Fostering open communication and engagement channels with community groups.</li> <li>Continuing to seek opportunities to increase community involvement, including through community grants and Council partnerships.</li> </ul>	Ongoing	Lead	All other management agencies, environmental and community groups and organisations
	LE5.2	In alignment with Shire wide Action EG5.3, review consolidate and update foreshore signage across Lakes Entrance to: <ul style="list-style-type: none"> <li>Ensure consistency.</li> <li>Promote connectivity, wayfinding and safety.</li> <li>Celebrate unique environments, history and culture.</li> <li>Support implementation of activity, recreation and industrial nodes (Action LE4.1).</li> </ul>	3-5 years	Lead	Other land managers, GLaWAC
	LE5.3	In alignment with Shire wide Action EG5.8, review and prioritise encroachment cases across Lakes Entrance. Work with landholders to address cases of encroachment, guided by Shire wide policy, framework and procedures.	3-5 years	Lead	DEECA, Parks Victoria, other land managers
	LE5.4	In collaboration with Gippsland Ports, continue to maintain clear, accurate and timely communication with the community regarding entrance dredging operations, procedures, impacts, environmental assessments and monitoring.	Ongoing	Participate	DEECA

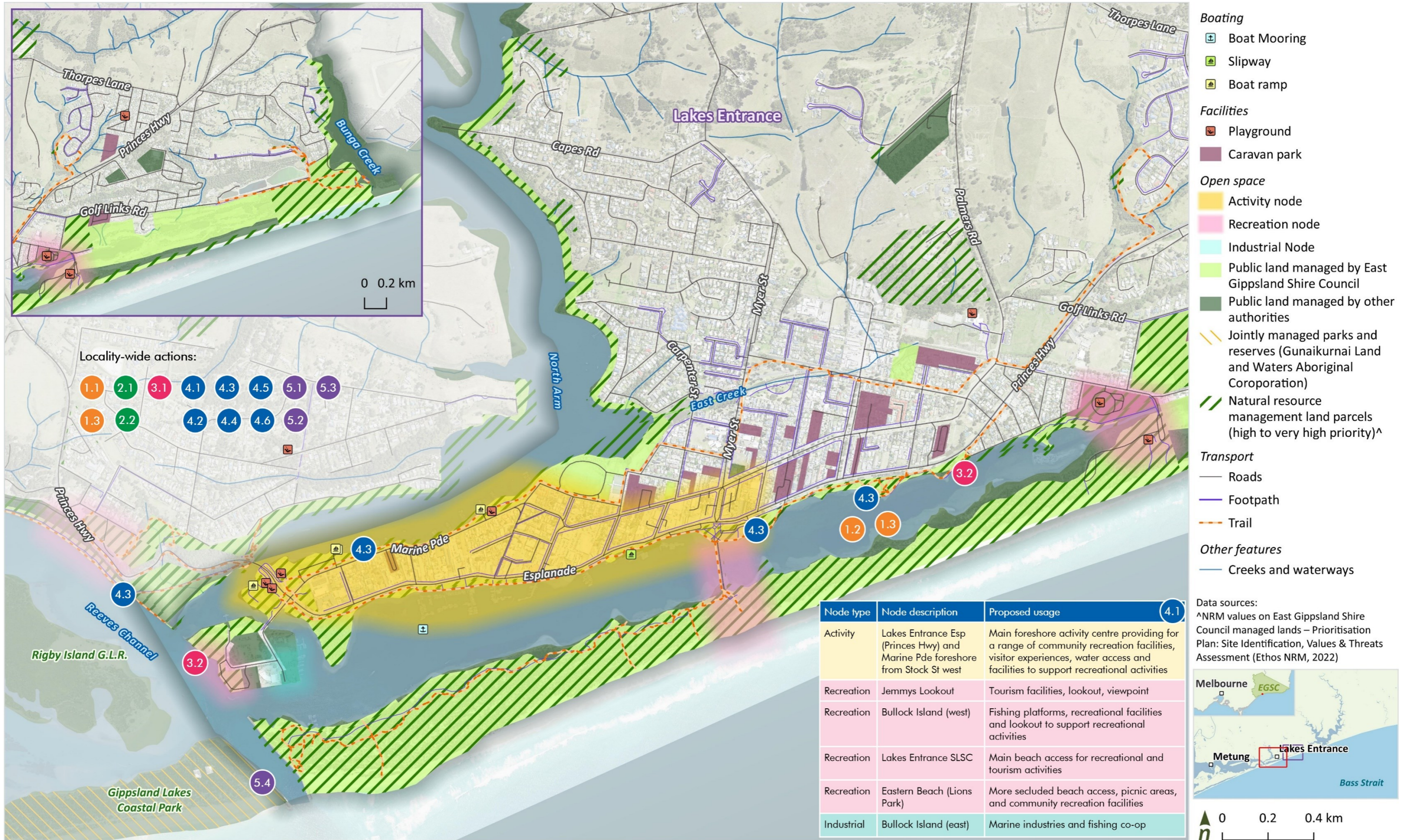


Figure 89. Lakes Entrance management actions and nodes

## 10 Lake Tyers Beach

The quiet town of Lake Tyers Beach is on the western shores of Lake Tyers. The township spans the lake and Bass Strait coast. Lake Bunga and Lakes Entrance sit to the west.

This holiday destination is popular for surfing, swimming, fishing, and wildlife watching. The Lake itself is an intermittently closed-open estuary with high cultural and environmental value. Lake Tyers is a valued land, kayak and boat fishing spot.



Figure 91. Lake Tyers Beach locality.

### 10.1 Community and connection to coast

The small community includes retirees, families and holiday home owners. With a slightly lower median age than similar rural towns, Lake Tyers Beach has a relatively high proportion of teenagers and mature families. Community facilities and attractions include the primary school, caravan park, general store and tavern.

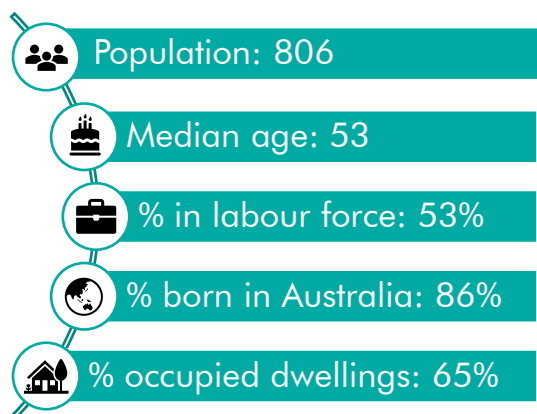


Figure 90. Key statistics for Lake Tyers Beach (ABS, 2021).

The Gunaikurnai people are the Traditional Owners of the Lake Tyers Beach area, represented by GLaWAC. The area sits within Krauatungalung Country.

Lake Tyers was an important meeting place for Gunaikurnai groups. It was a neutral place, rich in food and materials. As an abundant place, a lot of people lived there. Many recorded scar trees, artefact scatters, birthing places and burial sites exist. The land, water and surrounds remain important for hunting, catching fish and eels, and collecting mussels, swan eggs, various plants for food and medicine.





Management responsibility for Lake Tyers was transferred back to Traditional Owners in the 1970s. This was one of the first successful Aboriginal land rights claims in Australia's history.

**The formation of Bung Yarnda (Lake Tyers)**

Narkabungdha, the sea, was tired from playing with fish, rushing over rocks and rolling up and back on the sand. He searched the coast for somewhere to rest. At last he found a quiet place with tall gum trees for shade and soft earth to lie on. Narkabungdha lay down to sleep. He wriggled down into the soft sand, turning his body this way and that until he was comfortable. This place became Bung Yarnda (Lake Tyers), a place where Narkabungdha still rests among the trees.

*Gunaikurnai Whole of Country Plan (GLaWAC, 2015)*



Today the Lake Tyers Aboriginal Reserve is the private property of the Lake Tyers Aboriginal Trust. Gunaikurnai Traditional Owners and Parks Victoria jointly manage Lake Tyers State Park. These two reserves together form one of the most significant cultural and historic places in Victoria for Aboriginal people.

**10.2 The coastal environment**

Lake Tyers is listed on the Directory of Important Wetlands in Australia. The lake and adjoining coastal dune foreshore host a variety of flora and fauna. These important ecological communities include:

- Littoral Rainforest and Coastal Vine Thickets of the beach and lake foreshore (EPBC-listed)
- Subtropical and Temperate Coastal Saltmarsh (EPBC-listed)
- Limestone Box Forest across the Fisherman's Landing Arm

These ecosystems supports a diversity of species, including threatened bird species:

- Fairy, Little and Caspian Terns
- Little and White-bellied Sea Eagles
- Hooded Plover
- Eastern Curlew
- Musk Duck
- Plumed and Eastern Great Egrets
- Curlew sandpiper

Other important species recorded around the Lake Tyers Beach area include the Long-nosed Potoroo, Grey-headed Flying-fox and Southern Right Whale.

Threats to natural values across the Lake Tyers area are very high (Ethos NRM, 2022). These include:

- Weed infestations
- Pest animal impacts (e.g. deer)
- Adjacent land use impacts
- Vegetation dieback
- Erosion (coastal and hillslope)





### 10.3 Coastal processes and hazards

The Lake Tyers estuary naturally opens and closes. Historically, the estuary is closed around 75% of the time. With a relatively small catchment, high rainfall and river flows are needed for successful opening.

Commercial and residential properties and assets are largely situated on the steep surrounding hills. Only small lakeshore areas flood when the estuary closes. This impacts boat ramps, fishing platforms, jetties, and tracks across the foreshore.

Sea level rise and climate change could alter opening and closure. This may include more frequent or longer closures and higher water levels needed for opening (Water Technology, 2013). Erosion across the foreshore may also increase with sea level rise.

#### **i** Intermittently closed-open estuaries

The region hosts several estuaries that naturally open and close. This is influenced by river flows, rainfall, sea, and wind conditions. Some estuaries close for months or years. These naturally dynamic systems support varied ecological, cultural and social values. Artificial openings can impact on these values, with poor water quality and fish kills.



The EGCMA monitors estuary health – analysing water levels, water quality, and weather conditions for potential closures and re-openings. Protocols guide entrance management, with further information at: [egcma.com.au/what-we-do/estuary-openings](http://egcma.com.au/what-we-do/estuary-openings)

### 10.4 Coastal uses, reserves and facilities

There are a range of foreshore facilities along the sandy beach and lake shore. These include trails, lookouts, holiday parks, picnic areas, playgrounds, toilets, jetties, fishing platforms and boat ramps.

Lake Tyers is a hot spot for recreational and competitive fishing, integral to the town’s allure. Community events, facilities, signage, and resources are dedicated to the sport. Key species include flathead, bream, trevally, estuary perch and mullet.



### 10.5 Coastal and marine management

Council manage the foreshore from the Lake Tyers Camp and Caravan Park to the township edge on Fisherman’s Landing Arm. Parks Victoria, with Gunaikurnai Traditional Owners in some areas, manage other public land. The EGCMA monitor and manage estuary openings.

The Lake Tyers Beach Foreshore Management Plan (2015) guides management across the foreshore. Management strategies in the plan include:











- Recreation and boat facility maintenance and upgrades
- Car, trailer and road upgrades
- Improved pedestrian access
- Managing natural and cultural value, including native vegetation
- Crown land boundary delineation
- Erosion management

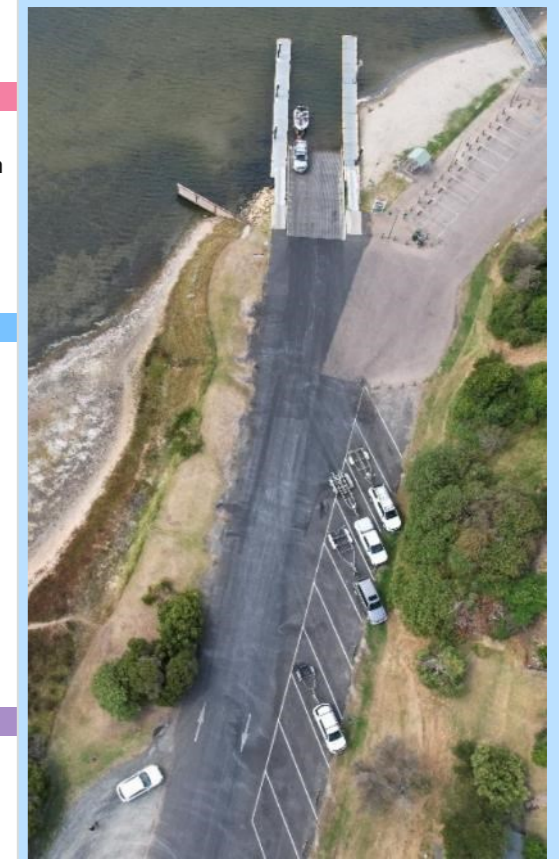
There are several recent or ongoing Council-led projects across Lake Tyers:

- Skidale Close Reserve upgrade
- Community hall upgrades

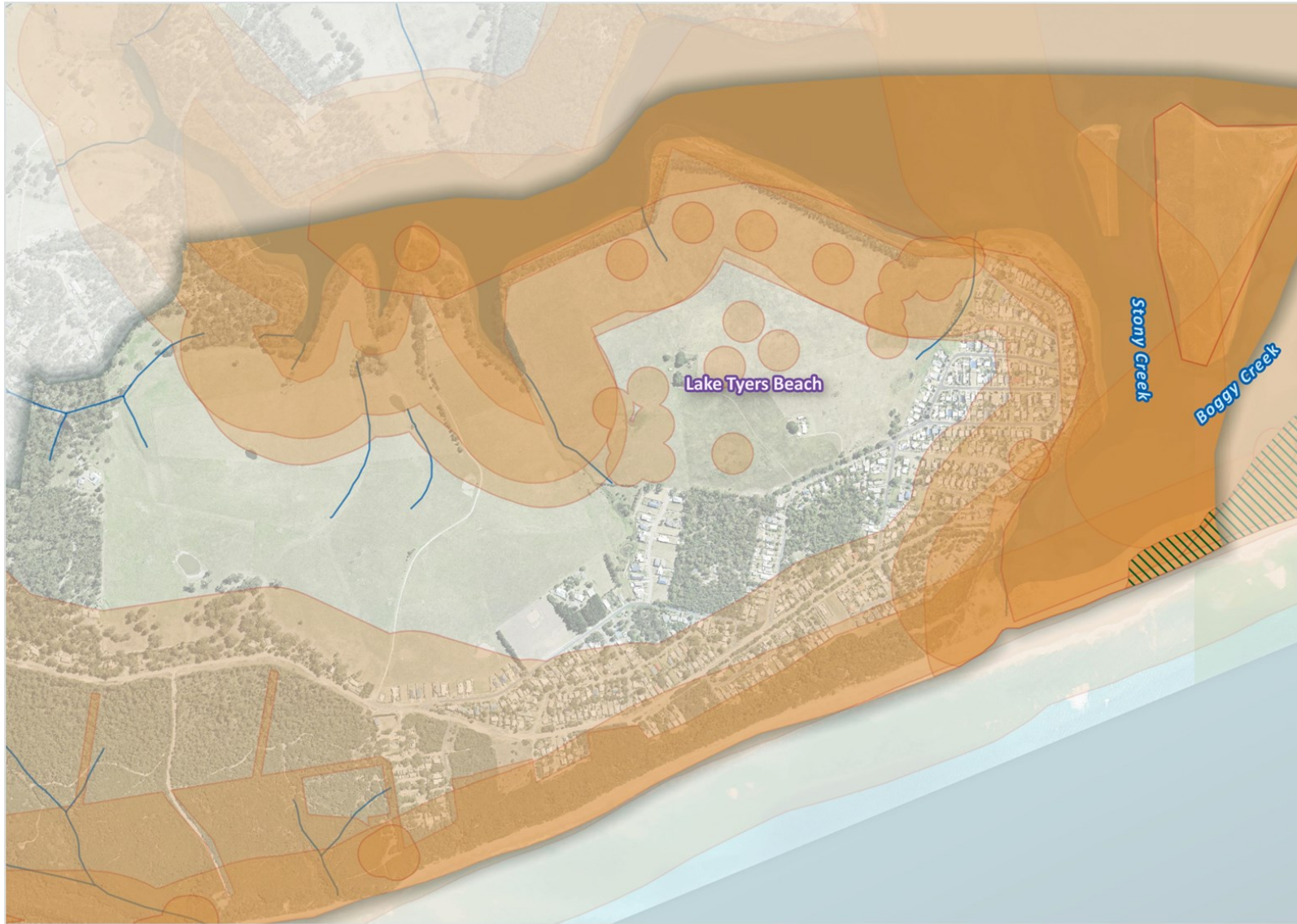
Table 20 summarises community values, challenges and opportunities across Lakes Tyers Beach, with focus areas for future management. Figure 92 to Figure 100 map key features, values, and management arrangements across the foreshore.

Table 20. Values, challenges and opportunities for Lake Tyers Beach coastal and marine management, with focus areas for future management.

		Lake Tyers Beach			
		 Values	 Challenges	 Opportunities	 Focus for management
	Traditional Owners' rights, aspirations and knowledge	<ul style="list-style-type: none"> <li>• Krauatungalung people and broader Gunaikurnai connection to Country</li> <li>• Importance of Lake Tyers area, including Lake Tyers Mission and significant land rights transfer</li> <li>• Stories of formation of Bung Yarnda (Lake Tyers)</li> <li>• Strong cultural connection and significant places</li> <li>• Joint management of Lake Tyers</li> <li>• Evidence of use and occupation of camping grounds – middens, artefact scatters, scar trees.</li> <li>• Other significant Aboriginal Heritage places and sites (recorded and unrecorded)</li> </ul>	<ul style="list-style-type: none"> <li>• Heritage sites being impacted or destroyed by other activities e.g. road and house construction and inappropriate recreational use</li> <li>• Limited awareness and understanding of Lake Tyers cultural values</li> <li>• Unsustainable fishing and resource extraction</li> </ul>	<ul style="list-style-type: none"> <li>• Identify unrecorded Aboriginal Heritage sites and continue appropriate planning overlays and controls to protect sites, including lakeside areas</li> <li>• Initiatives to share Aboriginal stories and knowledge, where desired by Traditional Owners</li> <li>• Work with agencies to help manage sustainable fishing and resource extraction</li> <li>• Initiatives and planning to minimise impacts on important sites and encourage sustainable use, as identified in Cultural Heritage Management Plans.</li> </ul>	<ul style="list-style-type: none"> <li>• Maintaining natural values, including vegetation protection and enhancement</li> <li>• Investigate and plan for estuary opening regime changes and coastal hazard impacts associated with climate change.</li> <li>• Facility upgrades, with consideration to landscape setting, terrain and all abilities access needs.</li> <li>• Engagement and communication around environmental values, access management, sensitive bird nesting habitats and agency roles and responsibilities</li> <li>• Investigate and increase understanding of cultural heritage and ensure protection.</li> </ul>
	The marine and coastal environment	<ul style="list-style-type: none"> <li>• High value natural vegetation and habitat across Lake Tyers foreshore reserves</li> <li>• Important vegetation communities - littoral rainforest and coastal vine thickets, subtropical and temperate coastal saltmarsh, limestone box</li> <li>• Rare and threatened species - eagles, plovers, ducks, egrets, terns, flying-fox and whales</li> <li>• Part of the Gippsland Lakes Ramsar site</li> <li>• Recreational activities centred around natural values – birdwatching, fishing, whale watching</li> <li>• Important estuarine and coastal wetland habitats – significant tern breeding sites</li> </ul>	<ul style="list-style-type: none"> <li>• Impacts of inappropriate recreational use - quad and motorbikes on the beach</li> <li>• Feral predator, pest and weed threats</li> <li>• Impacts on nesting waterbirds from recreational use, dogs and other predators</li> <li>• Lake water quality, stormwater management, closure and opening regimes, algae bloom management and balancing environmental and ecological benefits/threats of opening</li> <li>• Development and native vegetation removal/clearing</li> <li>• Balancing bushfire fuel management requirements with loss of native vegetation</li> </ul>	<ul style="list-style-type: none"> <li>• Initiatives to protect endangered species, native vegetation and ecosystems</li> <li>• Educate and engage private landowners on native plants, species selection and vegetation protection</li> <li>• Improved signage and awareness building to minimise impacts on nesting waterbirds</li> <li>• Holistic approach to vegetation management, including fire risk management</li> <li>• Continued estuary water quality and water level monitoring to inform opening requirements</li> <li>• Apply water-sensitive urban design and stormwater controls from urban areas and development</li> </ul>	
	Natural processes and climate change	<ul style="list-style-type: none"> <li>• Natural coastal processes that people see change every day</li> <li>• Escarpment landscape setting that limits inundation hazards in higher areas</li> <li>• Natural sand/dune features acting as a buffer to coastal hazard impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Current flooding along foreshore pathways and associated with estuary closure</li> <li>• Erosion hotspots and escarpment instability</li> <li>• Future coastal hazard impacts with changing estuary opening regimes, climate change and sea level rise</li> </ul>	<ul style="list-style-type: none"> <li>• Opportunities for nature-based coastal hazard management options and increasing slope stability with vegetation</li> <li>• Stormwater outlet management to reduce erosion</li> <li>• Investigate estuary dynamics and expected changes with climate change and sea level rise.</li> </ul>	
	Sustainable use and development	<ul style="list-style-type: none"> <li>• Walking tracks, pedestrian access and connectivity along the foreshore and across the open coast</li> <li>• All abilities access</li> <li>• Boating and water access facilities – boat ramp and small watercraft launching areas</li> <li>• Facilities to support recreational activities – parking, toilets, playgrounds, BBQs and picnic areas</li> <li>• Peaceful village setting surrounded by bushland</li> </ul>	<ul style="list-style-type: none"> <li>• Aging and outdated public facilities – public toilets, playgrounds and picnic areas</li> <li>• Terrain constraints and limited public open space for public facilities and all abilities access</li> <li>• Issues with traffic flow and parking requirements around the estuary's access points</li> <li>• Limited all abilities access and facilities</li> <li>• Stormwater management, littering and pollution</li> <li>• Potential future development and increased pressure on environment and cultural values, stormwater management and facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Investigate opportunities for facility upgrades (public toilet, playgrounds, picnic areas) and consider land form/terrain constraints, including Skidale Close Reserve Upgrades</li> <li>• Investigate opportunities for improving all-abilities access and improving foreshore tracks where required.</li> <li>• Consider water-sensitive urban design and stormwater outlet upgrades</li> </ul>	
	Stewardship, knowledge, engagement and collaboration	<ul style="list-style-type: none"> <li>• Community groups - Friends of the Gippsland Lakes, Lakes Entrance Landcare, Lake Tyers Coast Action Inc.</li> <li>• Recreational clubs – Lake Tyers Beach Angling Club</li> </ul>	<ul style="list-style-type: none"> <li>• Poorly defined and understood land and asset management arrangements</li> </ul>	<ul style="list-style-type: none"> <li>• Better communication of land and asset management responsibilities</li> <li>• Further support for community groups</li> </ul>	



# Lake Tyers Beach mapping: Traditional Owners and cultural values



### Traditional Owners and Cultural Values

- Areas of Cultural Heritage Sensitivity
- Jointly managed parks and reserves (Gunaikurnai Land and Waters Aboriginal Corporation and Parks Victoria)

### Other Features

- Creeks and waterways

### Inset map

#### Registered Aboriginal Parties

- Gunaikurnai Land and Waters Aboriginal Corporation
- Other Registered Aboriginal Parties

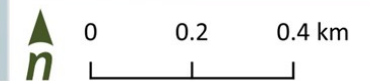


Figure 92. Registered Aboriginal Party areas, culturally sensitive areas and Joint Management areas for Lake Tyers Beach.

# Lake Tyers Beach mapping: Environmental values

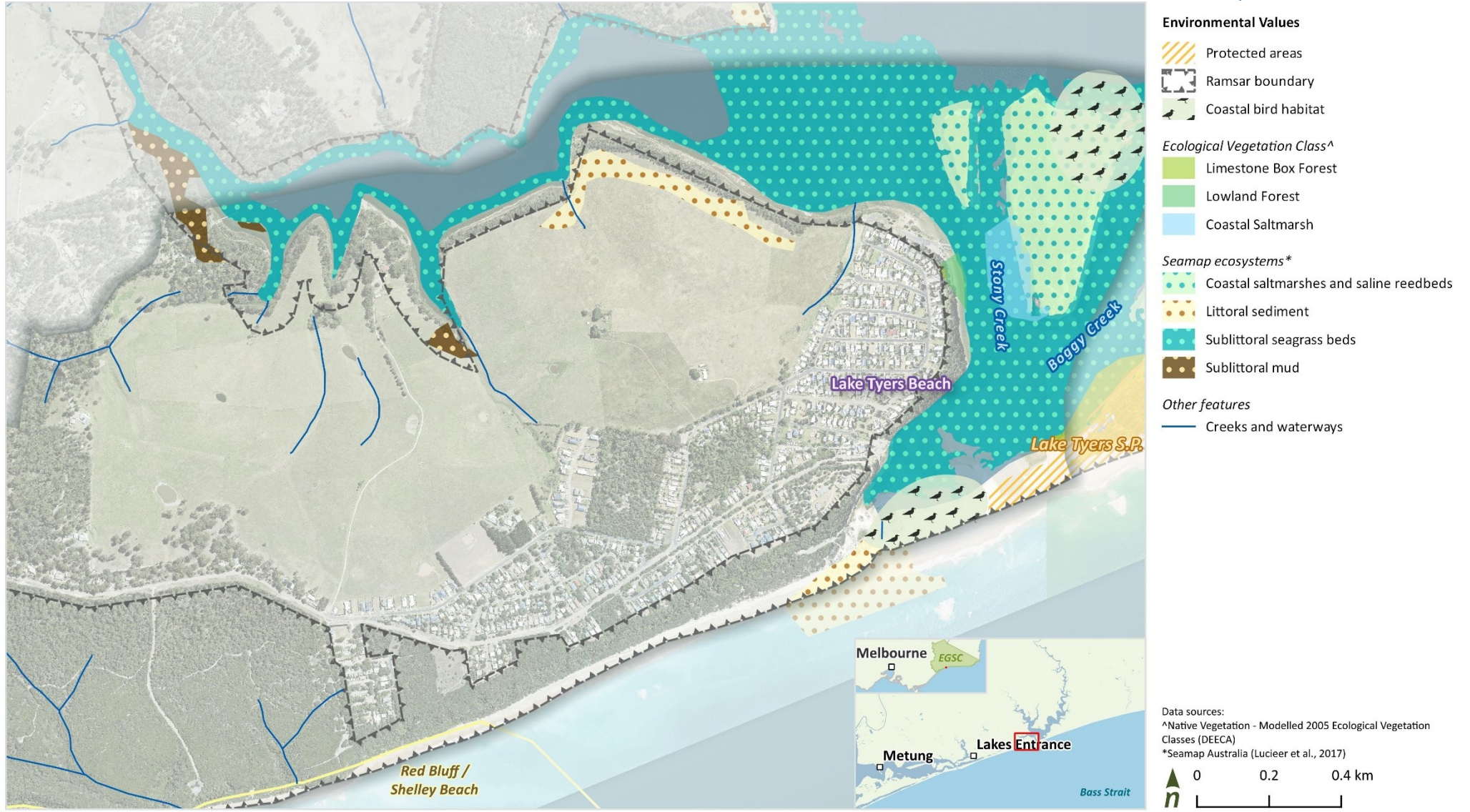
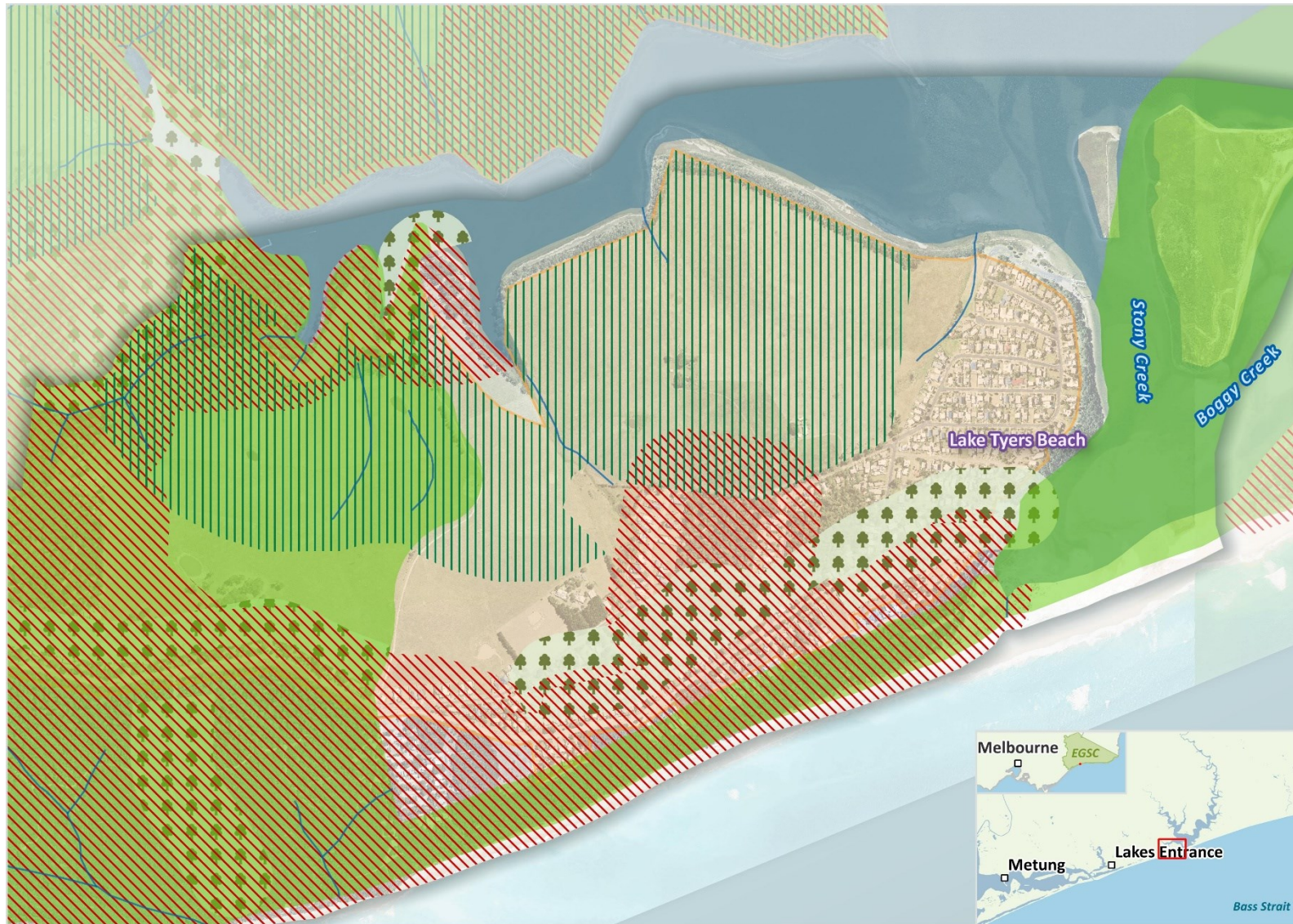







Figure 93. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Lake Tyers Beach.

# Lake Tyers Beach mapping: Environmental overlays



## Environmental Overlays

### Planning Scheme Overlays

-  Bushfire Management Overlay
-  Environmental Significance Overlay
-  Erosion Management Overlay
-  Significant Landscape Overlay
-  Vegetation Protection Overlay

### Other features


-  Creeks and waterways

Figure 94. Environmental and land management planning overlays for Lake Tyers Beach.

# Lake Tyers Beach mapping: Coastal hazards



### Coastal Hazards

#### Statewide coastal datasets:

##### Sea level rise<sup>^</sup>

- 0.0 m sea level rise (2009 baseline)
- 0.2 m sea level rise
- 0.47 m sea level rise
- 0.82 m sea level rise

##### 1% AEP storm tide inundation<sup>^</sup>

- 0.82 m sea level rise

##### Erosion vulnerability<sup>~</sup>

- Moderate
- High
- Very High

##### Other features

- Creeks and waterways

AEP: Annual Exceedence Probability (AEP) is the probability of an event occurring in any given year.

##### Data sources:

- <sup>^</sup>DELWP 2009 - Victorian Coastal Inundation Dataset (Future Coasts Project)
- <sup>~</sup>DELWP 2017 - Victorian Coastal Hazard Assessment (VCHA)

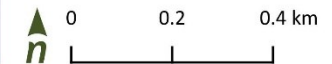


Figure 95. Coastal hazard mapping of Statewide coastal hazard data as part of the Victorian Governments Future Coasts Project and Victorian Coastal Hazard Assessment for Lakes Tyers Beach.

# Lake Tyers Beach mapping: Coastal protection and drainage infrastructure



- Coastal Infrastructure**
- Protection Structures*
- Groyne
- Drainage*
- Stormwater pit
  - Stormwater pipe
- Other features*
- Creeks and waterways

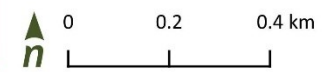


Figure 96. Coastal protection and drainage infrastructure for Lake Tyers Beach.

# Lake Tyers Beach mapping: Recreation and transport



- Recreation and Transport**
- Boating**
    - Boat ramp
    - Marinas and jetties
  - Facilities**
    - Playground
    - Caravan park
  - Open space**
    - Reserve (park)
    - Protected areas
  - Transport**
    - Roads
    - Footpath
    - Trail
  - Other features**
    - Creeks and waterways

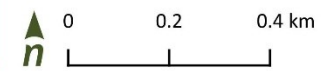
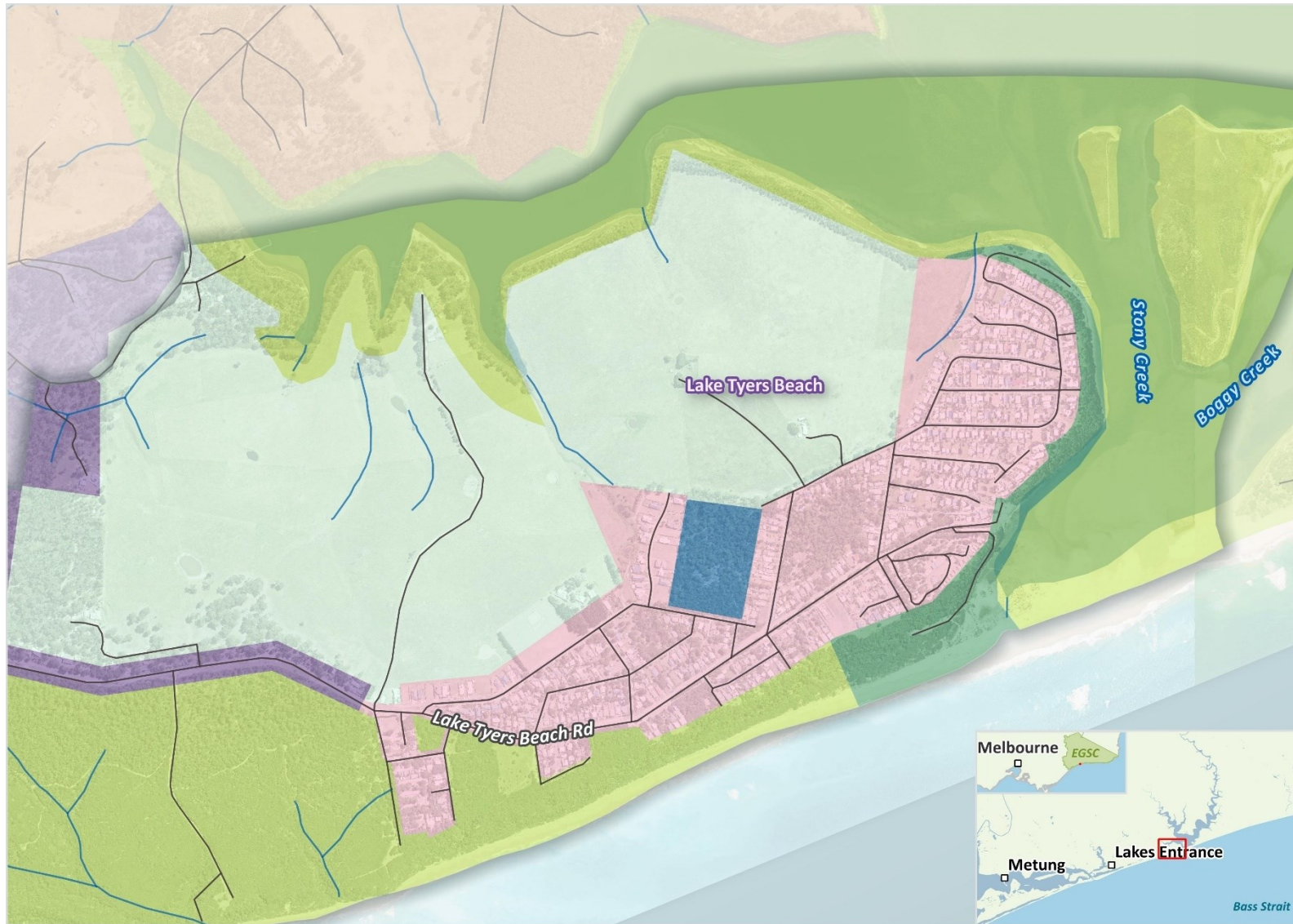


Figure 97. Recreation facilities and transport networks for Lake Tyers Beach.

# Lake Tyers Beach mapping: Planning scheme zones



### Planning Scheme Zones

- Farming zone - Schedule 1
- General residential zone - Schedule 1
- Low density residential zone
- Public conservation and resource zone
- Public park and recreation zone
- Public use zone - Local government
- Rural living zone - Schedule 3

### Transport

— Roads

### Other features

— Creeks and waterways

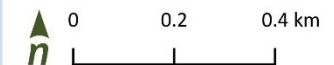


Figure 98. Planning scheme zones for Lake Tyers Beach.

# Lake Tyers Beach mapping: Planning overlays



### Planning Overlays

Property boundaries

### Planning Scheme Overlays

Design and Development Overlay

### Other features

Creeks and waterways




Figure 99. Other planning scheme overlays for Lake Tyers Beach.

# Lake Tyers Beach mapping: Land management arrangements



### Land Tenure

#### Public Land Management

-  East Gippsland Shire Council
-  Parks Victoria
-  Jointly managed parks and reserves (Gunaikurnai Land and Waters Aboriginal Corporation)

#### Other features

-  Creeks and waterways
-  Roads
-  Property boundaries
-  Built up areas

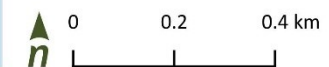


Figure 100. Public Land Management arrangements for Lake Tyers Beach.



## 10.6 Management actions

Table 21 details the CMMP management actions for Lake Tyers Beach.

Figure 101 presents site-specific management actions and maps activity and recreation nodes.

Table 21. Lake Tyers Beach management actions

Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 1: Acknowledge Traditional Owners' rights, aspirations and knowledge</b>	LT11.1	Guided by GLaWAC, support identification, management and protection of cultural heritage values across Lake Tyers Beach coastal areas. In alignment with Shire Wide actions, this includes: <ul style="list-style-type: none"> <li>Supporting GLaWAC to identify unrecorded cultural heritage sites.</li> <li>Continuing to implement appropriate planning overlays and controls such as Cultural Heritage Management Plans to protect cultural heritage.</li> <li>Collaborating with GLaWAC to better understand cultural values and inform future protection.</li> <li>Incorporating culturally-sensitive design into all works across Council-managed coastal reserves.</li> </ul>	Ongoing	Participate	GLaWAC
	LT1.2	In collaboration with GLaWAC and Action EG1.3, investigate development and implementation of initiatives to share Aboriginal stories and knowledge of Bung Yarnda (Lake Tyers) and the greater Lake Tyers Beach region to communicate the cultural and historic significance of this region of Krauatungalung Country.	3-5 years, then ongoing	Lead	GLaWAC
<b>Objective 2: Protect and enhance the marine and coastal environment</b>	LT2.1	Collaborate with BirdLife Australia, EGCMA and other stakeholders to promote important estuarine and coastal wetland habitats across the Gippsland Lakes and fringing wetlands. Support education on impacts of inappropriate recreational use, presence of dogs, and vegetation removal.	Ongoing	Participate	EGCMA, BirdLife Australia, environmental and community groups
	LT2.2	Continue to support EGCMA and citizen science programs to monitor estuary water quality and levels to inform opening arrangements of Lake Tyers. Communicate management roles and responsibilities with reference to EGCMA entrance management protocols. Aligns with Shire wide Action EG5.2.	Ongoing	Participate	EGCMA, Parks Victoria, citizen science programs
<b>Objective 3: Respect natural processes and strengthen resilience to climate change</b>	LT3.1	Review localised erosion hotspots and consider potential management measures including nature-based methods (e.g. revegetation and habitat enhancement), water-sensitive urban design and best-practice stormwater drainage upgrades.	5+ years	Lead	
	LT3.2	Collaborate with land managers and EGCMA to investigate and plan for Lake Tyers estuary opening regime changes expected with climate change and sea level rise. Consider opportunities for accommodation and adaptation of surrounding built and natural environment, impacts of increased flooding associated with prolonged closures, and the reducing need for artificial estuary opening.	5+ years	Participate	EGCMA, land managers



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 4: Use and develop sustainably</b>	LT4.1	In alignment with Action EG4.1, utilise activity and recreation nodes to clearly delineate distinct purposes and uses within foreshore zones, and ensure efficient development through co-location, partnership use, and consolidation of community assets. Includes delineation of: <ul style="list-style-type: none"> <li>Lake Tyers Beach Road Car Park and Lake Tyers Boat Ramp and Jetty as recreation nodes, supporting parking, toilets, boat access, fishing facilities, playgrounds and other recreational facilities.</li> </ul>	0-3 years	Lead	All other land managers
	LT4.2	In alignment with East Gippsland Housing and Settlement Strategy (2023), continue to foster Rural Town character and prioritisation of natural setting through <ul style="list-style-type: none"> <li>Maintenance of existing foreshore facilities and investment in facilities, based on assessment of need.</li> <li>Only small-scale housing development within existing residentially zoned areas.</li> <li>Promoting adherence to township boundaries, planning overlays and land use planning.</li> </ul>	Ongoing	Lead	
	LT4.3	Investigate and progress upgrade works to foreshore precinct and facilities including: <ul style="list-style-type: none"> <li>Skidale Close Reserve Upgrades (already underway).</li> <li>All-abilities access opportunities, within context of terrain constraints.</li> <li>Public toilet upgrades, in coordination with above upgrades.</li> </ul> Review designs and planning to ensure proposed works and upgrades align with CMMP objectives, principles, actions and State policy.	Ongoing	Lead	DEECA, GLaWAC
	LT4.4	As part of future development approvals and conditions, investigate current and anticipated stormwater requirements for Lake Tyers Beach, considering increased pressure from future development. Implement measures to manage quantities and quality of town stormwater. Consider cumulative impacts from township development and sources of pollution or poor water quality entering the Lake. Measures to be considered include best-practice integrated water management and water sensitive urban design options. Aligns with Shire wide Action EG4.5.	3-5 years	Lead	DEECA, IWM Forum partners
<b>Objective 5: Take a stewardship approach, build understanding and knowledge, engage and collaborate</b>	LT5.1	Continue to support and collaborate with local volunteer community environment groups e.g. Friends of the Gippsland Lakes, Lakes Entrance Landcare, Lake Tyers Coast Action Inc. Includes: <ul style="list-style-type: none"> <li>Promoting community group activities in the coastal and marine space.</li> <li>Fostering open communication and engagement channels with community groups.</li> <li>Continuing to seek opportunities to increase community involvement, including through community grants and Council partnerships.</li> <li>Promoting and increasing citizen science opportunities (including environmental monitoring - Action LT2.2).</li> </ul>	Ongoing	Lead	All other management agencies, environmental and community groups and organisations
	LT5.2	In alignment with Action EG5.3, review, consolidate and update foreshore signage across Lake Tyers Beach to: <ul style="list-style-type: none"> <li>Ensure consistency.</li> <li>Promote connectivity and wayfinding.</li> <li>Celebrate unique environments, history and culture including significance of Lake Tyers region to Gunaikurnai peoples.</li> <li>Support implementation of activity and recreation nodes (Action LT4.1).</li> </ul>	3-5 years	Lead	Other land managers, GLaWAC

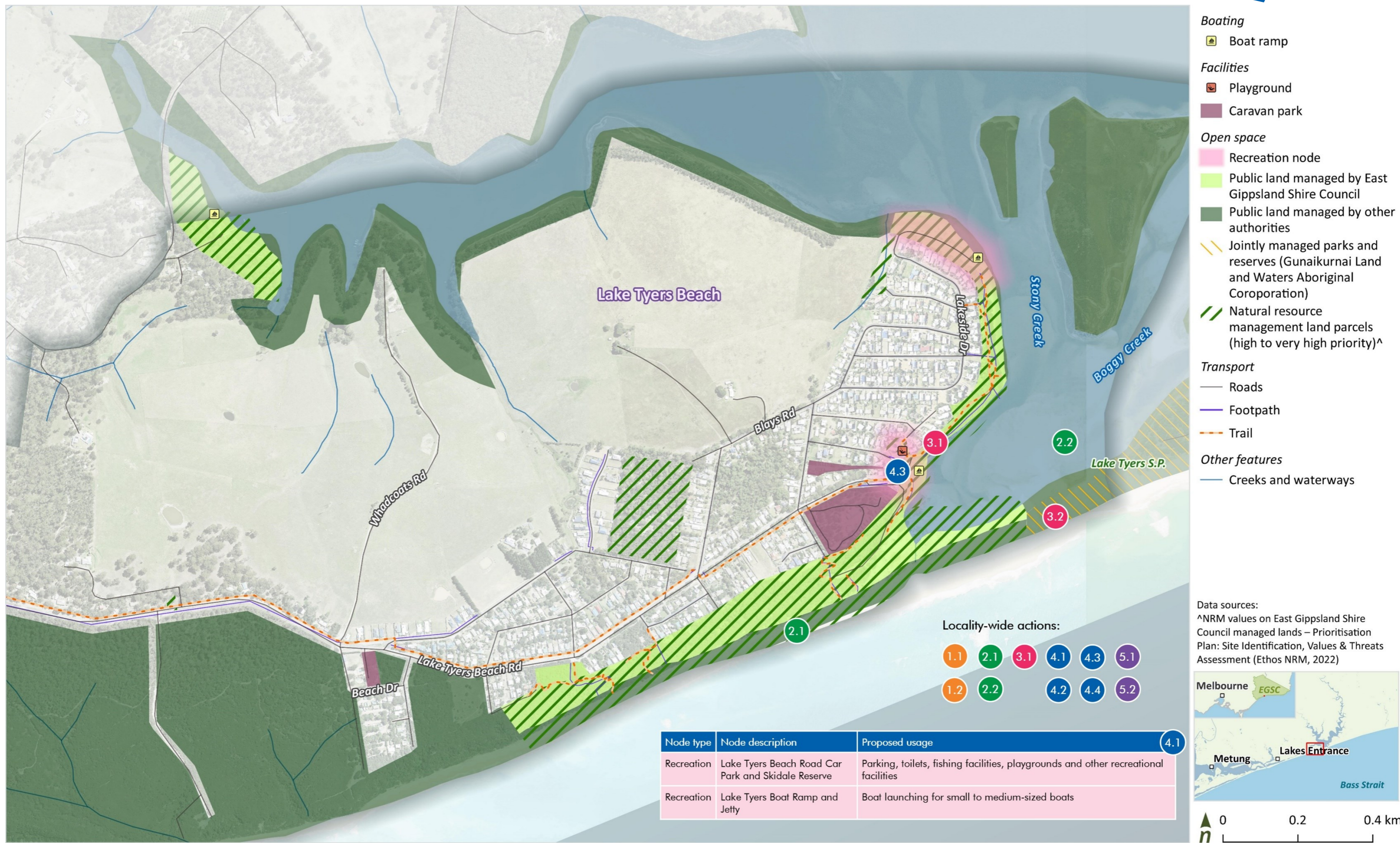


Figure 101. Lake Tyers Beach management actions and nodes

## 11 Marlo

Marlo is a small town nestled on the shores of the Snowy River estuary, southeast of Orbost. Marlo has a range of amenities available such as caravan parks, camps, the Marlo Pub and Hotel, a boat ramp, and small convenience store.

The community thrives on access to the water and the iconic Snowy estuary landscape. The idyllic location and coastal surrounds allows for a range of activities and attracts an influx of visitors every year, despite maintaining a relatively small population. The Marlo community takes pride in its quiet and tranquil surroundings and embraces its small coastal town vibe.

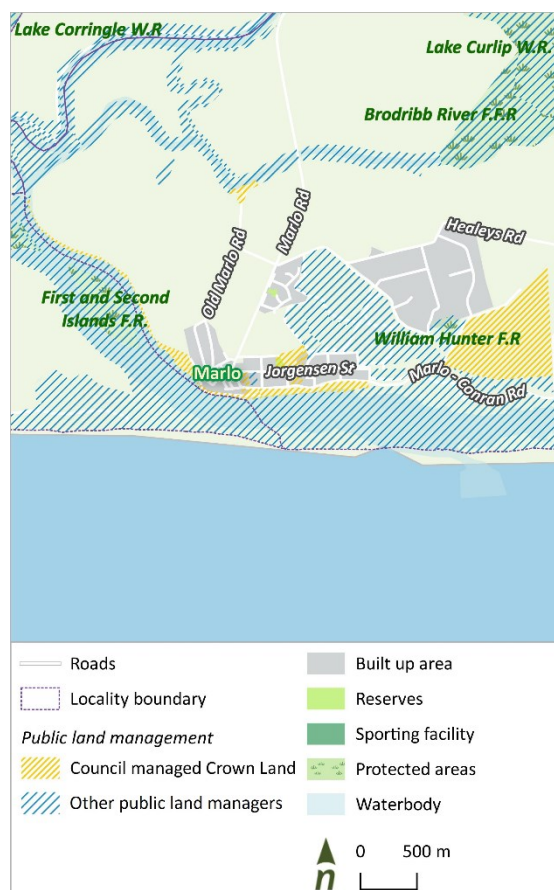


Figure 103. Marlo locality.

### 11.1 Community and connection to coast

Marlo currently has a population just over 600 people and is expected to undergo growth. During holidays, the town experiences substantial population influx. Only around 65% of private dwellings are occupied, indicating many holiday homes.

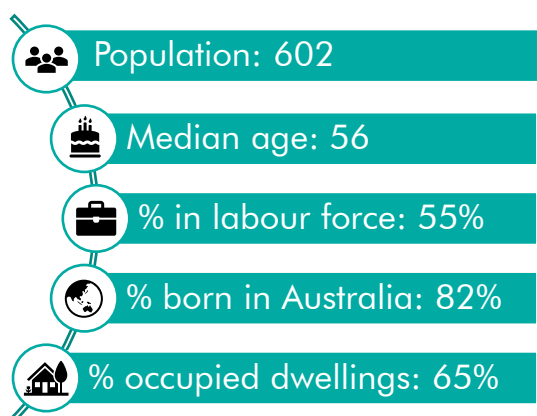


Figure 102. Key statistics for Marlo (ABS, 2021).

The Gunaikurnai people are the designated Traditional Owners west of the Snowy River, represented by GLaWAC. This area sits within Krauatungalung Country.

Gunaikurnai Traditional Owners and Parks Victoria jointly manage the Corrigle Foreshore Reserve. This was an important meeting place. It was a plentiful food source and a place of connection — joining the ocean to the rivers, connecting along the coastline to Lake Tyers.

Today, many Gunaikurnai continue to use the reserve for camping, fishing and gathering natural resources. Key values are known to include large middens. Marlo was also an important source of ochre for ceremonies - *Marloo* means white clay.

While no formal designation currently exists for the area east of the Snowy River these areas are important to a number of the region's Traditional Owner groups



### 11.2 The coastal environment

Marlo sits on the Snowy River estuary, fed by the Snowy and Brodribb Rivers. Surrounding the town are numerous low-lying wildlife reserves - the French Narrows Coastal Walk, Corringle Slips Reserve, and Lake Corringle Wildlife Reserve.

Important ecological communities include:

- River-flat eucalypt forest on coastal floodplains (EPBC-listed)
- Subtropical and Temperate Coastal Saltmarsh (EPBC-listed)
- Warm Temperate Rainforest
- Coastal Lagoon Wetlands
- Damp Sands Herb-rich Woodland

The ecosystems support a high number of threatened fauna species, including:

- Fairy, Little and Caspian Terns
- White-bellied Sea Eagles
- Hooded Plover
- Eastern Curlew
- Little and Eastern Great Egrets
- Curlew sandpiper

The nationally significant Snowy estuary supports native fish such as Australian bass. Floodplain wetlands of Lake Corringle, Lake Wat Wat, Lake Curlip, and Cabbage Tree Lagoon are also ecologically important.



### 11.3 Coastal processes and hazards

The Marlo area is influenced by riverine and coastal inundation. Surrounded by low-lying floodplain wetlands, inundation is an important natural process to support these ecosystems. With sea level rise, these areas may flood more frequently or become permanently inundated.

Most private, commercial and recreational properties and facilities are located on the historic coastal bluff, around 10-15 m above water levels. However, foreshore values such as boat ramps, pathways, jetties and roads could be subject to inundation and erosion.

The intermittently open-closed estuary is dynamic with sand bars and spits changing each day. A semi-permanent entrance is maintained through the dune. The entrance only closed around eight times in the last 20 years, generally in autumn. In recent years the entrance location has shifted back and forth across a 1 km stretch of the dune.

#### **i Intermittently closed-open estuaries**

The region hosts several estuaries that naturally open and close. This is influenced by river flows, rainfall, sea, and wind conditions. Some estuaries close for months or years.

These naturally dynamic systems support varied ecological, cultural and social values. Artificial openings can impact on these values, with poor water quality and fish kills.



The EGCMA monitors estuary health – analysing water levels, water quality, and weather conditions for potential closures and re-openings. Protocols guide entrance management, with further information at: [egcma.com.au/what-we-do/estuary-openings](http://egcma.com.au/what-we-do/estuary-openings)

Recent erosion has been reported across the Marlo foreshore. This is a result of both coastal processes and stormwater drainage arrangements. Erosion can mean reduced access and availability of a sandy beach. Council are currently assessing the erosion and stormwater arrangements to inform a management approach.



### 11.4 Coastal uses, reserves and facilities

As a popular holiday, fishing and boating destination, the Marlo foreshore holds a range of facilities to cater for visitors and residents. The towns hosts caravan parks, other accommodation, a general store, a bait shop and the Marlo Hotel.

The foreshore offers access to the water through beach access points, the Marlo boat ramp and jetty and Marlo Angling Club. Across the foreshore reserve there are also numerous trails, lookouts and signage. The Brodribb River Boat Ramp and Jetty are also located nearby.



The Marlo Foreshore Management Plan (2013) guides management, with management strategies covering:

- Erosion management
- Maintenance, upgrade or provision of recreational facilities
- Car and trailer parking, and roads;
- Improved pedestrian linkages
- Maintenance, upgrade or improvement of boating facilities;
- Management of natural values and native vegetation

The plan also outlines detailed foreshore zones and management objectives.

There are several recent or ongoing Council-led projects across Marlo:

- Town drainage and stormwater strategy, including erosion investigations
- Foreshore management plan implementation and landscape improvements
- Triangle Park upgrades






Table 20 summarises community values, challenges and opportunities across Marlo, with focus areas for future management. Figure 104 to Figure 112 map key features, values, and management arrangements across the foreshore.

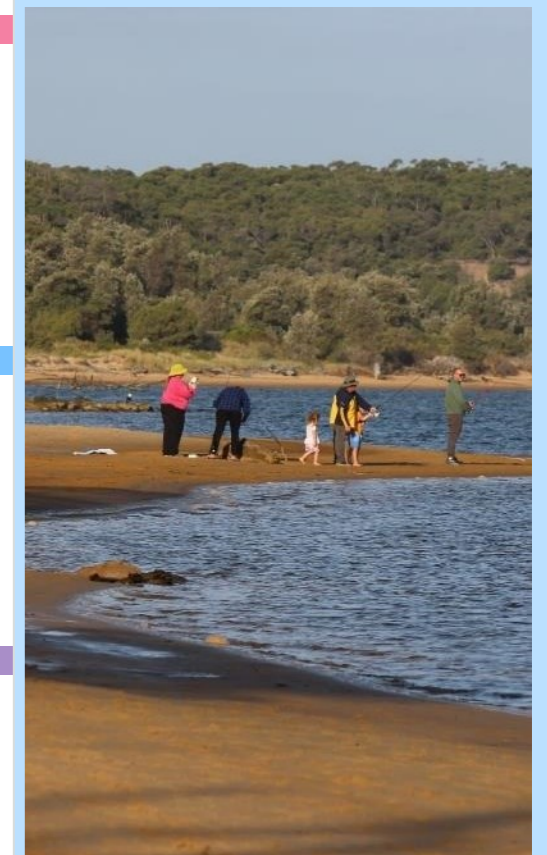


### 11.5 Coastal and marine management

Council manage the Marlo Coastal Reserve across the township east to Mills Street. Council also manage the Marlo Racecourse and Recreation Reserve and Brodribb River Boat Ramp. Gippsland Ports, EGCMA and Parks Victoria manage the Snowy and Brodribb Rivers and estuary. DEECA manage the Marlo State Forest. Gunaikurnai Traditional Owners and Parks Victoria jointly manage the Corringale Foreshore Reserve.

Table 22. Values, challenges and opportunities for Marlo coastal and marine management, with focus areas for future management.

		Marlo			
		Values	Challenges	Opportunities	Focus for management
	Traditional Owners' rights, aspirations, and knowledge	<ul style="list-style-type: none"> <li>• Krauatungalung people, broader Gunaikurnai and Far East groups connection to Country</li> <li>• Evidence of use and occupation of camping and fishing grounds – large middens, canoe trees and earth ovens.</li> <li>• Other significant Aboriginal Heritage places and sites (recorded and unrecorded)</li> <li>• Joint management of Corringale foreshore reserve, strong sense of ownership and continued use for traditional practices</li> <li>• Important meeting places of connection</li> </ul>	<ul style="list-style-type: none"> <li>• Unrecorded and unprotected sites and heritage</li> <li>• No Registered Aboriginal Party east of the Snowy River, with unclear arrangements of who can speak for Country.</li> <li>• Recreational use impacts on cultural values.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify unrecorded Aboriginal Heritage sites and continue planning overlays and controls to protect</li> <li>• Initiatives to share Aboriginal stories and knowledge, where desired by Traditional Owners</li> <li>• Maintain reserves in good condition and low impacts from tourists and occupation</li> <li>• Support Gunaikurnai rangers and sole management of Corringale foreshore reserve</li> <li>• Strengthen understanding of and relationships with Far East groups and desire/capacity for involvement in coastal and marine management</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation of Marlo Foreshore masterplan and associated facility upgrades, including “node” definition</li> <li>• Stormwater and erosion management across the foreshore, including stormwater upgrades and adaptation planning</li> <li>• Investigate and plan for estuary opening regime changes and coastal hazard impacts associated with climate change.</li> </ul>
	The marine and coastal environment	<ul style="list-style-type: none"> <li>• High value natural vegetation and habitat across Marlo foreshore reserve</li> <li>• Important vegetation communities - river-flat eucalypt forest, coastal floodplains, coastal saltmarsh, seagrass beds, littoral rainforest, coastal lagoon wetlands, and damp sands herb-rich woodland</li> <li>• Rare and threatened species - White-bellied Sea Eagles, Australasian Bittern, Hooded Plover, Eastern Curlew, egrets and terns.</li> <li>• Special marine life and nationally significant Snowy River estuary and Directory of Important Wetlands</li> </ul>	<ul style="list-style-type: none"> <li>• Invasive species, weeds, pests and vegetation removal</li> <li>• Stormwater quality, sewage releases and pollution from urban, agricultural and industrial zones, including inappropriate drainage and outlets</li> <li>• Environmental pressures from increasing residential population growth</li> <li>• Increasing sediment delivery from the Snowy River to the estuary, and associated impacts on aquatic species</li> <li>• Fish waste dumping and littering - impacts on ecosystems and animal behaviour</li> <li>• Vegetation removal and habitat loss</li> </ul>	<ul style="list-style-type: none"> <li>• Vegetation protection and enhancement, including weed, pest and access management</li> <li>• Improved best-practice stormwater controls and water sensitive urban design</li> <li>• Continued estuary water quality monitoring</li> </ul>	<ul style="list-style-type: none"> <li>• Beach access replacement, facility upgrades and maintenance</li> <li>• Coastal hazard management to consider nature-based solutions</li> <li>• Managing impacts of population growth and pressures on stormwater drainage, facilities and open space</li> <li>• Investigate and increase understanding of cultural heritage and ensure protection.</li> </ul>
	Natural processes and climate change	<ul style="list-style-type: none"> <li>• Coastal and water views of the Snowy River entrance from the township</li> <li>• Dynamic sand bars and estuary entrance that changes each day</li> <li>• Respecting natural processes and minimal intervention in sand management</li> </ul>	<ul style="list-style-type: none"> <li>• Existing coastal flooding and erosion impacts – loss of sandy beach, impacts on road, access, safety, facilities</li> <li>• Several private properties at risk in future</li> <li>• Aging coastal protection infrastructure</li> <li>• Informal stormwater drainage arrangements</li> <li>• Steep terrain and embankment stability issues</li> <li>• Increase in coastal hazard impacts - sea level rise</li> <li>• More frequent and longer duration estuary closures associated with climate changes and sea level rise</li> </ul>	<ul style="list-style-type: none"> <li>• Implement actions from foreshore erosion and stormwater studies</li> <li>• Review of coastal protection structures and investigation into replacement or alternatives</li> <li>• Beach access sensitive to natural coastal processes</li> <li>• Investigate nature-based solutions as alternative to engineered coastal protection</li> <li>• Investigate estuary dynamics and expected changes with climate change and sea level rise.</li> </ul>	
	Sustainable use and development	<ul style="list-style-type: none"> <li>• Foreshore walking tracks, connectivity with facilities and lookouts, and pedestrian safety</li> <li>• Safe boating, fishing and water access facilities – Marlo boat ramp and jetty, Brodribb River boat ramp, small craft access points, fishing platforms</li> <li>• Facilities to support recreational activities - fishing, swimming, boating, kayaking, sail boating</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of defined foreshore recreation areas</li> <li>• Insufficient/aging/outdated foreshore facilities - picnic shelters, toilets, BBQs, benches, open space</li> <li>• Limited pedestrian, space, safety and poor connectivity</li> <li>• Poor traffic flow and safety around Beach Road</li> <li>• Degraded beach access facilities and lighting</li> <li>• Poor stormwater management</li> <li>• Terrain constraints and limited space for facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance and upgrade of foreshore facilities, beach access and define safe recreation areas</li> <li>• Improve pedestrian safety and traffic flow at Marlo foreshore and Brodribb River boat ramp</li> <li>• Stormwater management improvements</li> <li>• Recreation and activity “nodes” to promote Angling Club as a gathering place</li> </ul>	
	Stewardship, knowledge, engagement and collaboration	<ul style="list-style-type: none"> <li>• Community groups – Marlo Landcare</li> <li>• Recreational clubs – Marlo Angling Club</li> </ul>	<ul style="list-style-type: none"> <li>• Outdated signage</li> <li>• Coordination of Council projects and implementation, with clear communication</li> </ul>	<ul style="list-style-type: none"> <li>• Signage updates, inclusion of environmental and cultural information, where appropriate</li> <li>• Improved coordination of Council activities</li> </ul>	



# Marlo mapping: Traditional Owners and cultural values



### Traditional Owners and Cultural Values

- Areas of Cultural Heritage Sensitivity
- Jointly managed parks and reserves (Gunaikurnai Land and Waters Aboriginal Corporation and Parks Victoria)

- Other Features*
- Creeks and waterways

### Inset map

- Registered Aboriginal Parties*
- Gunaikurnai Land and Waters Aboriginal Corporation
  - Other Registered Aboriginal Parties

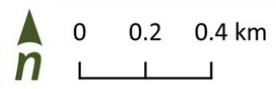
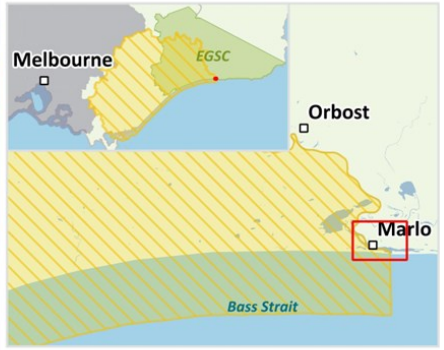


Figure 104. Registered Aboriginal Party areas, culturally sensitive areas and Joint Management areas for Marlo.

# Marlo mapping: Environmental values

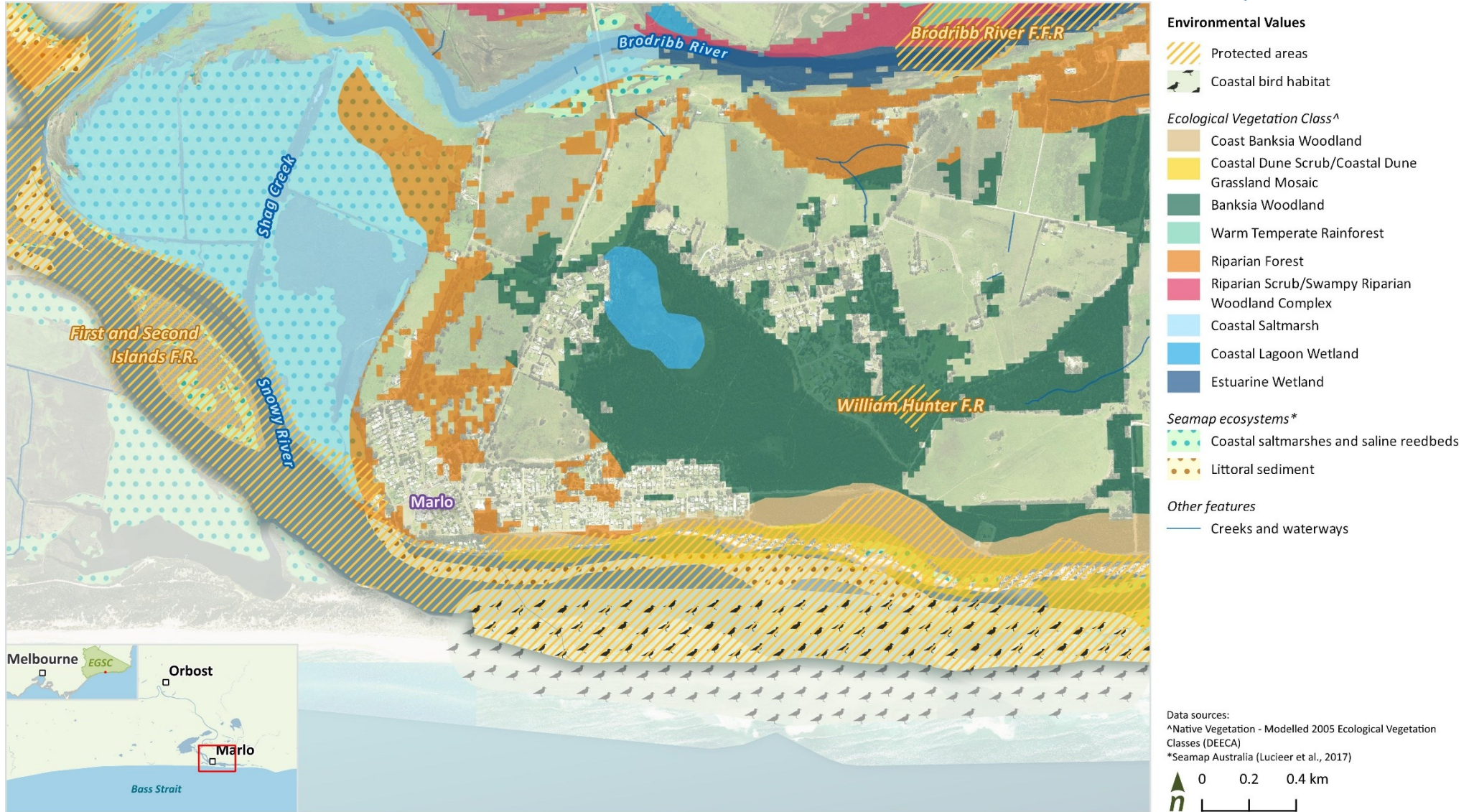
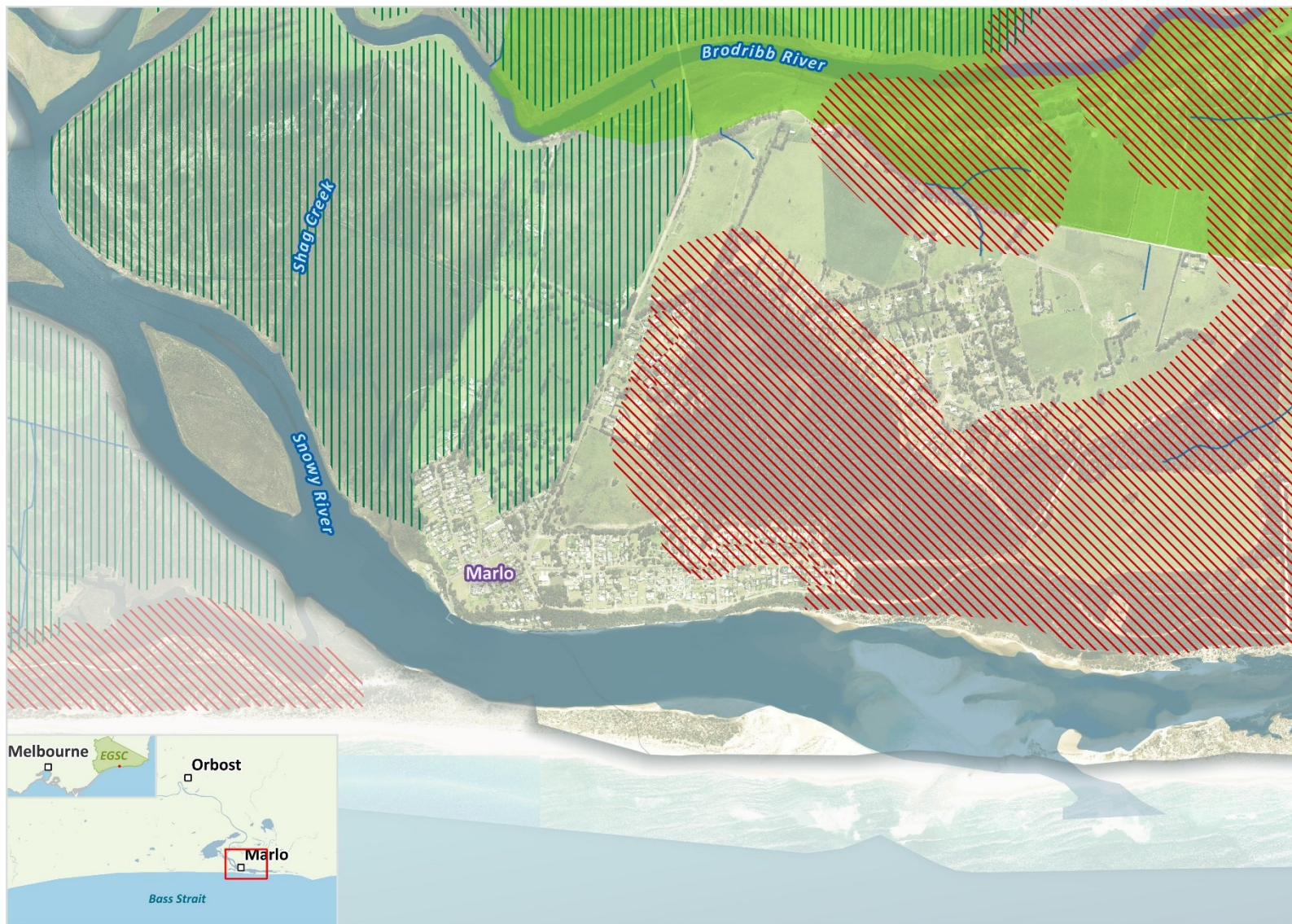


Figure 105. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Marlo.

# Marlo mapping: Environmental overlays




### Environmental Overlays

#### Planning Scheme Overlays

-  Bushfire Management Overlay
-  Environmental Significance Overlay
-  Significant Landscape Overlay

#### Other features

-  Creeks and waterways

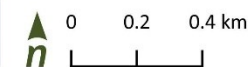


Figure 106. Environmental and land management planning overlays for Marlo.



**Coastal Hazards**

Statewide coastal datasets:

Sea level rise<sup>^</sup>

- 0.0 m sea level rise (2009 baseline)
- 0.2 m sea level rise
- 0.47 m sea level rise
- 0.82 m sea level rise

1% AEP storm tide inundation<sup>^</sup>

- 0.82 m sea level rise

Erosion vulnerability<sup>~</sup>

- High
- Very High

Other features

- Creeks and waterways

AEP: Annual Exceedence Probability (AEP) is the probability of an event occurring in any given year.

Data sources:

- <sup>^</sup>DELWP 2009 - Victorian Coastal Inundation Dataset (Future Coasts Project)
- <sup>~</sup>DELWP 2017 - Victorian Coastal Hazard Assessment (VCHA)

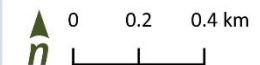


Figure 107. Coastal hazard mapping of Statewide coastal hazard data as part of the Victorian Governments Future Coasts Project and Victorian Coastal Hazard Assessment for Marlo.

# Marlo mapping: Coastal protection and drainage infrastructure



- Coastal Infrastructure**
- Protection Structures*
- Seawall
  - Unknown
- Drainage*
- Stormwater pit
  - Stormwater pipe
- Other features*
- Creeks and waterways

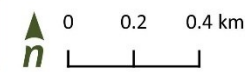


Figure 108. Coastal protection and drainage infrastructure for Marlo.

# Marlo mapping: Recreation and transport



## Recreation and Transport

- Boating**
  - Launching site
  - Boat ramp
  - Marinas and jetties
- Facilities**
  - Playground
  - Caravan park
  - Education complex
- Open space**
  - Reserve (park)
  - Protected areas
- Transport**
  - Roads
  - Footpath
  - Trail
- Other features**
  - Creeks and waterways

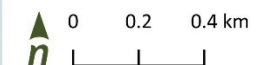
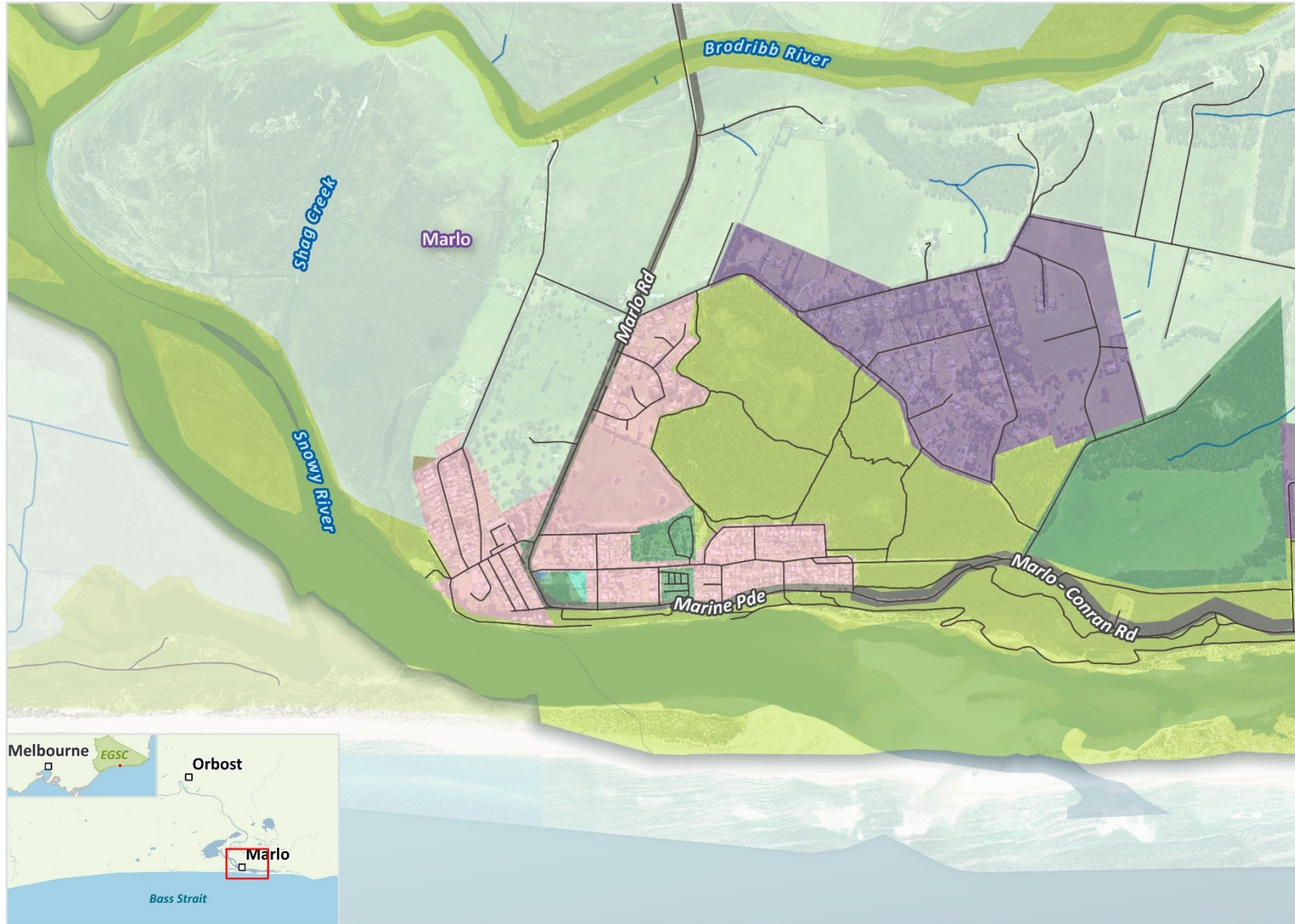


Figure 109. Recreation facilities and transport networks for Marlo.

# Marlo mapping: Planning scheme zones



### Planning Scheme Zones

- Farming zone - Schedule 1
- General residential zone - Schedule 1
- Low density residential zone
- Public conservation and resource zone
- Public park and recreation zone
- Public use zone - Local government
- Public use zone - Other public use
- Public use zone - Service and utility
- Transport zone 2 - Principal road network

### Transport

— Roads

### Other features

— Creeks and waterways

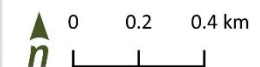


Figure 110. Planning scheme zones for Marlo.

# Marlo mapping: Planning overlays



### Planning Overlays

Property boundaries

### Planning Scheme Overlays

Development Plan Overlay

Land Subject To Inundation Overlay

Design and Development Overlay

### Other features

Creeks and waterways

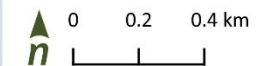


Figure 111. Other planning scheme overlays for Marlo.

# Marlo mapping: Land management arrangements



- Land Tenure**
- Public Land Management*
- East Gippsland Shire Council
  - Parks Victoria
  - Department of Energy, Environment and Climate Action
  - Department of Education and Training
  - Department of Health
  - Department of Justice and Community
- Other features*
- Creeks and waterways
  - Roads
  - Property boundaries
  - Built up areas

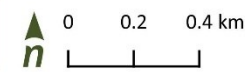


Figure 112. Public land management arrangements for Marlo.



## 11.6 Management actions

Table 23 details the CMMP management actions for Marlo.

Figure 113 presents site-specific management actions and maps activity and recreation nodes.

Table 23. Marlo management actions

Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 1: Acknowledge Traditional Owners' rights, aspirations and knowledge</b>	MR1.1	Guided by GLaWAC and Far East Groups, support identification, management and protection of cultural heritage values across Marlo coastal areas. In alignment with Shire Wide actions, this includes: <ul style="list-style-type: none"> <li>Supporting GLaWAC and Far East Groups to identify unrecorded cultural heritage sites.</li> <li>Continuing to implement appropriate planning overlays and controls such as Cultural Heritage Management Plans to protect cultural heritage.</li> <li>Collaborating with GLaWAC and Far East Groups to better understand cultural values and inform future protection, in alignment with Action MR1.2.</li> <li>Incorporating culturally-sensitive design into all works across Council-managed coastal reserves.</li> </ul>	Ongoing	Participate	GLaWAC, Far East Traditional Owner Groups
	MR1.2	Continue to advance relationships with Far East Groups, including Bidwell, Yuin, and Ngarigo Monero peoples, and strengthen EGSC understanding of desire and capacity among Far East Groups for collaboration in coastal and marine management across Marlo (east of the Snowy River).	0-3 years, then ongoing	Lead	Far East Traditional Owner Groups
	MR1.3	Support GLaWAC and other Traditional Owner groups in management of Corringale Foreshore Reserve by Gunaikurnai rangers and GLaWAC natural resource management staff of GLaWAC. Support GLaWAC, where possible, in seeking funding opportunities for increased involvement in coastal and marine management and Gunaikurnai rangers. Support GLaWAC enhancement of the Reserve as a coastal camping, boating and fishing destination, and ensuring the natural and cultural values of the Reserve are protected, and conserved for all.	Ongoing	Participate	GLaWAC
<b>Objective 2: Protect and enhance the marine and coastal environment</b>	MR2.1	Continue to support EGCMA and citizen science programs to monitor estuary water quality and levels to inform opening arrangements of Snowy River estuary. Communicate management roles and responsibilities with reference to EGCMA entrance management protocols. Aligns with Shire wide Action EG5.2.	Ongoing	Participate	EGCMA, Parks Victoria, citizen science programs
<b>Objective 3: Respect natural processes and strengthen resilience to climate change</b>	MR3.1	Investigate options to manage emerging coastal hazard risks across Marlo, including measures to avoid risk, the use of nature-based solutions and ways to accommodate coastal hazards. Undertake a review of aging coastal protection structures and investigate upgrade options, including replacement with alternatives e.g. nature-based coastal protection or incorporating living seawalls to improve ecological outcomes. Align measures with recent foreshore Erosion Assessment Report, considering known issues of steep terrain, embankment instability, and sand loss.	3-5 years	Lead	GLaWAC, Parks Victoria, DEECA, EGCMA, research institutes



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 3: Respect natural processes and strengthen resilience to climate change (cont.)</b>	MR3.2	Collaborate with land managers and EGCMA to investigate and plan for Snowy River estuary opening regime changes expected with climate change and sea level rise. Consider opportunities for accommodation and adaptation of surrounding built and natural environment, impacts of increased flooding associated with prolonged closures, and the reducing need for artificial estuary opening.	5+ years	Participate	EGCMA, land managers
<b>Objective 4: Use and develop sustainably</b>	MR4.1	In alignment with Action EG4.1, utilise activity and recreation nodes to clearly delineate distinct purposes and uses within foreshore zones, and ensure efficient development through co-location, partnership use, and consolidation of community assets. Includes delineation of: <ul style="list-style-type: none"> <li>• Marlo Boat Ramp and Jetty, Angling Club, Beach Road 'turnaround' and Brodribb River Boat Ramp as recreation nodes, supporting parking, boat access, fishing facilities, toilets and other recreational facilities.</li> </ul>	0-3 years	Lead	All other land managers
	MR4.2	In alignment with East Gippsland Housing and Settlement Strategy (2023), continue to foster Town character through: <ul style="list-style-type: none"> <li>• Maintenance of existing foreshore facilities and investment in facilities, based on assessment of need.</li> <li>• Sustainable growth within extent of existing urban zoning through infill development and subject to environmental risk (bushfire, flood, coastal hazard) constraints.</li> <li>• Promoting adherence to township boundaries, planning overlays and land use planning.</li> </ul>	Ongoing	Lead	
	MR4.3	Progress and complete upgrade works to foreshore precincts and facilities in alignment with Marlo Foreshore Management Plan Implementation and that are currently underway including: <ul style="list-style-type: none"> <li>• Angling Club upgrades - decking, BBQ facilities, parking improvements, landscaping, footpaths and boat launching.</li> <li>• Foreshore toilet, parking, footpath, signage, access and landscaping upgrades.</li> </ul> Review designs and planning to ensure proposed works and upgrades align with CMMP objectives, principles, actions, State policy and recommendations from foreshore erosion and town drainage studies.	3-5 years	Lead	
	MR4.4	In collaboration with the East Gippsland Integrated Water Management Forum, continue to develop a Sustainable Stormwater Strategy for Marlo, promoting best-practice stormwater management.	0-3 years	Lead	DEECA, IWM Forum partners
	MR4.5	Support boating activities across the Marlo region by ensuring the ongoing maintenance and upgrade of a diversity of boating infrastructure, including: <ul style="list-style-type: none"> <li>• Car parking (line painting) and lighting upgrades at Brodribb River boat ramp.</li> <li>• Maintenance and updates to smaller boat launching sites at Marlo foreshore (in alignment with Action MR4.3).</li> </ul> Communicate purpose and preferred usage of boating facilities in alignment with Action MR4.1.	0-3 years, then ongoing	Lead	Gippsland Ports, Boating Vic, Better Boating Victoria



Long-term objective	No.	Action	Timeframe	Council role	Partners
Objective 5: Take a stewardship approach, build understanding and knowledge, engage and collaborate	MR5.1	Continue to support and collaborate with local volunteer community environment groups e.g. Marlo Landcare. Includes: <ul style="list-style-type: none"> <li>Promoting community group activities in the coastal and marine space.</li> <li>Fostering open communication and engagement channels with community groups.</li> <li>Continuing to seek opportunities to increase community involvement, including through community grants and Council partnerships.</li> <li>Promoting and increasing citizen science opportunities (including environmental monitoring - Action MR2.2).</li> </ul>	Ongoing	Lead	All other management agencies, environmental and community groups and organisations
	MR5.2	In alignment with Shire wide Action EG5.3, review, consolidate and update foreshore signage across Marlo to: <ul style="list-style-type: none"> <li>Ensure consistency.</li> <li>Promote connectivity, wayfinding and safety (e.g. pedestrian safety across Beach Road).</li> <li>Celebrate unique environments, history and culture.</li> <li>Support implementation of activity and recreation nodes (Action MR4.1).</li> </ul>	3-5 years	Lead	Other land managers, GLaWAC, Far East Traditional Owner groups

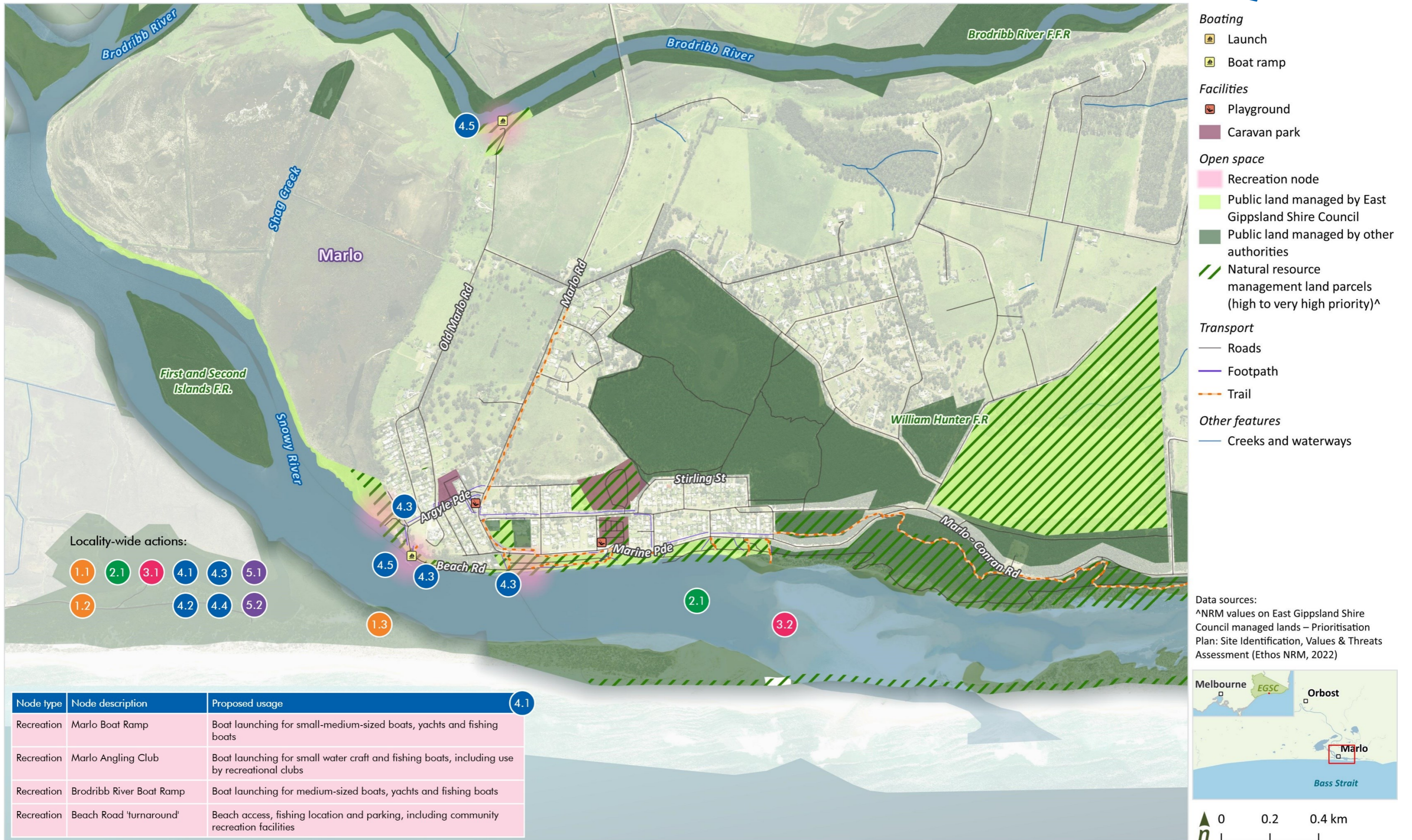


Figure 113. Marlo management actions and nodes



## 12 Bemm River

Bemm River is a small town located on Sydenham Inlet. The river itself bends north of the township, entering the Inlet to the east. The Inlet is surrounded to the west by east by Cape Conran Coastal Park and to the east by Croajingolong National Park.

The town hosts various holiday cottages and accommodation, a boat ramp, bait shop and boating facilities including jetties, wharfs and launching ramps. Fishing and boating are key attractions in Bemm River.



Figure 115. Bemm River locality.

### 12.1 Community and connection to coast

The Bemm River community is very small, with just over 70 residents, 60% of which are male. The older population has a median age of 67, with very few families and no residents younger than 20 years.

Only around a third of the population are in the labour force, with many retirees. Around half of properties are occupied, suggesting a high number of holiday homes.

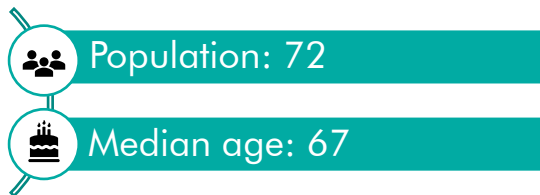


Figure 114. Key statistics for Bemm River (ABS, 2021). Note some other statistics have reduced reliability due to small population size.

While no formal designation currently exists for the area surrounding Bemm River these areas are important to a number of the region's Traditional Owner groups.

Traditional Owners were known to travel from the hills to the coast at different times of year to harvest different food sources such as abalone, mussels, shrimp and fish.





## 12.2 The coastal environment

The Bemm River hosts a multitude of waterways and inlets, encompassing the Sydenham Inlet, Swan Lake, and Bemm River itself. Sydenham Inlet is recognised as a high-value wetland.

Important ecological communities include:

- Coastal Saltmarsh
- Riparian Forest
- Coast Banksia Woodland
- Lowland Forest



These ecosystems provide habitat for a range of threatened species, including:

- Caspian, Little, Fairy, and Australian Gull-billed Terns
- Little Egret
- Lace Monitor
- Ground Parrot
- White-throated Needle-tail
- Musk Duck
- Yellow-bellied Glider
- White-bellied Sea-Eagle
- Hooded plovers

The Inlet is recognised as a high-value wetland in the Directory of Important Wetlands. The inlet, river and lakes are popular with visitors and residents for Bream fishing. They are also home to many other species like flathead, mullet, and salmon.

## 12.3 Coastal processes and hazards

The area is influenced by both riverine and coastal inundation. Surrounded by low-lying floodplain wetlands, inundation is an important natural process to support these ecosystems.

Some foreshore reserves and facilities are likely to be impacted by inundation, particularly in storm events. Impacted areas may include Pearl Point Road, Sydenham Parade, the boat ramp, jetties, piers and the coastal reserve itself. With sea level rise, inundation may become more frequently or permanent.

The inlet is subject to closure and rarely re-opens naturally. Flooding occurs on roads, wharves and boat ramps when the inlet is closed for extended periods.

### Intermittently closed-open estuaries

The region hosts several estuaries that naturally open and close. This is influenced by river flows, rainfall, sea, and wind conditions. Some estuaries close for months or years. These naturally dynamic systems support varied ecological, cultural and social values. Artificial openings can impact on these values, with poor water quality and fish kills.



The EGCMA monitors estuary health – analysing water levels, water quality, and weather conditions for potential closures and re-openings. Protocols guide entrance management, with further information at: [egcma.com.au/what-we-do/estuary-openings](http://egcma.com.au/what-we-do/estuary-openings)





### 12.4 Coastal uses, reserves, and facilities

The town’s nickname is “The Bream Capital”. It is a hot spot for recreational and competitive fishers. The Bemm River Angling Club hosts numerous fishing events and competitions for visitors and residents.

There is also a growing emphasis on embracing eco-tourism within the region, with many tourism websites advertising it as a birdwatcher’s haven and walking trails destination.

The main public foreshore facilities include the Bemm River Coastal Reserve itself, the boat ramp, fishing platforms, jetties and wharfs and picnic areas.



### 12.5 Coastal and marine management

Council manage the coastal reserve across the township from near Banksia Street to the eastern edge of Sydenham Parade residences. Council also manage the recreation reserve. Parks Victoria manage surrounding coastal and national parks. Gippsland Ports and Park Victoria are the managers of Sydenham Inlet. The EGCMA manage river health and oversee opening of the inlet. DEECA manage the Bemm River State Forest and other Crown land.



The Bemm River Foreshore Management Plan (2014) guide management with management strategies focused on maintaining, improving or upgrading:

- Recreational facilities, including boating facilities
- Car and trailer parking and roads
- Pedestrian linkages and access
- Natural values and vegetation


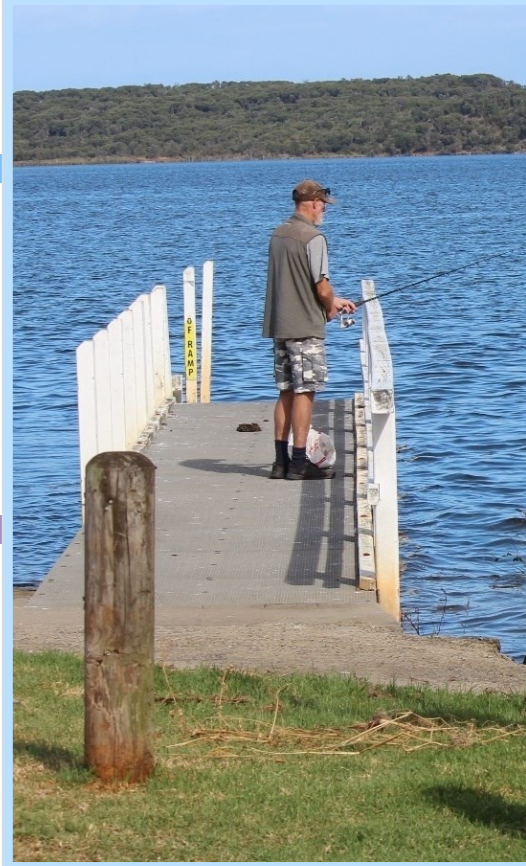




The plan also sought to clarify boundaries for on-ground management responsibility and better define Crown land boundaries.

There are several recent or ongoing Council-led projects across Bemm River:

- Footpath development
- Road safety improvements

Table 20 summarises community values, challenges and opportunities across Bemm River, with focus areas for future management. Figure 116 to Figure 124 map key features, values, and management arrangements across the foreshore.

Table 24. Values, challenges and opportunities for Bemm River coastal and marine management, with focus areas for future management.

		Bemm River			
		Values	Challenges	Opportunities	Focus for management
	Traditional Owners' rights, aspirations and knowledge	<ul style="list-style-type: none"> <li>Far East groups connection to Country</li> <li>Significant Aboriginal Heritage places and sites (recorded and unrecorded)</li> </ul>	<ul style="list-style-type: none"> <li>Unrecorded and unprotected sites and heritage</li> <li>No Registered Aboriginal Party with unclear arrangements of who can speak for Country.</li> <li>Recreational use impacts on cultural values.</li> </ul>	<ul style="list-style-type: none"> <li>Identify unrecorded Aboriginal Heritage sites and continue planning overlays and controls to protect</li> <li>Strengthen understanding of and relationships with Far East groups and desire/capacity for involvement in coastal and marine management</li> </ul>	<ul style="list-style-type: none"> <li>Maintain existing facilities, small town character and surrounding environmental values,</li> <li>Strategic vegetation management consistent with planning and overlay controls</li> <li>Review upgraded walking paths, connectivity and improve all abilities access to water and fishing opportunities</li> <li>Review safety and traffic flow arrangements</li> <li>Update signage and consolidate engagement of community members to develop better understanding of community needs and values</li> <li>Improve communication of Council roles, responsibilities and activities</li> <li>Work with Far East Groups to investigate and increase understanding of cultural heritage and ensure protection.</li> </ul> 
	The marine and coastal environment	<ul style="list-style-type: none"> <li>Foreshore vegetation, natural setting and surrounding National and Coastal Parks</li> <li>Important vegetation communities – coastal saltmarsh, seagrass, swamp and riparian scrub, riparian and lowland forest, and coastal banksia</li> <li>Rare and threatened species - Ground Parrot, White-throated Needle-tail, Musk Duck, Yellow-bellied Glider, Australian Grayling, White-bellied Sea-Eagle, egrets, terns and plovers.</li> <li>Sydenham Inlet - Directory of Important Wetlands</li> <li>Diverse fish - Black Bream and Estuary Perch</li> </ul>	<ul style="list-style-type: none"> <li>Stormwater quality and pollution from town and agricultural zones</li> <li>Water quality impacts related to inlet opening and closure regime, including artificial opening</li> <li>Balancing bushfire fuel management requirements with loss of native vegetation – e.g. vegetation removal controls and species selection</li> </ul>	<ul style="list-style-type: none"> <li>Vegetation protection and enhancement, including weed, pest and access management</li> <li>Continued estuary water quality and water level monitoring to inform opening requirements</li> <li>Consider water-sensitive urban design options to improve stormwater quality</li> <li>Holistic approach to vegetation management, including fire risk management</li> </ul>	
	Natural processes and climate change	<ul style="list-style-type: none"> <li>Dynamic estuary and inlet features</li> <li>Fire safety and bushfire preparedness/planning</li> </ul>	<ul style="list-style-type: none"> <li>Flooding associated with prolonged estuary closure occurs on roads, wharves and boat ramps.</li> <li>Active management of estuary required – rarely opens naturally</li> <li>Changing estuary opening regimes associated with climate change and sea level rise</li> <li>One road in and out for evacuation routes, with places of last resort, often on foreshores</li> <li>Vegetation management in relation to fuel loads</li> </ul>	<ul style="list-style-type: none"> <li>Strategic vegetation management and communication, incorporating bushfire management considerations</li> <li>Monitoring of sediment movement around Luderick Point and any impacts on boat ramps</li> <li>Investigate ecosystem responses to changing estuary conditions resulting from changes in climate and sea level.</li> <li>Investigate estuary dynamics and expected changes with climate change and sea level rise.</li> </ul>	
	Sustainable use and development	<ul style="list-style-type: none"> <li>Boating, fishing and water access facilities across Luderick Point – main boat ramp, jetty, small craft and kayak water access, fishing platforms.</li> <li>High recreational fishing value and all abilities fishing access platforms</li> <li>Recently upgraded facilities – playground, toilets, other foreshore facilities</li> <li>Accommodation, camping and caravan parks to support tourism</li> <li>Small village character and wilderness surrounds</li> </ul>	<ul style="list-style-type: none"> <li>Lack of foreshore access pathways, connectivity between walking tracks and all abilities access</li> <li>Poor stormwater management and occurrences of poor local water quality</li> <li>Safety around Luderick Point including playground and toilet placement</li> </ul>	<ul style="list-style-type: none"> <li>Water- and ecologically-sensitive facilities – boardwalks in areas of inundation</li> <li>Walking path connectivity and all-abilities access</li> <li>Apply best-practice water-sensitive urban design and stormwater controls from urban town areas</li> <li>Safety, parking and traffic flow improvements</li> </ul>	
	Stewardship, knowledge, engagement and collaboration	<ul style="list-style-type: none"> <li>Community groups - Far East Victoria Landcare, Bemm River Recreation Reserve Committee, Bemm River Progress and Improvement Association Inc. and Bemm River Community Centre</li> <li>Recreational groups – Bemm River Angling Club</li> </ul>	<ul style="list-style-type: none"> <li>Perceived lack of Council communication and opportunities to engage</li> <li>Confusing signage around boat ramps</li> </ul>	<ul style="list-style-type: none"> <li>Consolidate community input into key strategies, including CMMP</li> <li>Improve communication of Council roles and activities</li> <li>Upgrades to foreshore signage</li> </ul>	

# Bemm River mapping: Traditional Owners and cultural values



### Traditional Owners and Cultural Values

- Areas of Cultural Heritage Sensitivity
- Other Features**
- Creeks and waterways

### Inset map

#### Registered Aboriginal Parties

- Gunaikurnai Land and Waters Aboriginal Corporation
- Other Registered Aboriginal Parties

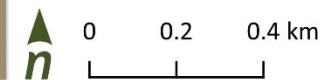
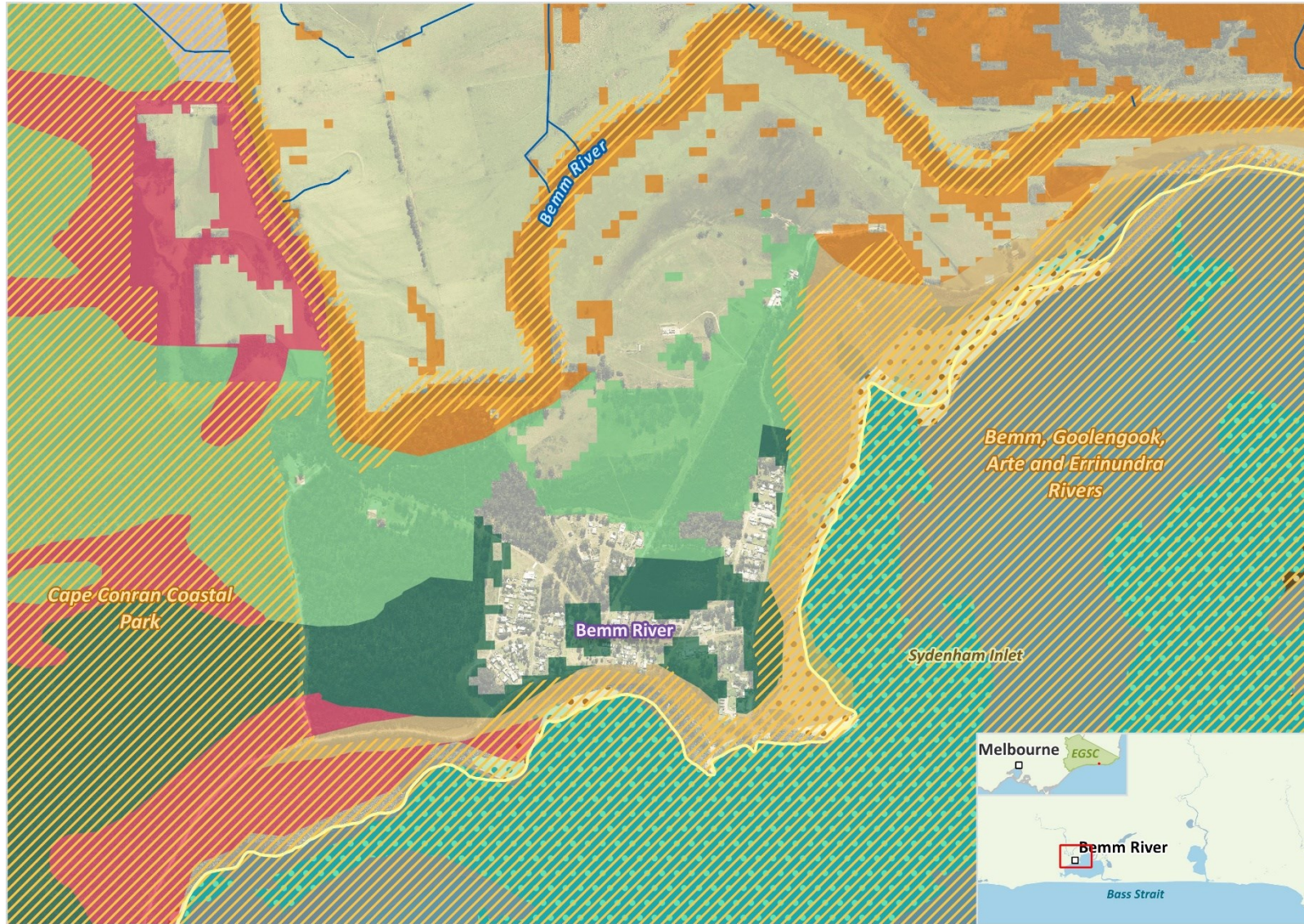


Figure 116. Registered Aboriginal Party areas, culturally sensitive areas, and Joint Management areas for Bemm River.

# Bemm River mapping: Environmental values



- Environmental Values**
- Protected areas
  - Significant marine assets
- Ecological Vegetation Class<sup>A</sup>**
- Coast Banksia Woodland
  - Lowland Forest
  - Banksia Woodland
  - Riparian Forest
  - Riparian Scrub/Swampy Riparian Woodland Complex
  - Damp Forest
- Seamap ecosystems<sup>\*</sup>**
- Coastal saltmarshes and saline reedbeds
  - Littoral sediment
  - Sublittoral seagrass beds
- Other features**
- Creeks and waterways

Data sources:  
<sup>A</sup>Native Vegetation - Modelled 2005 Ecological Vegetation Classes (DEECA)  
<sup>\*</sup>Seamap Australia (Lucieer et al., 2017)

0 0.2 0.4 km



Figure 117. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Bemm River.

# Bemm River mapping: Environmental overlays




### Environmental Overlays

#### Planning Scheme Overlays

-  Bushfire Management Overlay
-  Erosion Management Overlay

#### Other features

-  Creeks and waterways

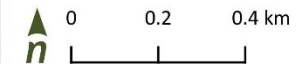
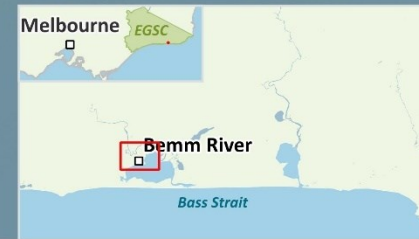






Figure 118. Environmental and land management planning overlays for Bemm River.




### Coastal Hazards

#### Statewide coastal datasets:

##### Sea level rise<sup>^</sup>

-  0.0 m sea level rise (2009 baseline)
-  0.2 m sea level rise
-  0.47 m sea level rise
-  0.82 m sea level rise


##### 1% AEP storm tide inundation<sup>^</sup>

-  0.82 m sea level rise

##### Erosion vulnerability<sup>~</sup>

-  Moderate
-  High

##### Other features

-  Creeks and waterways

AEP: Annual Exceedence Probability (AEP) is the probability of an event occurring in any given year.

#### Data sources:

- <sup>^</sup>DELWP 2009 - Victorian Coastal Inundation Dataset (Future Coasts Project)
- <sup>~</sup>DELWP 2017 - Victorian Coastal Hazard Assessment (VCHA)

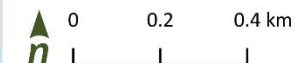


Figure 119. Coastal hazard mapping of Statewide coastal hazard data as part of the Victorian Governments Future Coasts Project and Victorian Coastal Hazard Assessment for Bemm River.

# Bemm River mapping: Coastal protection and drainage infrastructure



### Coastal Infrastructure

#### Protection Structures

— Revetment

#### Drainage

● Stormwater pit

— Stormwater pipe

#### Other features

— Creeks and waterways

Figure 120. Coastal protection and drainage infrastructure for Bemm River.

# Bemm River mapping: Recreation and transport



- Recreation and Transport**
- Boating*
- Boat ramp
  - Fishing platform
  - Marinas and jetties
- Facilities*
- Playground
  - Community facility
  - Caravan park
  - Treatment plant
- Open space*
- Reserve (park)
  - Protected areas
- Transport*
- Roads
- Other features*
- Creeks and waterways

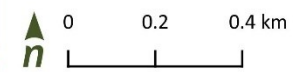


Figure 121. Recreation facilities and transport networks for Bemm River.

# Bemm River mapping: Planning scheme zones



### Planning Scheme Zones

- Farming zone - Schedule 1
- Public conservation and resource zone
- Public park and recreation zone
- Township zone

### Transport

— Roads

### Other features

— Creeks and waterways

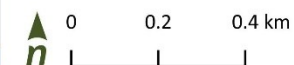


Figure 122. Planning scheme zones for Bemm River.

# Bemm River mapping: Planning overlays



### Planning Overlays

Property boundaries

### Planning Scheme Overlays

Design and Development Overlay

### Other features

Creeks and waterways

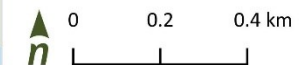
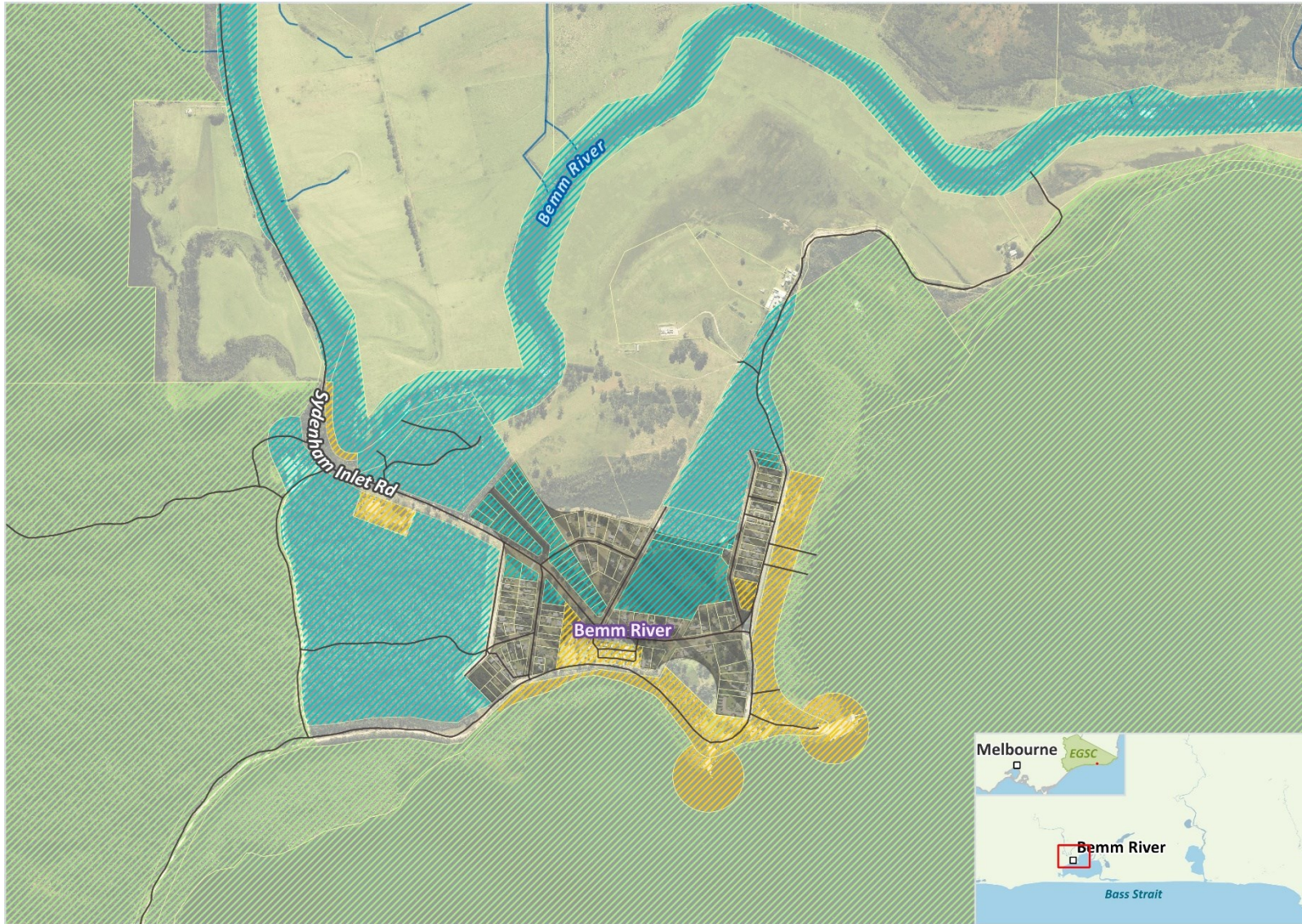


Figure 123. Other planning scheme overlays for Nungurner.

# Bemm River mapping: Land management arrangements



- Land Tenure**
- Public Land Management*
- East Gippsland Shire Council
  - Parks Victoria
  - Department of Energy, Environment and Climate Action
- Other features*
- Creeks and waterways
  - Roads
  - Property boundaries
  - Built up areas

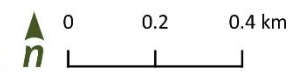


Figure 124. Public land management arrangements for Bemm River.



## 12.6 Management actions

Table 25 details the CMMP management actions for Bemm River.

Figure 125 presents site-specific management actions and maps activity and recreation nodes.

Table 25. Bemm River management actions

Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 1: Acknowledge Traditional Owners' rights, aspirations and knowledge</b>	BR1.1	Guided by Far East Traditional Owner Groups, support identification, management and protection of cultural heritage values across Bemm River coastal areas. In alignment with Shire Wide actions, this includes: <ul style="list-style-type: none"> <li>Supporting Far East Traditional Owner Groups to identify unrecorded cultural heritage sites.</li> <li>Continuing to implement appropriate planning overlays and controls such as Cultural Heritage Management Plans to protect cultural heritage.</li> <li>Collaborating with Far East Traditional Owner Groups to better understand cultural values and inform future protection, in alignment with Action BR1.2.</li> <li>Incorporating culturally-sensitive design into all works across Council-managed coastal reserves.</li> </ul>	Ongoing	Participate	Far East Traditional Owner Groups
	BR1.2	Continue to advance relationships with Far East Groups, including Bidwell, Yuin, and Ngarigo Monero peoples, and strengthen EGSC understanding of desire and capacity among Far East Groups for collaboration in coastal and marine management across Bemm River.	0-3 years, then ongoing	Lead	Far East Traditional Owner Groups
<b>Objective 2: Protect and enhance the marine and coastal environment</b>	BR2.1	Continue to support EGCMA and citizen science programs to monitor estuary water quality and levels to inform opening arrangements of Sydenham Inlet. Communicate management roles and responsibilities with reference to EGCMA entrance management protocols. Aligns with Shire wide Action EG5.2.	Ongoing	Participate	EGCMA, Parks Victoria, citizen science programs
<b>Objective 3: Respect natural processes and strengthen resilience to climate change</b>	BR3.1	Investigate options to manage emerging coastal hazard risks across the Bemm River foreshore, including measures to avoid risk and the use of nature-based solutions.	3-5 years	Lead	Parks Victoria, DEECA, EGCMA, research institutes
	BR3.2	Collaborate with land managers and EGCMA to investigate and plan for Sydenham Inlet estuary opening regime changes expected with climate change and sea level rise. Consider opportunities for accommodation and adaptation of surrounding built and natural environment, impacts of increased flooding associated with prolonged closures, and the reducing need for artificial estuary opening.	5+ years	Participate	EGCMA, land managers
	BR3.3	Continue to contribute to strategic bushfire recovery and management across coastal and marine areas through: <ul style="list-style-type: none"> <li>DEECA, Forest Fire Management Victoria (FFMVic) and CFA collaboration.</li> <li>Strategic vegetation management, considering environmental values and fuel management loads.</li> <li>Review of bushfire recovery projects, funding and outstanding actions.</li> <li>Aligning and coordinating bushfire recovery efforts with CMMP objectives, principles and actions.</li> <li>Strategic bushfire management activity communication (through Action BR5.1 and aligning with Action EG3.4).</li> </ul>	0-3 years	Participate	DEECA, FFMVic



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 4: Use and develop sustainably</b>	BR4.1	In alignment with Action EG4.1, utilise activity and recreation nodes to clearly delineate distinct purposes and uses within foreshore zones, and ensure efficient development through co-location, partnership use, and consolidation of community assets. Includes delineation of: <ul style="list-style-type: none"> <li>Bemm River (Luderick Point) Boat Ramp area as recreation node, supporting parking, boat access, fishing facilities, toilets, playground and other recreational facilities.</li> </ul>	0-3 years	Lead	All other land managers
	BR4.2	In alignment with East Gippsland Housing and Settlement Strategy (2023), continue to foster Rural Town character and prioritisation of natural setting through: <ul style="list-style-type: none"> <li>Maintenance of existing foreshore facilities and investment in facilities, based on assessment of need.</li> <li>Only small-scale housing development within existing residentially zoned areas.</li> <li>Promoting adherence to township boundaries, planning overlays and land use planning.</li> </ul>	Ongoing	Lead	
	BR4.3	Progress and complete Bemm River Footpath Development project. Review designs and planning to ensure proposed works and upgrades align with CMMP objectives, principles, actions and State policy. Review and monitor path upgrade to understand if further works are required to improve alignment with community values and needs, and/or incorporate ecosensitive design improvement opportunities.	5+ years	Lead	
	BR4.4	Undertake review of town drainage arrangements and maintenance regimes. Investigate potential for drainage upgrades, improved maintenance and implementation of best-practice water-sensitive urban design options to improve stormwater quality entering the Inlet.	5+ years	Lead	
	BR4.5	Improve user safety through review and upgrades to Luderick Point including: <ul style="list-style-type: none"> <li>Update to boat ramp road markings, parking demarcation and signage.</li> <li>Review playground and toilet siting and implement strategies to improve safety (e.g. formalised pedestrian crossing, fencing, signage).</li> </ul>	0-3 years	Lead	
<b>Objective 5: Take a stewardship approach, build understanding and knowledge, engage and collaborate</b>	BR5.1	Continue to support and collaborate with local volunteer community and environment groups e.g. Far East Victoria Landcare, Bemm River Recreation Reserve Committee, Bemm River Progress and Improvement Association Inc. and Bemm River Community Centre. Includes: <ul style="list-style-type: none"> <li>Promoting community group activities in the coastal and marine space.</li> <li>Fostering open communication and engagement channels with community groups.</li> <li>Leveraging existing engagement information and knowledge, established community networks and place managers to improve communication of and engagement with of Council activities.</li> <li>Continuing to seek opportunities to increase community involvement, including through community grants and Council partnerships.</li> <li>Promoting and increasing citizen science opportunities (including environmental monitoring - Action BM2.2).</li> </ul>	Ongoing	Lead	All other management agencies, environmental and community groups and organisations



Long-term objective	No.	Action	Timeframe	Council role	Partners
<b>Objective 5: Take a stewardship approach, build understanding and knowledge, engage and collaborate (cont.)</b>	BR5.2	<p>In alignment with Shire wide Action EG5.3, review, consolidate and update foreshore signage across Bemm River to:</p> <ul style="list-style-type: none"> <li>• Increase clarity of communication.</li> <li>• Promote activities around Bemm River.</li> <li>• Improve safety.</li> <li>• Celebrate unique environments, history and culture.</li> <li>• Support implementation of activity and recreation nodes (Action BR4.1).</li> </ul> <p>May include updated township mapping.</p>	3-5 years	Lead	Other land managers, VFA, Far East Traditional Owner groups



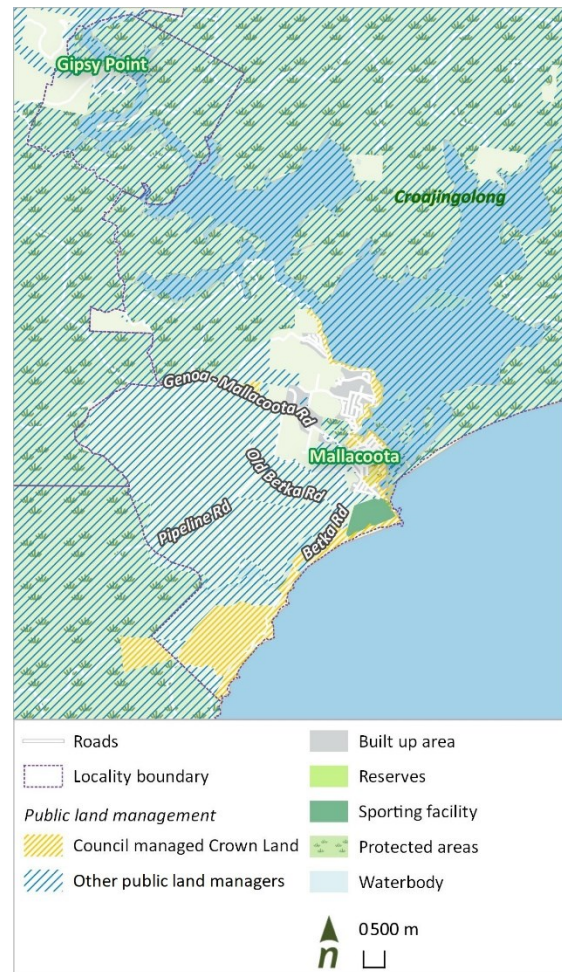
Figure 125. Bemm River management actions and nodes



## 13 Mallacoota

Mallacoota is the easternmost town in Victoria, close to the border of New South Wales. The town spans across the coast of Mallacoota Inlet and the open Bass Coast and is surrounded by the wilderness of Croajingolong National Park.

Coastal and marine areas include the open coast and Betka River, Bastion Point, the main town foreshore, Karbeethong, and Bucklands Jetty areas. Gypsy Point is also a Council-managed area between the Genoa and Wallagaraugh Rivers.



### 13.1 Community and connection to coast

Mallacoota had a population of around 1,200 at the last census. With an influx of tourists during summer, the population can rise significantly. Mallacoota is an older community. Nearly half are aged over 60. The town attracts many retirees. Less than half of the population in the workforce.

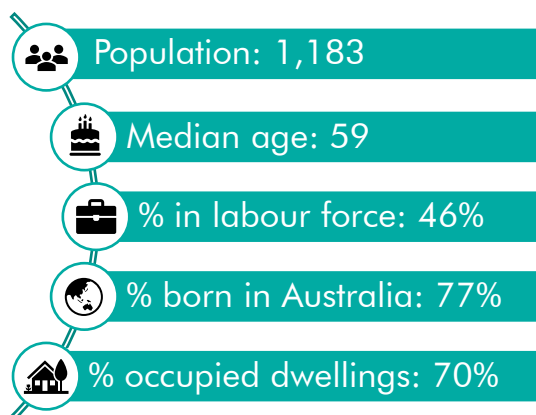


Figure 126. Key statistics for Mallacoota (ABS, 2021).

Figure 127. Mallacoota locality.

While no formal designation currently exists for the area surrounding Mallacoota these areas are important to a number of the region's Traditional Owner groups.

Traditional Owners were known to travel from the hills to the coast at different times of year to harvest different food sources such as abalone, mussels, shrimp and fish.





### 13.2 The coastal environment

The Genoa and Wallagaraugh Rivers feed Mallacoota inlet, which stretches out to Bass Strait, near Bastion Point. The inlet hosts many sand banks and islands with reedbeds, sedgeland and seagrass. Important ecological communities include:

- Littoral Rainforest and Coastal Vine Thickets (EPBC-listed)
- River-flat eucalypt forest on coastal floodplains (EPBC-listed)
- Sub-tropical and Temperate Saltmarsh (EPBC-listed)
- Clay Heathlands
- Warm Temperate Rainforest



Council-managed reserves with particularly high natural value include the southern and northern foreshore, Betka River area and Shady Gully (Ethos NRM, 2022). These areas hold a variety of threatened flora and fauna species, including:

- White-fronted, Little and Fairy Terns
- Great and Red Knots
- Gang-gang Cockatoo
- Curlew Sandpiper
- Mallacoota Burrowing Crayfish
- Eastern Curlew
- Southern Right Whale
- Eastern Bristlebird
- White-bellied Sea-Eagle
- Hooded Plover

Croajingolong National Park is designated as a World Biosphere Reserve and contains records for one quarter of all Australian bird species (Parks Victoria, 2023).

The extent and severity of the 2019/20 bushfires drastically impacted the region’s natural values, particularly at Mallacoota.

### 13.3 Coastal processes and hazards

The coastal processes around Mallacoota are complex. The area is influenced by both riverine and coastal inundation. Surrounded by low-lying wetlands and marshes, inundation is an important natural process to support ecosystems.

Mallacoota Inlet is an intermittently closed-open estuary. The entrance can be closed for months at a time, if not years. Flooding of jetties, wharves, camping areas, carparks, boat ramps and moorings can occur when water levels are high.

#### Intermittently closed-open estuaries

The region hosts several estuaries that naturally open and close. This is influenced by river flows, rainfall, sea, and wind conditions. Some estuaries close for months or years. These naturally dynamic systems support varied ecological, cultural and social values. Artificial openings can impact on these values, with poor water quality and fish kills.



The EGCMA monitors estuary health – analysing water levels, water quality, and weather conditions for potential closures and re-openings. Protocols guide entrance management, with further information at: [egcma.com.au/what-we-do/estuary-openings](http://egcma.com.au/what-we-do/estuary-openings)

Changes in climate and sea levels could alter the flooding regime and may increase inundation across the Mallacoota foreshore. While most residences, commercial properties and assets are located on higher ground, public foreshore facilities could be increasingly impacted.

Vegetation cover strengthens dunes and provides some protection from erosion, especially on the open coast. There are also stretches of seawalls along the coast, particularly along the township foreshore and Caravan Park.



### 13.4 Coastal uses, reserves and facilities

The pristine natural coastal surrounds make Mallacoota a popular holiday spot for nature-lovers. Many recreational facilities are available for visitors and are centred around outdoor activities. These include:

- Camping and caravan parks including the Council-managed Mallacoota Foreshore Holiday Park
- Fishing jetties and wharfs, including Karbeethong, Bucklands and Gypsy Point Jetties
- Boat mooring and launching areas, including moorings along the caravan park and Bastion Point Boat Ramp
- Walking tracks and lookouts for sightseeing, birdwatching, and hiking.
- Surfing and swimming spots including sheltered areas in the inlet and open coast surf areas.



Recreational fishing-based tourism is considered to be a major contributor to economic activity in the town. Mallacoota Inlet was declared a fisheries reserve in 2004. The town also hosts commercial fisheries, specifically abalone and sea urchin harvesting.

### 13.5 Coastal and marine management

Council manage the foreshore reserves from Secret Beach, along the open coast and into the inlet, round to the edge of the township at Bucklands Jetty. DEECA manage large areas of State Forest. Parks Victoria manage surrounding National Parks. Gippsland Ports manage a range of public boating facilities and the Inlet itself.

The Mallacoota Foreshore Management Plan (2005) and Urban Design Framework (2007) have guided past management but are now outdated. Perspectives and setting have also changed since the 2019/20 bushfires. The Mallacoota and District Recovery Association (MADRA) have developed a community-led recovery plan. Key values and priorities linked to coastal and marine management include:






- A love of our diverse, unspoilt wilderness landscape.
- Balance between natural values and bushfire safety
- A need to diversify the economy to balance tourist and resident needs
- Town planning and overlay updates to recognise hazards and consider emergency needs
- Replacement or upgrade of foreshore facilities and access.

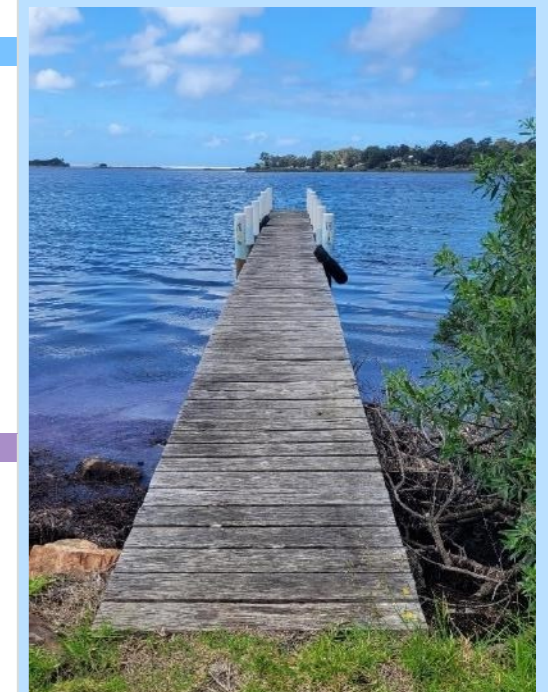
There are several recent or ongoing Council-led projects across Mallacoota:

- Bastion Point groin wall
- Streetscape upgrades
- Secret Beach stair reconstruction
- Mallacoota seawall reconstruction

Table 26 summarises community values, challenges and opportunities across Mallacoota, with focus areas for future management. Figure 128 to Figure 136 map key features, values, and management arrangements across the foreshore.

Table 26. Values, challenges and opportunities for Mallacoota coastal and marine management, with focus areas for future management.

		Mallacoota			
		Values	Challenges	Opportunities	Focus for management
	Traditional Owners' rights, aspirations and knowledge	<ul style="list-style-type: none"> <li>Far East groups connection to Country</li> <li>Significant Aboriginal Heritage places and sites (recorded and unrecorded)</li> <li>Broader community desire to understand Aboriginal culture</li> </ul>	<ul style="list-style-type: none"> <li>Unrecorded and unprotected sites and heritage</li> <li>No Registered Aboriginal Party with unclear arrangements of who can speak for Country.</li> <li>Challenges undertaking cultural heritage surveys, with multiple groups and minimal resources available</li> <li>Recreational use impacting on cultural values</li> </ul>	<ul style="list-style-type: none"> <li>Identify unrecorded Aboriginal Heritage sites and continue planning overlays and controls to protect</li> <li>Strengthen understanding of and relationships with Far East groups and desire/capacity for involvement in coastal and marine management</li> <li>Where appropriate, increase signage to communicate and celebrate Aboriginal culture</li> </ul>	<ul style="list-style-type: none"> <li>Coordinate bushfire recovery efforts and funding, taking stock of actions completed and remaining areas for improvement, including restoring access paths and trails.</li> <li>Leverage off post-bushfire funding and engagement to deliver foreshore upgrades – streetscaping, amenities, walking connectivity etc.</li> </ul>
	The marine and coastal environment	<ul style="list-style-type: none"> <li>High value natural vegetation and habitat across foreshore reserves – Mallacoota Coastal Reserve, Mortimers Paddock and Mallacoota Aerodrome</li> <li>Important vegetation communities - littoral rainforest, coastal vine thickets, river-flat eucalypt forest, coastal floodplains, saltmarsh, seagrass beds, clay heathlands and warm temperate rainforest</li> <li>Rare and threatened species - Gang-gang Cockatoo, Mallacoota Burrowing Crayfish, Southern Right Whale, Eastern Bristlebird, sea-eagles, terns and knots</li> <li>Mallacoota Inlet and dynamic estuary environment</li> <li>National Parks, Reserves and coastal wilderness</li> </ul>	<ul style="list-style-type: none"> <li>2019/20 bushfire loss of vegetation and habitat</li> <li>Balancing bushfire fuel management requirements with loss of native vegetation – e.g. vegetation removal controls and species selection</li> <li>Weed management and pest control, with few resources</li> <li>Management of burnt vegetation and environmental recovery following bushfires</li> <li>Impacts of human disturbance and dogs on beach nesting birds</li> </ul>	<ul style="list-style-type: none"> <li>Vegetation protection and enhancement, including weed, pest and access management</li> <li>Holistic approach to vegetation management, including fire risk management and species selection advice</li> <li>Continued estuary water quality and water level monitoring to inform opening requirements</li> <li>Improved communication and protection for beach nesting birds</li> </ul>	<ul style="list-style-type: none"> <li>Improve definition and communication of purpose of foreshore areas including separation of conflicting users and communication of public open space through Caravan Park</li> <li>Consolidate and communicate land management arrangements including determining suitable managing agencies, communicating public open space areas and seeking opportunities for further open space.</li> </ul>
	Natural processes and climate change	<ul style="list-style-type: none"> <li>Bushfire emergency evacuation routes, safe access and places of last resort, often on foreshores</li> <li>Recently upgraded seawall across Caravan Park</li> </ul>	<ul style="list-style-type: none"> <li>Managing bushfire and coastal hazard risk</li> <li>Flooding associated with prolonged estuary closure occurs on roads, wharves and boat ramps.</li> <li>Erosion, sediment and ground movement at Bastion Point – sand build up and impacts on safe boating</li> <li>Swimming safety associated with entrance opening</li> <li>More frequent and longer duration estuary closures associated with climate changes and sea level rise</li> </ul>	<ul style="list-style-type: none"> <li>Improve emergency management and consider where evacuation locations, routes and service reliability may intersect with coastal and marine management</li> <li>Clearly communicate swimming hazards and whether beach are patrolled by surf lifesaving clubs.</li> <li>Investigate estuary dynamics and expected changes with climate change and sea level rise.</li> </ul>	<ul style="list-style-type: none"> <li>Investigate and plan for estuary opening regime changes and coastal hazard impacts associated with climate change.</li> <li>Work with Far East Groups to investigate and increase understanding of cultural heritage and ensure protection.</li> </ul>
	Sustainable use and development	<ul style="list-style-type: none"> <li>Trails, boardwalks and walking/cycling connectivity</li> <li>Access to foreshore parks and reserves - Betka River Reserve, Mallacoota Foreshore Holiday Park</li> <li>Safe boating and water access – foreshore mooring, Bastion Point and main township boat ramps, Karbeethong jetty, other jetties and moorings.</li> <li>Tourism and recreational values - fishing, camping, boating, safe swimming, surfing, festivals and events</li> <li>Commercial fishing and the abalone industry</li> <li>Coastal wilderness setting and sea views</li> <li>Peaceful meeting points and reflection areas</li> </ul>	<ul style="list-style-type: none"> <li>Extended footpaths and trail closures following bushfires</li> <li>Lack of 'sense of arrival' and seascape connectivity</li> <li>Parking availability, traffic flow and pedestrian safety at Bastion Point, particularly in peak season</li> <li>Poorly defined activity and recreation areas with limited public open space and access to existing space</li> <li>Tenure arrangements and the right agency for land</li> <li>Outdated amenities at Foreshore Holiday Park</li> <li>Aging Caravan Park facilities and Buckland Boat Shed</li> <li>Lack of surf lifesaving storage facilities and confusion over patrol timings, with potential inadequacy of patrols</li> </ul>	<ul style="list-style-type: none"> <li>Reinstate walking track connectivity following bushfires</li> <li>Collect and utilise usage data to determine facility, parking and surf lifesaving patrol needs.</li> <li>Upgrade facilities at Foreshore Holiday Park and communicate this as public open space</li> <li>Reconfigure Bastion Point parking to improve pedestrian safety – utilise traffic counts to inform design and investigate additional golf course land</li> <li>Better define and communicate nodes and separate conflicting uses (e.g. children and boat ramp users)</li> <li>Streetscape upgrades (underway)</li> </ul>	
	Stewardship, knowledge, engagement and collaboration	<ul style="list-style-type: none"> <li>Active and passionate community groups - Mallacoota and District Recovery Association and Mallacoota and District Business and Tourism Association, Friends of Mallacoota, Far East Landcare, Southeast Landcare</li> <li>Recreational groups - East Gippsland Sportfishing</li> <li>Strong sense of self-determination – community driven</li> </ul>	<ul style="list-style-type: none"> <li>Post-bushfire engagement fatigue and higher prioritisation of other recovery projects</li> <li>Balancing community desires with roles and responsibilities of agencies</li> </ul>	<ul style="list-style-type: none"> <li>Consolidate engagement opportunities to gather input on multiple issues</li> <li>Engage Place Managers and leverage off existing engagement information and networks (e.g. MADRA)</li> <li>Improved communication of Council activities</li> </ul>	



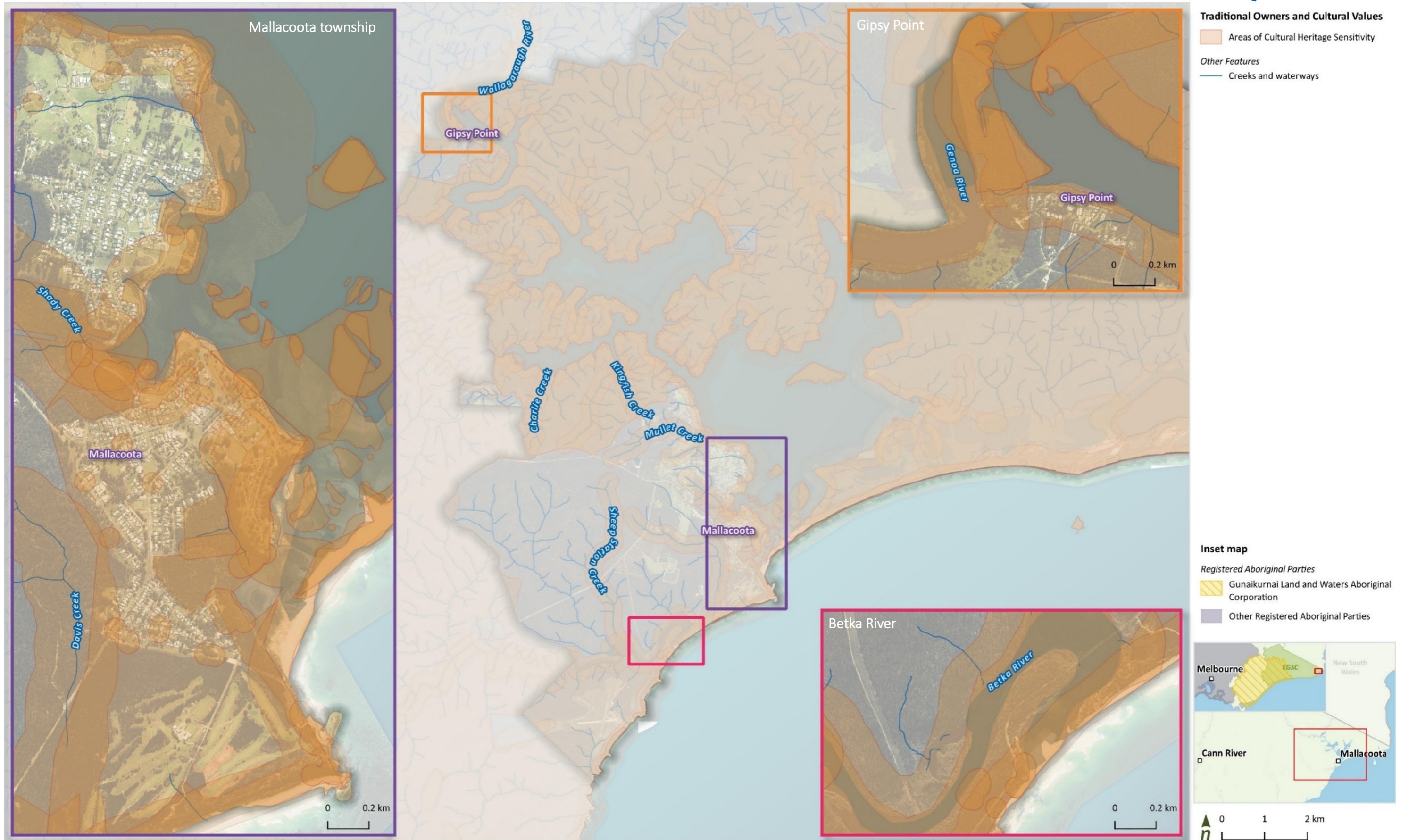


Figure 128. Registered Aboriginal Party areas, culturally sensitive areas and Joint Management areas for Mallacoota.

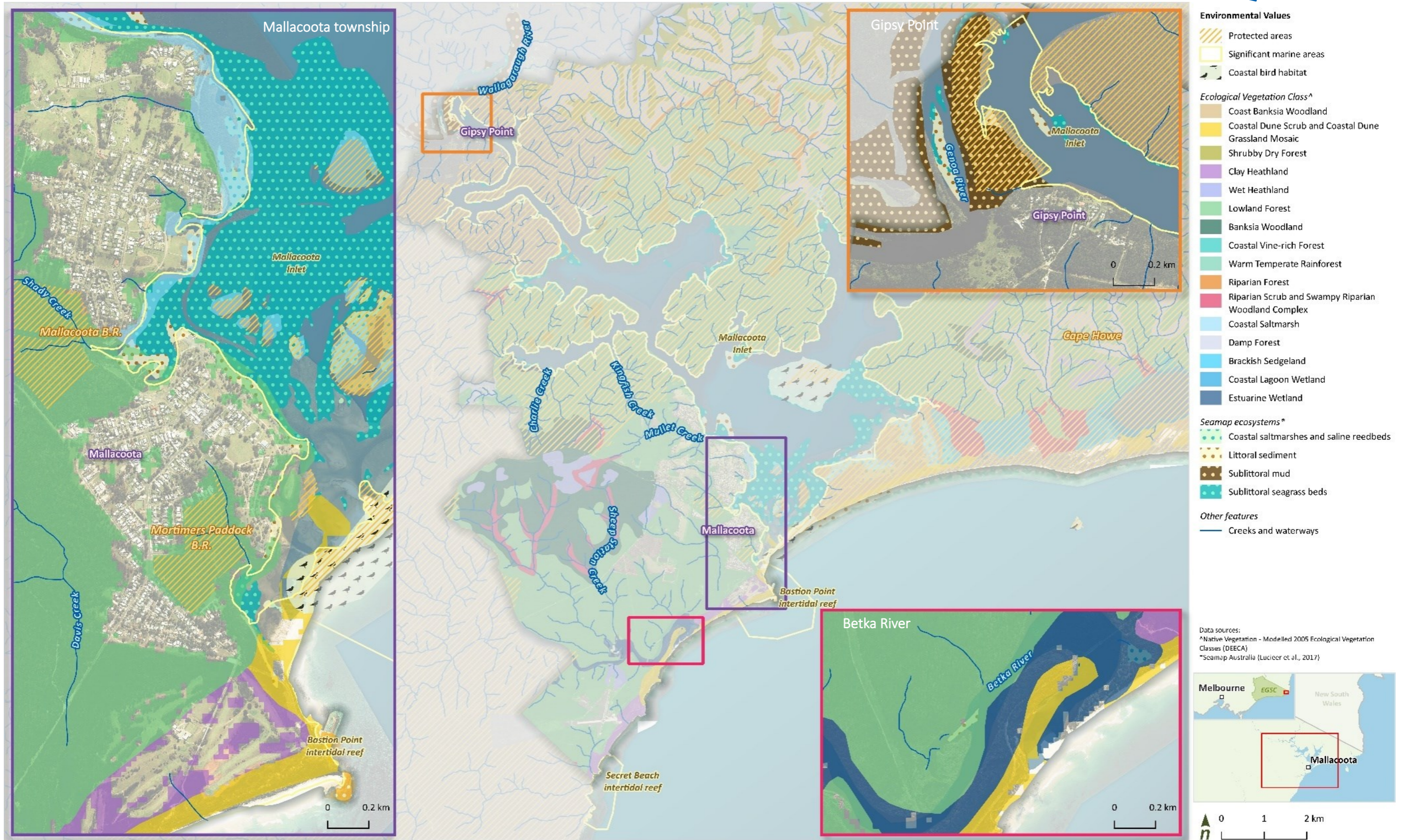


Figure 129: Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Mallacoota.

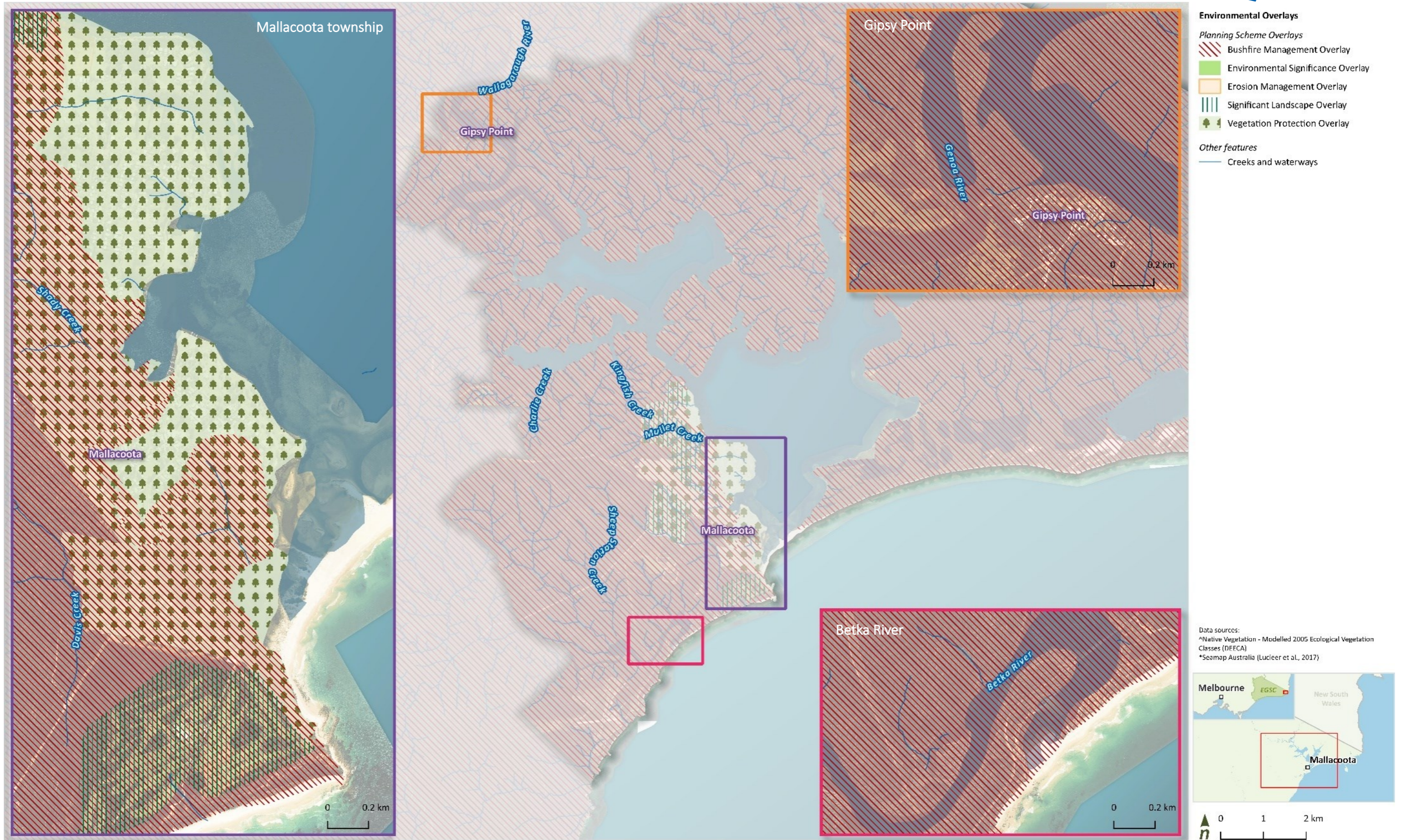


Figure 130. Environmental and land management planning overlays for Mallacoota.

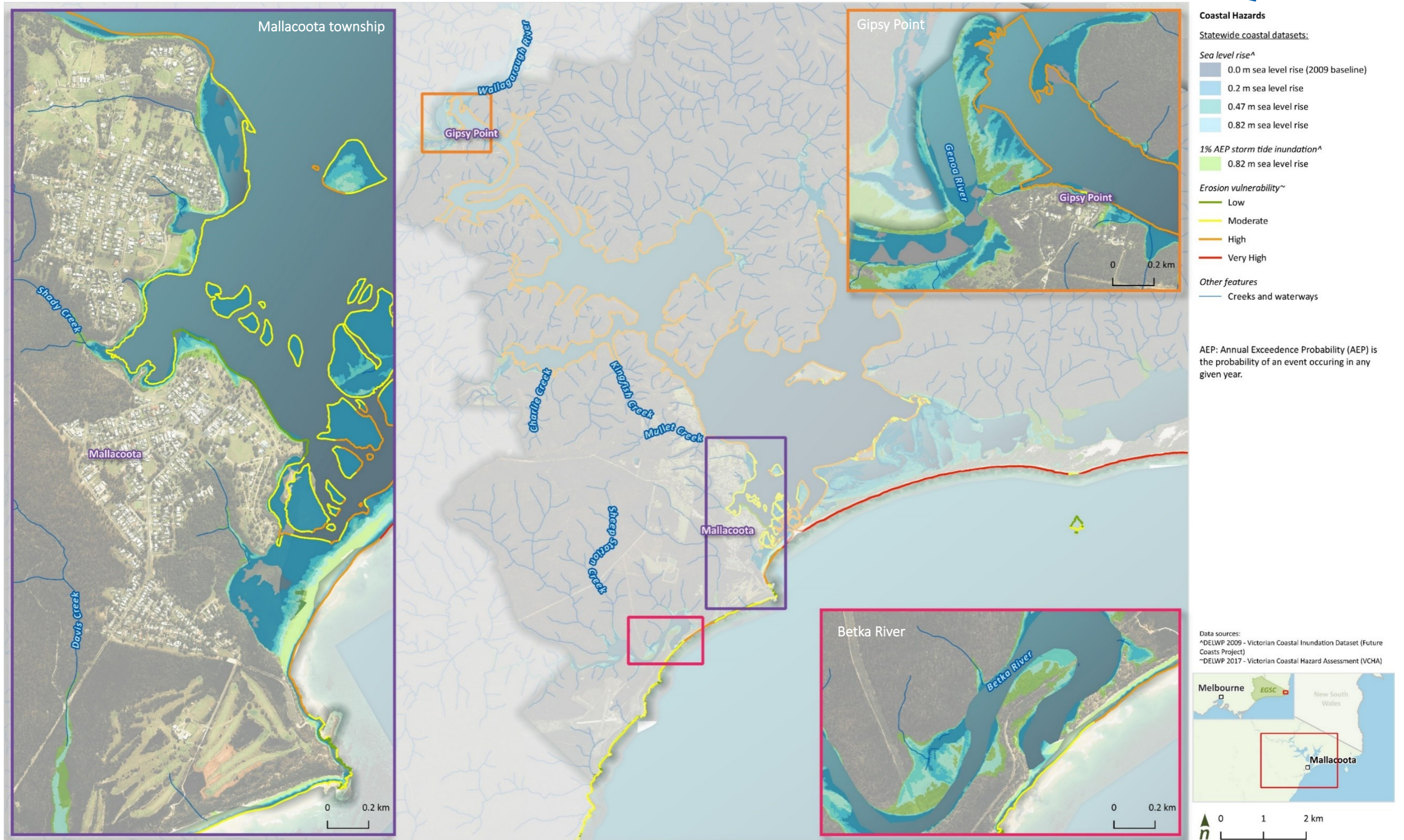


Figure 131. Coastal hazard mapping of Statewide coastal hazard data as part of the Victorian Governments Future Coasts Project and Victorian Coastal Hazard Assessment for Mallacoota.

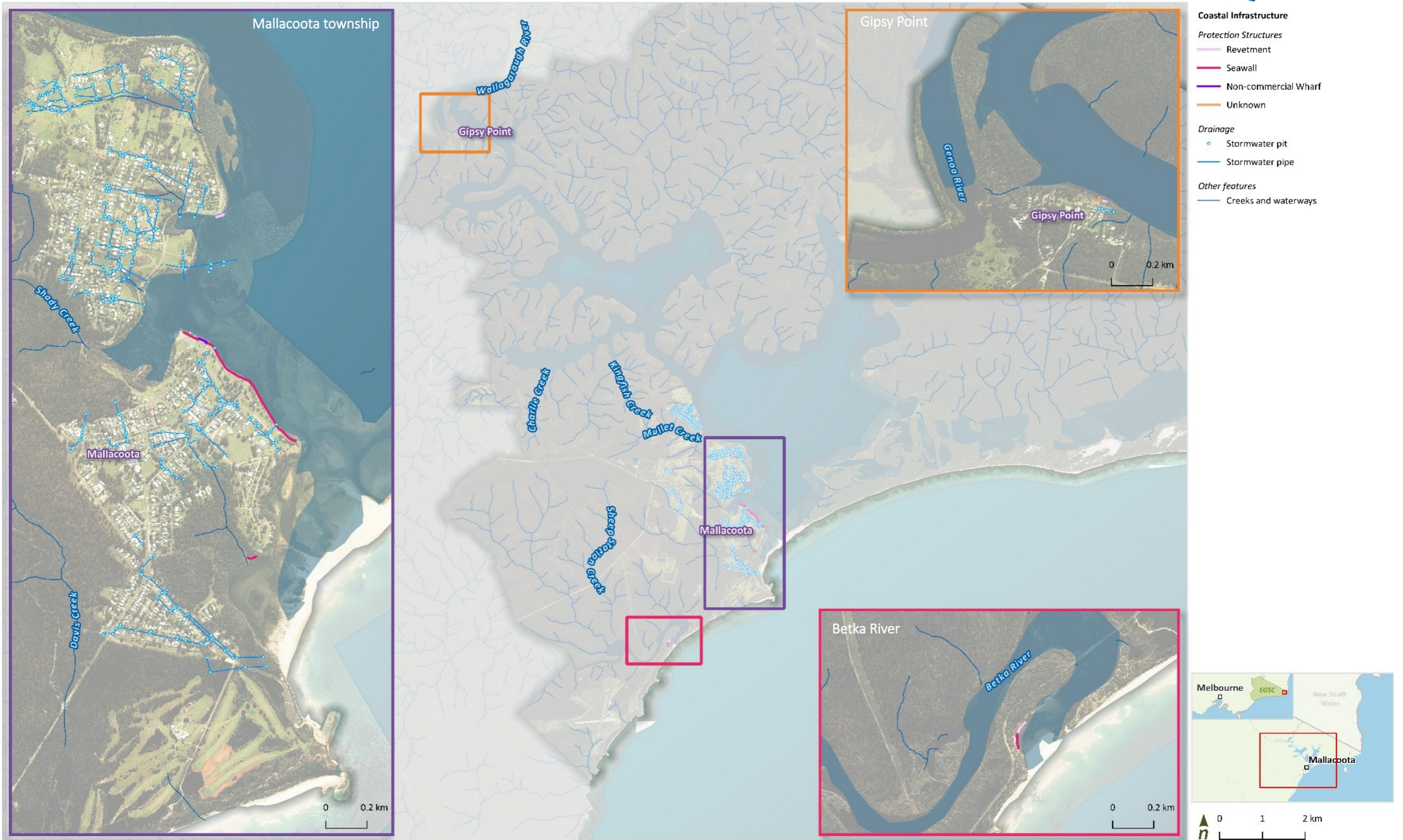


Figure 132. Coastal protection and drainage infrastructure for Mallacoota.

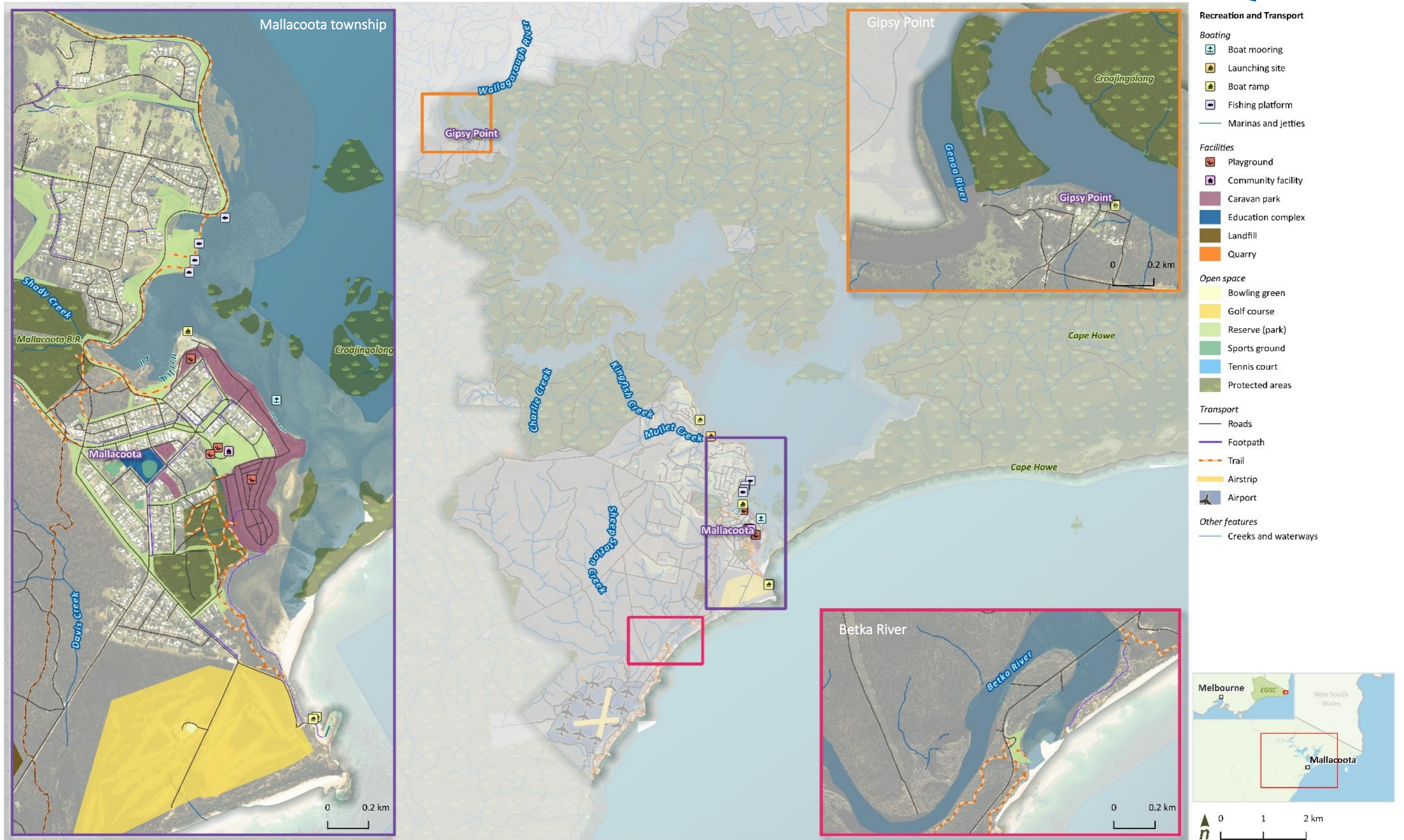


Figure 133. Recreation facilities and transport networks for Mallacoota.

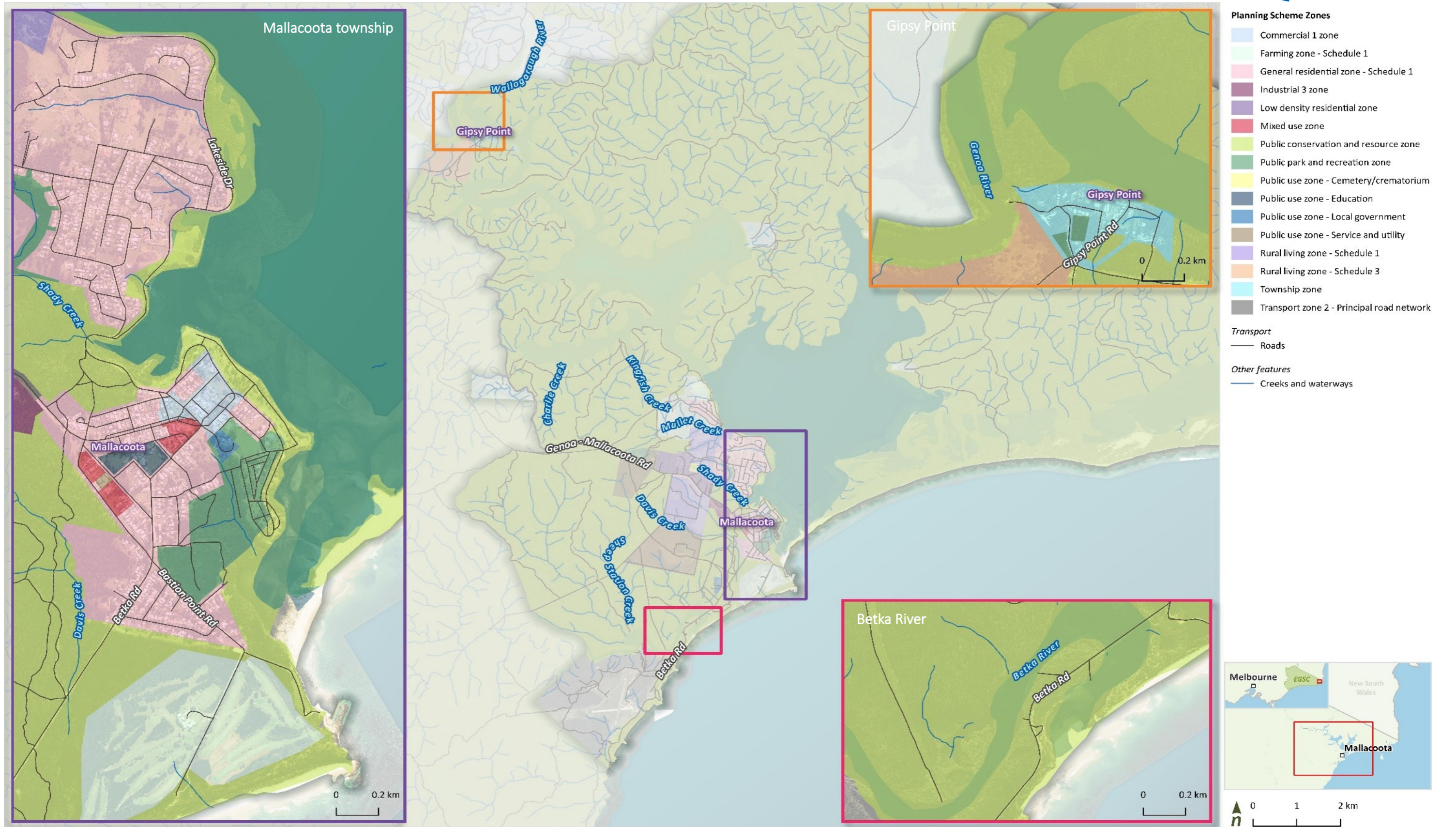


Figure 134. Planning scheme zones for Mallacoota.

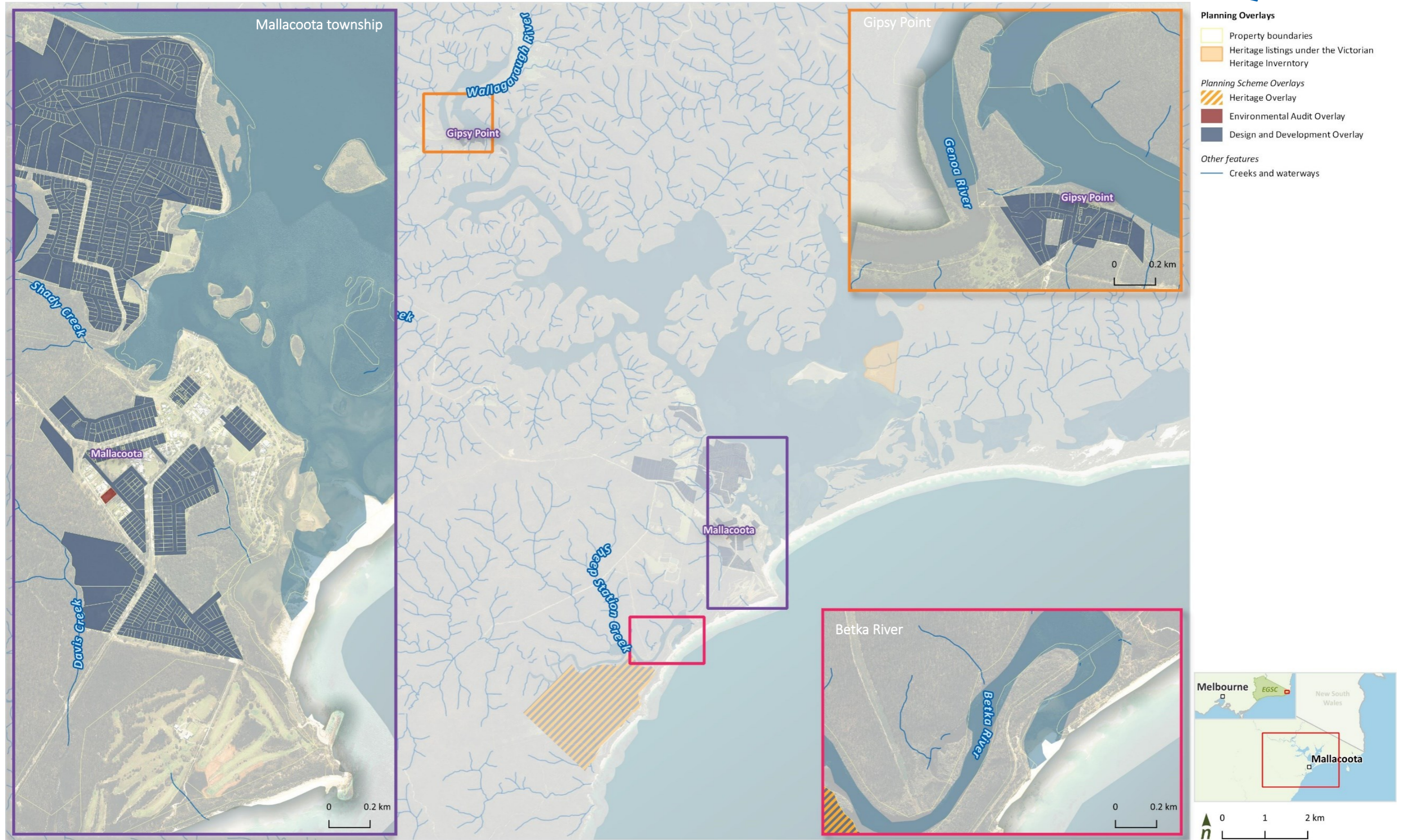


Figure 135. Other planning scheme overlays for Mallacoota.

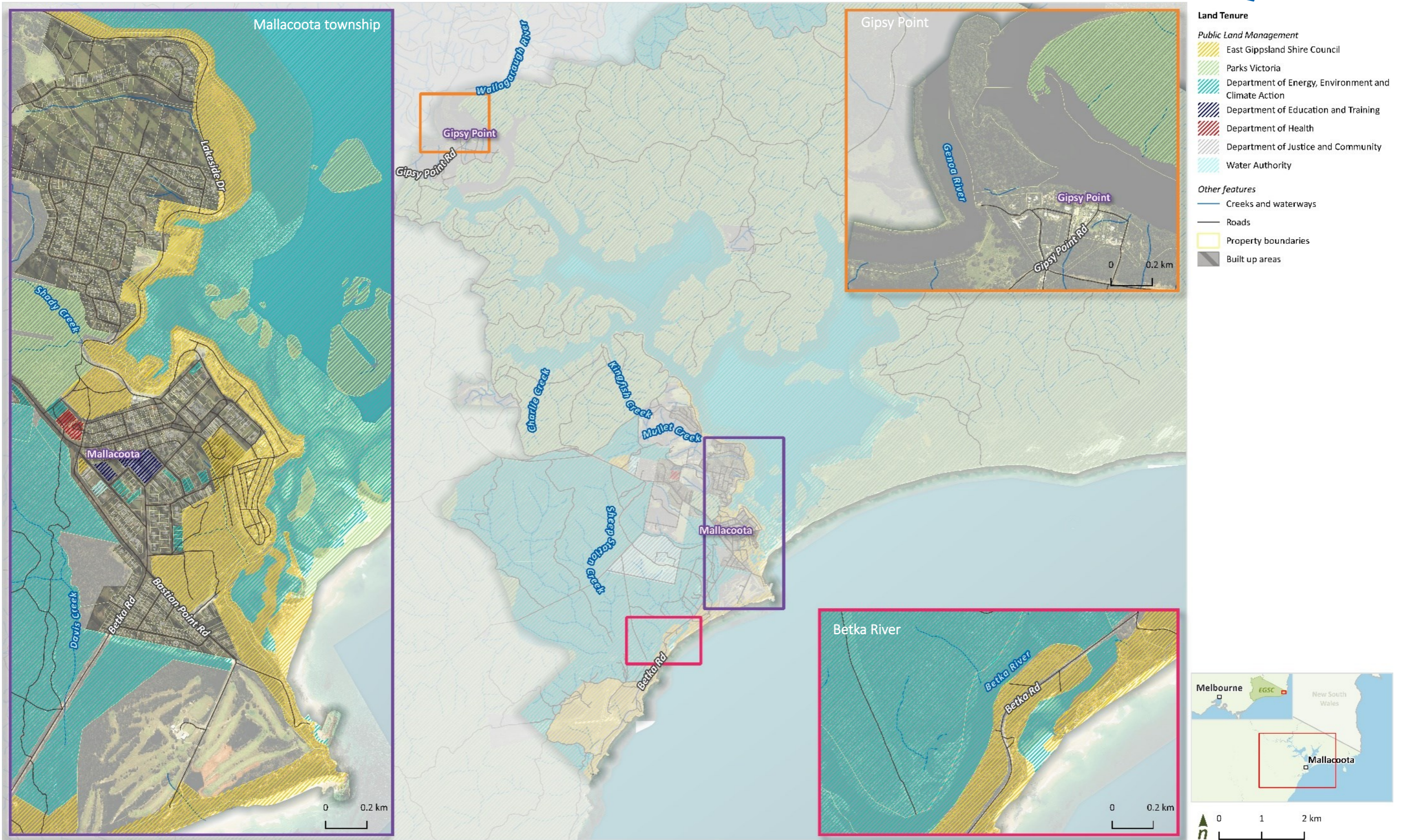


Figure 136. Public land management arrangements for Mallacoota.



## 13.6 Management actions

Table 27 details the CMMP management actions for Mallacoota.

Figure 137 presents site-specific management actions and maps activity and recreation nodes.

Table 27. Mallacoota management actions

Long-term objective	No.	Action	Priority	Council role	Partners
<b>Objective 1: Acknowledge Traditional Owners' rights, aspirations and knowledge</b>	ML1.1	Guided by Far East Traditional Owner Groups, support identification, management and protection of cultural heritage values across Bemm River coastal areas. In alignment with Shire Wide actions, this includes: <ul style="list-style-type: none"> <li>Supporting Far East Traditional Owner Groups to identify unrecorded cultural heritage sites.</li> <li>Continuing to implement appropriate planning overlays and controls such as Cultural Heritage Management Plans to protect cultural heritage.</li> <li>Collaborating with Far East Traditional Owner Groups to better understand cultural values and inform future protection, in alignment with Action ML1.2.</li> <li>Incorporating culturally-sensitive design into all works across Council-managed coastal reserves.</li> </ul>	Ongoing	Participate	Far East Traditional Owner Groups
	ML1.2	Continue to advance relationships with Far East Groups, including Bidwell, Yuin, and Ngarigo Monero peoples, and strengthen EGSC understanding of desire and capacity among Far East Groups for collaboration in coastal and marine management across Mallacoota.	0-3 years, then ongoing	Lead	Far East Traditional Owner Groups
<b>Objective 2: Protect and enhance the marine and coastal environment</b>	ML2.1	Collaborate with BirdLife Australia, EGCMA and other stakeholders to promote important estuarine and coastal wetland habitats. Support education on impacts of inappropriate recreational use, presence of dogs, and vegetation removal.	Ongoing	Participate	EGCMA, BirdLife Australia, environmental and community groups
	ML2.2	Continue to support EGCMA and citizen science programs to monitor estuary water quality and levels to inform opening arrangements of Mallacoota Inlet. Communicate management roles and responsibilities with reference to EGCMA entrance management protocols. Aligns with Shire wide Action EG5.2.	Ongoing	Participate	EGCMA, Parks Victoria, citizen science programs
<b>Objective 3: Respect natural processes and strengthen resilience to climate change</b>	ML3.1	Collaborate with land managers and EGCMA to investigate and plan for Mallacoota Inlet estuary opening regime changes expected with climate change and sea level rise. Consider opportunities for accommodation and adaptation of surrounding built and natural environment, impacts of increased flooding associated with prolonged closures, and the reducing need for artificial estuary opening.	5+ years	Participate	EGCMA, land managers
	ML3.2	Continue to contribute to strategic bushfire recovery and management across coastal and marine areas through: <ul style="list-style-type: none"> <li>DEECA, Forest Fire Management Victoria (FFMVic) and CFA collaboration.</li> <li>Strategic vegetation management, considering environmental values and fuel management loads.</li> <li>Review of bushfire recovery projects, funding and outstanding actions.</li> <li>Aligning and coordinating bushfire recovery efforts with CMMP objectives, principles and actions.</li> <li>Strategic bushfire management activity communication (through Action ML5.1 and aligning with Action EG3.4).</li> </ul>	0-3 years	Participate	DEECA, FFMVic,



Long-term objective	No.	Action	Priority	Council role	Partners
<b>Objective 4: Use and develop sustainably</b>	ML4.1	In alignment with Action EG4.1, utilise activity and recreation nodes to clearly delineate distinct purposes and uses within foreshore zones, and ensure efficient development through co-location, partnership use, and consolidation of community assets. Includes delineation of: <ul style="list-style-type: none"> <li>• Mallacoota Caravan Park between Maurice Avenue and Mallacoota Boat Ramp, and adjoining commercial centre as key activity node.</li> <li>• Bastion Point as recreation node for larger boat launching and open-coast swimming and surfing activities.</li> <li>• Betka River as recreation node for family and picnic activities.</li> </ul>	0-3 years	Lead	All other land managers
	ML4.2	In alignment with East Gippsland Housing and Settlement Strategy (2023), continue to foster Town character through: <ul style="list-style-type: none"> <li>• Maintenance of existing foreshore facilities and investment in facilities, based on assessment of need.</li> <li>• Sustainable growth within extent of existing urban zoning through infill development and subject to environmental risk (bushfire, flood, coastal hazard) constraints.</li> <li>• Promoting adherence to township boundaries, planning overlays and land use planning.</li> </ul>	Ongoing	Lead	
	ML4.3	Progress and complete upgrade works to foreshore precincts and facilities that are currently underway including Mallacoota Streetscape Upgrade. Review designs and planning to ensure proposed works and upgrades align with CMMP objectives, principles, actions and State policy.	3-5 years	Lead	
	ML4.4	Support boating activities across the Mallacoota region by ensuring the ongoing maintenance and upgrade of a diversity of boating infrastructure, including: <ul style="list-style-type: none"> <li>• Bastion Point boat ramp as preferred facilities for larger boats, with upgrades and maintenance undertaken through Actions ML4.5 and ML4.6.</li> <li>• Gypsy Point and Mallacoota foreshore boat ramps as preferred facilities for small- to medium-sized craft, with maintenance and updates implemented as required.</li> </ul> Communicate purpose and preferred usage of boating facilities in alignment with Action ML4.1.	0-3 years, then ongoing	Lead	Gippsland Ports, Boating Vic, Better Boating Victoria
	ML4.5	Review and investigate design upgrades to Bastion Point parking to improve parking availability, traffic flow, and pedestrian safety. Includes: <ul style="list-style-type: none"> <li>• Use of traffic count and monitoring data to inform designs and strategically manage parking availability throughout peak and low seasons.</li> <li>• Investigation of opportunities for land transfers.</li> <li>• Consideration of pathway upgrades, signage or other measures to improve pedestrian safety.</li> <li>• Site promotion as a recreation node for boat launching, ocean swimming and surfing activities in alignment with Action ML4.1</li> </ul>	0-3 years	Lead	Mallacoota Golf Club
	ML4.6	Continue to operate and maintain Bastion Point (Mallacoota Ocean Access) Boat Ramp in accordance with the Operation and Maintenance Environmental Management Plan and relevant approvals and conditions. Support independent audits, as required.	0-3 years	Lead	Gippsland Ports
	ML4.7	Collaborate with Life Saving Victoria and Surf Lifesaving Club to investigate opportunities to improve safety at Bastion Point, including: <ul style="list-style-type: none"> <li>• Review of signage and communication of patrol operations (or lack of), in alignment with Action ML5.2.</li> <li>• Review of storage facilities, lifesaving equipment and opportunities for improved arrangements.</li> </ul>	0-3 years	Lead	Life Saving Victoria, Mallacoota Surf Lifesaving Club



Long-term objective	No.	Action	Priority	Council role	Partners
<b>Objective 4: Use and develop sustainably (cont.)</b>	ML4.8	Investigate opportunities to communicate the Mallacoota Caravan Park as public open space through dedicated pathways, wayfinding signage and maps of public trails.	0-3 years	Lead	
	ML4.9	Reinstate damaged walking tracks through Mortimers Paddock, including Pittosporum walk to improve connectivity along and to the coast. Undertake works in ecologically sensitive manner and including wayfinding and interpretive signage.	0-3 years	Lead	DEECA
<b>Objective 5: Take a stewardship approach, build understanding and knowledge, engage and collaborate</b>	ML5.1	Continue to support and collaborate with local volunteer community and environment groups e.g. Mallacoota and District Recovery Association and MADRA, Friends of Mallacoota, Far East Landcare. Includes: <ul style="list-style-type: none"> <li>Promoting community group activities in the coastal and marine space.</li> <li>Fostering open communication and engagement channels with community groups.</li> <li>Leveraging existing engagement information and knowledge, established community networks and place managers to improve communication of and engagement with of Council activities.</li> <li>Continuing to seek opportunities to increase community involvement, including through community grants and Council partnerships.</li> <li>Promoting and increasing citizen science opportunities (including environmental monitoring - Action ML2.2).</li> </ul>	Ongoing	Lead	All other management agencies, environmental and community groups and organisations
	ML5.2	In alignment with Action EG5.3, review consolidate and update foreshore signage across Mallacoota to: <ul style="list-style-type: none"> <li>Ensure consistency.</li> <li>Improve safety and recognise swimming hazards and surf lifesaving patrol arrangements.</li> <li>Promote connectivity and wayfinding including communicating Caravan Park as public open space and thoroughfare.</li> <li>Communicate land and asset management arrangements.</li> <li>Celebrate unique environments, history and culture.</li> <li>Support implementation of activity and recreation nodes (Action ML4.1).</li> </ul>	3-5 years	Lead	Other land managers, Far East Traditional Owner groups
	ML5.3	In collaboration with Gippsland Ports, continue to maintain clear communication with the community regarding Bastion Point dredging operations, procedures, impacts, environmental assessments and monitoring to ensure the community is informed by the best available information in a timely manner. Linked to Action ML4.6.	Ongoing	Participate	DEECA
	ML5.4	Review and consolidate land tenure and management arrangements including determining suitable managing agencies, communicating public open space areas and seeking opportunities to increase public foreshore open space. Communicate any management alterations clearly with all relevant stakeholders.	3-5 years	Lead	Other land managers (DEECA, Parks Victoria)

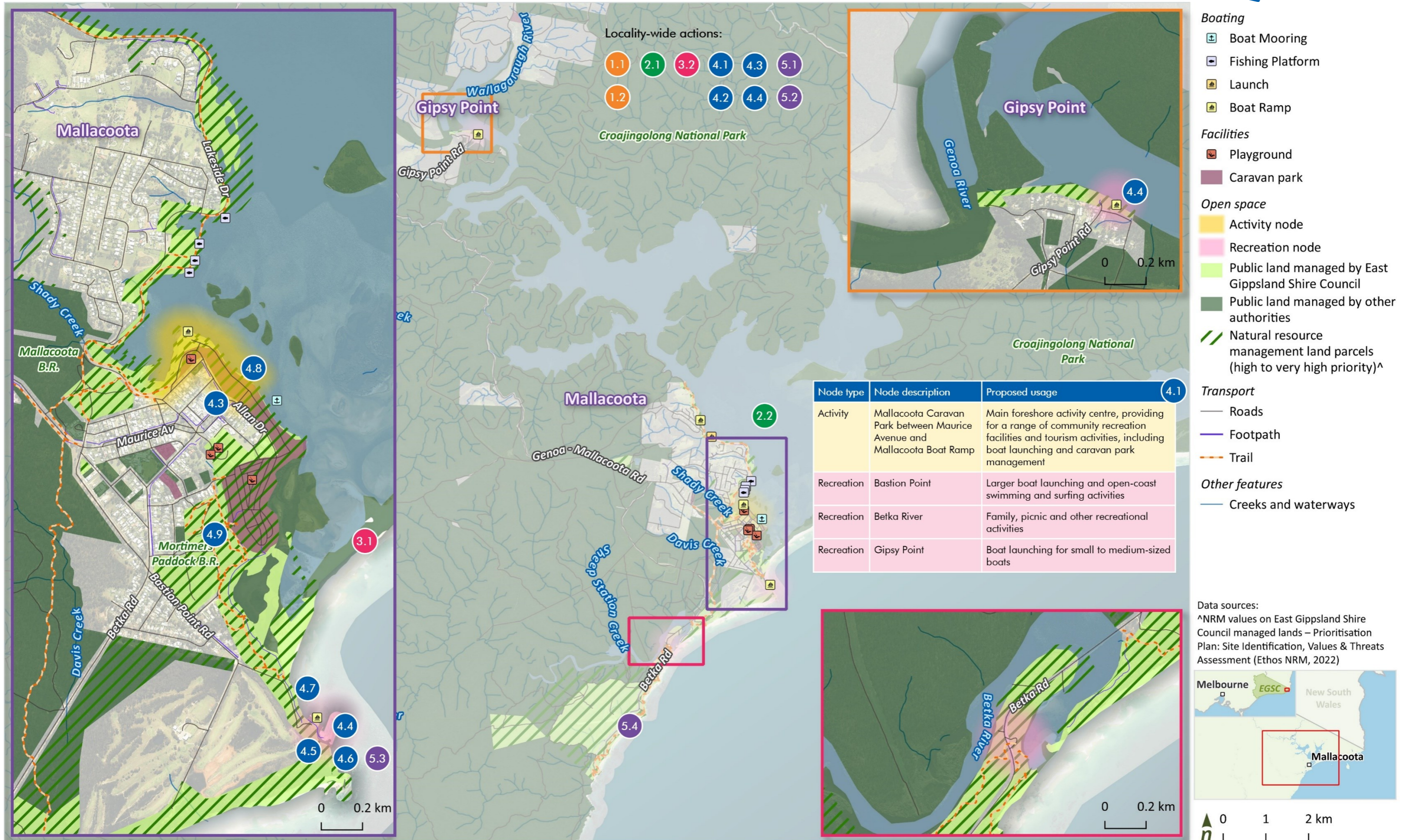


Figure 137. Mallacoota management actions and nodes



## 14 Implementation

Successful implementation of the East Gippsland Shire Council CMMP requires commitment from Council, rightsholders, stakeholders and State Government to prioritise coastal and marine management and ensure its integration with other Council plans, strategies and operations.

The CMMP actions will be delivered via a range of existing Council and stakeholder mechanisms (where possible). This includes ongoing foreshore projects, strategic planning, environmental and stormwater management, asset management plans and other Council plans, as well as “business-as-usual” operations.

Work towards some CMMP actions has already commenced, or is ongoing.

Action implementation will also include elements of monitoring, evaluation, review, and improvement, to be applied using an adaptive management approach, ensuring tracking, accountability and improvement of the CMMP delivery.

### 14.1 Implementation plan

Each action is included in a supplementary Implementation Plan, which provides:

- Further detail on action implementation arrangements, deliverables and next steps for progression of actions
- Relative prioritisation and timelines of action commencement
- Costing estimates and potential funding sources
- Lead agency (generally Council), responsible Council departments and external supporting partners
- Relevant approvals and other requirements
- Links to other relevant plans, strategies and further information to inform action implementation

This internal Implementation Plan provides a central reference for Council to track action implementation and review progress and prioritisation of actions. A plan of this nature allows flexibility and adaptability to priorities, changing conditions, funding availability and community advocacy.







## 14.2 Monitoring, evaluation, review and improvement

The monitoring, evaluation, review and improvement (MERI) process focusses on being able to report on key outcomes relating to the delivery of management actions. This includes action:

- impact and effectiveness,
- efficiency and efficacy, and
- appropriateness/suitability.

This understanding aids in ensuring success of the Plan, providing improvement opportunities and increasing accountability. The MERI process is to be integrated with other routine monitoring processes Council has for existing plans and strategies. This approach tracks progress of CMMP implementation to facilitate adaptive management. Next steps for CMMP implementation, monitoring and review are:

<b>2024</b>	<b>CMMP endorsement</b>
	CMMP submitted for Council approval and endorsement by the Minister for Environment.
<b>Ongoing</b>	<b>Implementation</b>
	Implementation of actions focusses on embedding actions into Council operations. May include project-based actions, capital works programs, planning arrangements, asset management plans and other Council plans, strategies and business-as-usual operations.
<b>Annual</b>	<b>Monitoring and review</b>
	Ongoing operational monitoring and evaluation of risks to action delivery, adjustment of prioritisation and tracking of delivery.
<b>2030</b>	<b>Formal review of CMMP</b>
	Evaluation and review of CMMP including incorporation of any updates in State policy, Council approaches to coastal and marine management, and changed community perspectives on values and challenges.  Outcomes of the review are used to improve the existing plan or develop a new plan.

Annual review of action status will be undertaken to determine what has been started, completed, yet to commence or is ongoing. This annual progress reporting will reflect on the CMMP actions and work undertaken throughout the year, and also identify upcoming work proposed for the next 12 months.

Reviews will also reflect on the actions in line with some key monitoring and evaluation questions. These may include:

### Impact/effectiveness

- To what extent and how well have actions contributed to:
  - Achieving the intended outcomes and long-term objectives of the Marine and Coastal Policy
  - Realising the vision of the CMMP
  - Incorporating CMMP principles in management approaches
- How has the CMMP and action delivery contributed to changes in Council's approach to coastal and marine management
- What, if any, unanticipated outcomes (positive and negative) have resulted from implementing the CMMP?
- Were stakeholder / delivery partners effective in working together?

### Efficiency and efficacy

- Have principles and actions been integrated into Council plans, processes and operations?
- Have actions been completed as per the priority/timelines in the implementation plan?
- To what extent did action delivery efficiently use resources, money and time?
- Has the CMMP and related actions delivery methods been effective?

### Appropriateness and suitability

- Were the long-term objectives suitable for achieving the vision of the CMMP?
- Were management principles suitable for assessing Council operations, projects and actions?
- Were the actions suitable for achieving the long-term objectives?
- Were the size, scale and approach of actions undertaken suitable?
- Were Council and delivery partner staff suitably tasked, trained and resourced?



### 14.3 Next steps

The CMMP will be submitted to Council and Councillors for review and endorsement.

Following this, the CMMP will be submitted to DEECA, the Victorian Marine and Coastal Council (VMaCC), and the Minister for final endorsement and sign off.

Indicative timeframes are shown in Figure 138, below. These timelines are indicative and are reliant on internal and external review and approvals timelines.



Figure 138. Timeline for next steps in CMMP development and endorsement.





## 15 References, figures and tables

### 15.1 References

- ABS, 2021. *2021 Census Data*, Australian Bureau of Statistics, accessed <https://abs.gov.au/census/find-census-data/search-by-area>
- DEECA, 2023a. *Coastal and Marine Management Plan Guidelines*, State of Victoria Department of Energy, Environment and Climate Action, accessed: [https://www.marineandcoasts.vic.gov.au/\\_data/assets/pdf\\_file/0033/683196/Coastal-and-Marine-Management-Plan-Guidelines.pdf](https://www.marineandcoasts.vic.gov.au/_data/assets/pdf_file/0033/683196/Coastal-and-Marine-Management-Plan-Guidelines.pdf)
- DEECA, 2023b. *Victoria's Resilient Coast – Adapting for 2100+*. State of Victoria Department of Energy, Environment and Climate Action, accessed: <https://www.marineandcoasts.vic.gov.au/marine-coastal-management/victorias-resilient-coast-adapting-for-2100>
- DELWP, 2020a. *Marine and Coastal Policy*, State of Victoria Department of Environment, Land, Water and Planning, accessed: [https://www.marineandcoasts.vic.gov.au/\\_data/assets/pdf\\_file/0027/456534/Marine-and-Coastal-Policy\\_Full.pdf](https://www.marineandcoasts.vic.gov.au/_data/assets/pdf_file/0027/456534/Marine-and-Coastal-Policy_Full.pdf)
- DELWP, 2020b. *Siting and design guidelines for structures on Victorian Coast*, State of Victoria Department of Environment, Land, Water and Planning, accessed: [https://www.marineandcoasts.vic.gov.au/\\_data/assets/pdf\\_file/0027/478413/Siting-and-Design-Guidelines\\_May2020\\_WEB.pdf](https://www.marineandcoasts.vic.gov.au/_data/assets/pdf_file/0027/478413/Siting-and-Design-Guidelines_May2020_WEB.pdf)
- DELWP, 2022. *Marine and Coastal Strategy*, State of Victoria Department of Environment, Land, Water and Planning, accessed [https://www.marineandcoasts.vic.gov.au/\\_data/assets/pdf\\_file/0029/571817/Marine-and-Coastal-Strategy\\_May-2022.pdf](https://www.marineandcoasts.vic.gov.au/_data/assets/pdf_file/0029/571817/Marine-and-Coastal-Strategy_May-2022.pdf)
- EGCMA, 2017. *East Gippsland Floodplain Management Strategy*, East Gippsland Catchment Management Authority, accessed <https://egcma.com.au/wp-content/uploads/2019/06/East-Gippsland-Floodplain-Management-Strategy-2017.pdf>
- EGCMA, 2022. *East Gippsland Regional Catchment Strategy*, East Gippsland Catchment Management Authority, accessed <https://eastgippsland.rcs.vic.gov.au/>
- Ethos NRM (2022) NRM values on East Gippsland Shire Council managed lands – Prioritisation Plan, prepared by Ethos NRM Pty Ltd for East Gippsland Shire Council, accessed [http://egcmn.org.au/wp-content/uploads/2022/06/EGCMN\\_East\\_Gippsland\\_Shire-Natural\\_Values\\_Report\\_final..pdf](http://egcmn.org.au/wp-content/uploads/2022/06/EGCMN_East_Gippsland_Shire-Natural_Values_Report_final..pdf)
- Water Technology (2013) *East Gippsland Estuary Entrance Management Protocols (including Part A and B)*, prepared by Water Technology for East Gippsland Catchment Management Authority.
- Water Technology (2014) *Gippsland Lakes/90 Mile Beach Local Coastal Hazard Assessment Project. Report 1: Summary Report*, prepared by Water Technology for the Department of Environment and Primary Industries, accessed [https://www.marineandcoasts.vic.gov.au/\\_data/assets/pdf\\_file/0015/415131/2363-01R01v09\\_Summary-Gipps-L.pdf](https://www.marineandcoasts.vic.gov.au/_data/assets/pdf_file/0015/415131/2363-01R01v09_Summary-Gipps-L.pdf)

## 15.2 Table of figures

Figure 1. Timeline for developing the CMMP.	2
Figure 2. East Gippsland Shire coastal areas, major townships, RAP area and other features.	4
Figure 3. The Gippsland Lakes catchment.	7
Figure 4. Stages in the evolution of the Gippsland Lakes Barriers (Bird, 1978, Water Technology 2014a).	7
Figure 5. Key census statistics for East Gippsland Shire, with Statewide comparison (ABS, 2021).	9
Figure 6. Victoria marine and coastal policy context.	12
Figure 7. The Planning and Decision Pathway sets out how the guiding principles and policy must be considered in decision making.	13
Figure 8. Alignment of recent key East Gippsland Shire Council and regional documents in relation to the Marine and Coastal Policy planning and decision pathway themes	14
Figure 9. Shire coastal public land management responsibilities.	15
Figure 10. Areas where the Marine and Coastal Policy applies (DELWP, 2020a)	18
Figure 11. Community roles in coastal and marine management	20
Figure 12. Council's role in managing coastal hazard risk and adaptation planning	21
Figure 13. Marine and Coastal Policy intended outcomes (adapted from DELWP, 2020a).	23
Figure 14. East Gippsland Shire Council CMMP program logic.	26
Figure 15. East Gippsland Shire Council CMMP management principles	27
Figure 16. Core values, uses and infrastructure across East Gippsland Shire. This is not intended to be an exhaustive list.	39
Figure 17. How activity, recreation and industrial nodes might appear in a coastal context (adapted from DELWP, 2020a)	41
Figure 18. Key statistics for Paynesville and Newlands Arm (ABS, 2021).	42
Figure 19. Paynesville and Newlands Arm locality.	42
Figure 20. Registered Aboriginal Parties, culturally sensitive areas and Joint Management areas for Paynesville and Newlands Arm.	46
Figure 21. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Paynesville and Newlands Arm.	47
Figure 22. Environmental and land management planning overlays for Paynesville and Newlands Arm.	48
Figure 23. Coastal hazard mapping from the Gippsland Lakes/90 Mile Beach LCHA for Paynesville and Newlands Arm.	49
Figure 24. Coastal protection and drainage infrastructure for Paynesville and Newlands Arm.	50
Figure 25. Recreation facilities and transport networks for Paynesville and Newlands Arm.	51
Figure 26. Planning scheme zones for Paynesville and Newlands Arm.	52
Figure 27. Other planning scheme overlays for Paynesville and Newlands Arm.	53
Figure 28. Public land management arrangements for Paynesville and Newlands Arm.	54
Figure 29. Paynesville and Newland Arm management actions and nodes	58
Figure 30. Key statistics for Raymond Island (ABS, 2021).	59
Figure 31. Raymond Island locality.	59
Figure 32. Registered Aboriginal Parties, culturally sensitive areas and Joint Management areas for Raymond Island.	63
Figure 33. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Raymond Island.	64
Figure 34. Environmental and land management planning overlays for Raymond Island.	65
Figure 35. Coastal hazard mapping from the Gippsland Lakes/90 Mile Beach LCHA for Raymond Island.	66
Figure 36. Coastal protection and drainage infrastructure for Raymond Island.	67
Figure 37. Recreation facilities and transport networks for Raymond Island.	68
Figure 38. Planning scheme zones for Raymond Island.	69
Figure 39. Other planning scheme overlays for Raymond Island.	70
Figure 40. Public land management arrangements for Raymond Island.	71
Figure 41. Raymond Island management actions and nodes	75
Figure 42. Key statistics for Eagle Point (ABS, 2021).	76
Figure 43. Eagle Point locality.	76
Figure 44. Registered Aboriginal Party areas, culturally sensitive areas and Joint Management areas for Eagle Point.	80



Figure 45. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Eagle Point.	81
Figure 46. Environmental and land management planning overlays for Eagle Point.	82
Figure 47. Coastal hazard mapping from the Gippsland Lakes/90 Mile Beach LCHA for Eagle Point.	83
Figure 48. Coastal protection and drainage infrastructure for Eagle Point.	84
Figure 49. Recreation facilities and transport networks for Eagle Point.	85
Figure 50. Planning scheme zones for Eagle Point.	86
Figure 51. Other planning scheme overlays for Eagle Point.	87
Figure 52. Public land management arrangements for Eagle Point.	88
Figure 53. Eagle Point management actions and nodes	91
Figure 54. Key statistics for Metung (ABS, 2021).	92
Figure 55. Metung locality.	92
Figure 56. Registered Aboriginal Party areas, culturally sensitive areas and Joint Management areas for Metung.	96
Figure 57. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Metung.	97
Figure 58. Environmental and land management planning overlays for Metung.	98
Figure 59. Coastal hazard mapping from the Gippsland Lakes/90 Mile Beach LCHA for Metung.	99
Figure 60. Coastal protection and drainage infrastructure for Metung.	100
Figure 61. Recreation facilities and transport networks for Metung.	101
Figure 62. Planning scheme zones for Metung.	102
Figure 63. Other planning scheme overlays for Metung.	103
Figure 64. Public land management arrangements for Metung.	104
Figure 65. Metung management actions and nodes	108
Figure 66. Key statistics for Nungurner (ABS, 2021).	109
Figure 67. Nungurner locality.	109
Figure 68. Registered Aboriginal Party areas, culturally sensitive areas, and Joint Management areas for Nungurner.	112
Figure 69. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Nungurner.	113
Figure 70. Environmental and land management planning overlays for Nungurner.	114
Figure 71. Coastal hazard mapping from the Gippsland Lakes/90 Mile Beach LCHA for Nungurner.	115
Figure 72. Coastal protection and drainage infrastructure for Nungurner.	116
Figure 73. Recreation facilities and transport networks for Nungurner.	117
Figure 74. Planning scheme zones for Nungurner.	118
Figure 75. Other planning scheme overlays for Nungurner.	119
Figure 76. Public land management arrangements for Nungurner.	120
Figure 77. Nungurner management actions and nodes	123
Figure 78. Lakes Entrance and Lake Bunga localities.	124
Figure 79. Key statistics for Lakes Entrance and Lake Bunga (ABS, 2021).	124
Figure 80. Registered Aboriginal Party areas, culturally sensitive areas and Joint Management areas for Lakes Entrance and Lake Bunga.	129
Figure 81. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Lakes Entrance and Lake Bunga.	130
Figure 82. Environmental and land management planning overlays for Lakes Entrance and Lake Bunga.	131
Figure 83. Coastal hazard mapping from the Gippsland Lakes/90 Mile Beach LCHA and Statewide coastal hazard data as part of the Victorian Governments Future Coasts Project and Victorian Coastal Hazard Assessment for Lakes Entrance and Lake Bunga.	132
Figure 84. Coastal protection and drainage infrastructure for Lakes Entrance and Lake Bunga.	133
Figure 85. Recreation facilities and transport networks for Lakes Entrance and Lake Bunga.	134
Figure 86. Planning scheme zones for Lakes Entrance and Lake Bunga.	135
Figure 87. Other planning scheme overlays for Lakes Entrance and Lake Bunga.	136
Figure 88. Public land management arrangements for Lakes Entrance and Lake Bunga.	137
Figure 89. Lakes Entrance management actions and nodes	141
Figure 90. Key statistics for Lake Tyers Beach (ABS, 2021).	142



Figure 91. Lake Tyers Beach locality.	142
Figure 92. Registered Aboriginal Party areas, culturally sensitive areas and Joint Management areas for Lake Tyers Beach.	146
Figure 93. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Lake Tyers Beach.	147
Figure 94. Environmental and land management planning overlays for Lake Tyers Beach.	148
Figure 95. Coastal hazard mapping of Statewide coastal hazard data as part of the Victorian Governments Future Coasts Project and Victorian Coastal Hazard Assessment for Lakes Tyers Beach.	149
Figure 96. Coastal protection and drainage infrastructure for Lake Tyers Beach.	150
Figure 97. Recreation facilities and transport networks for Lake Tyers Beach.	151
Figure 98. Planning scheme zones for Lake Tyers Beach.	152
Figure 99. Other planning scheme overlays for Lake Tyers Beach.	153
Figure 100. Public Land Management arrangements for Lake Tyers Beach.	154
Figure 101. Lake Tyers Beach management actions and nodes	157
Figure 102. Key statistics for Marlo (ABS, 2021).	158
Figure 103. Marlo locality.	158
Figure 104. Registered Aboriginal Party areas, culturally sensitive areas and Joint Management areas for Marlo.	162
Figure 105. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Marlo.	163
Figure 106. Environmental and land management planning overlays for Marlo.	164
Figure 107. Coastal hazard mapping of Statewide coastal hazard data as part of the Victorian Governments Future Coasts Project and Victorian Coastal Hazard Assessment for Marlo.	165
Figure 108. Coastal protection and drainage infrastructure for Marlo.	166
Figure 109. Recreation facilities and transport networks for Marlo.	167
Figure 110. Planning scheme zones for Marlo.	168
Figure 111. Other planning scheme overlays for Marlo.	169
Figure 112. Public land management arrangements for Marlo.	170
Figure 113. Marlo management actions and nodes	174
Figure 114. Key statistics for Bemm River (ABS, 2021). Note some other statistics have reduced reliability due to small population size.	175
Figure 115. Bemm River locality.	175
Figure 116. Registered Aboriginal Party areas, culturally sensitive areas, and Joint Management areas for Bemm River.	179
Figure 117. Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Bemm River.	180
Figure 118. Environmental and land management planning overlays for Bemm River.	181
Figure 119. Coastal hazard mapping of Statewide coastal hazard data as part of the Victorian Governments Future Coasts Project and Victorian Coastal Hazard Assessment for Bemm River.	182
Figure 120. Coastal protection and drainage infrastructure for Bemm River.	183
Figure 121. Recreation facilities and transport networks for Bemm River.	184
Figure 122. Planning scheme zones for Bemm River.	185
Figure 123. Other planning scheme overlays for Nungurner.	186
Figure 124. Public land management arrangements for Bemm River.	187
Figure 125. Bemm River management actions and nodes	191
Figure 126. Key statistics for Mallacoota (ABS, 2021).	192
Figure 127. Mallacoota locality.	192
Figure 128. Registered Aboriginal Party areas, culturally sensitive areas and Joint Management areas for Mallacoota.	196
Figure 129: Key coastal and marine environmental values, including protected areas, ecological vegetation classes (EVCs) and biotypes for Mallacoota.	197
Figure 130. Environmental and land management planning overlays for Mallacoota.	198
Figure 131. Coastal hazard mapping of Statewide coastal hazard data as part of the Victorian Governments Future Coasts Project and Victorian Coastal Hazard Assessment for Mallacoota.	199
Figure 132. Coastal protection and drainage infrastructure for Mallacoota.	200
Figure 133. Recreation facilities and transport networks for Mallacoota.	201

Figure 134. Planning scheme zones for Mallacoota.	202
Figure 135. Other planning scheme overlays for Mallacoota.	203
Figure 136. Public land management arrangements for Mallacoota.	204
Figure 137. Mallacoota management actions and nodes	208
Figure 138. Timeline for next steps in CMMP development and endorsement.	211
Figure 139. Additional Gippsland Lakes LCHA storm tide inundation mapping for Paynesville, Newlands Arm, Eagle Point and Raymond Island.	261
Figure 140. Additional Gippsland Lakes LCHA storm tide inundation mapping for Lakes Entrance.	262
Figure 141. Land that has the potential to contain Coastal Acid Sulphate Soils across the East Gippsland coastal zone.	264

### 15.3 Table of tables

Table 1. Land managers, rightsholders and other key stakeholders.	16
Table 2. Summary of roles and responsibilities in coastal and marine management – not an exhaustive list.	17
Table 3. Considerations for siting and design of structures (in or of priority)	19
Table 4. Coastal hazard adaptation options - to be considered in order (DELWP, 2020a)	21
Table 5. Values, challenges and opportunities for East Gippsland Shire coastal and marine management, with focus areas for future management.	25
Table 6. Shire wide CMMP actions	30
Table 7. Mapping for each locality.	38
Table 8. Values, challenges and opportunities for Paynesville and Newlands Arm coastal and marine management, with focus areas for future management.	45
Table 9. Paynesville and Newlands Arm management actions	55
Table 10. Values, challenges and opportunities for Raymond Island coastal and marine management, with focus areas for future management.	62
Table 11. Raymond Island management actions	72
Table 12. Values, challenges and opportunities for Eagle Point coastal and marine management, with focus areas for future management.	79
Table 13. Eagle Point management actions	89
Table 14. Values, challenges and opportunities for Metung coastal and marine management, with focus areas for future management.	95
Table 15. Metung management actions	105
Table 16. Values, challenges and opportunities for Nungurner coastal and marine management, with focus areas for future management.	111
Table 17. Nungurner management actions	121
Table 18. Values, challenges and opportunities for Lakes Entrance coastal and marine management, with focus areas for future management.	128
Table 19. Lakes Entrance management actions	138
Table 20. Values, challenges and opportunities for Lake Tyers Beach coastal and marine management, with focus areas for future management.	145
Table 21. Lake Tyers Beach management actions	155
Table 22. Values, challenges and opportunities for Marlo coastal and marine management, with focus areas for future management.	161
Table 23. Marlo management actions	171
Table 24. Values, challenges and opportunities for Bemm River coastal and marine management, with focus areas for future management.	178
Table 25. Bemm River management actions	188
Table 26. Values, challenges and opportunities for Mallacoota coastal and marine management, with focus areas for future management.	195
Table 27. Mallacoota management actions	205
Table 28. Engagement activities to date	218
Table 29. Available coastal hazard information for the CMMP.	259



## Attachment A: Engagement approach

### Summary

A range of communication and engagement activities have shaped the East Gippsland Shire Council CMMP. These activities have been guided by a strategic approach to communication and engagement.

### Communication and engagement plan

To support engagement activities associated with developing the CMMP, a communication and engagement plan was developed.

This live, stand-alone plan provided an easy-to-use visual of key engagement strategies and activities (and includes consideration of risks) for the life of the CMMP development process.

The communications and engagement plan:

- Provided context for engagement with stakeholders including an overview of coastal communities
- Outlined what successful engagement will look like and the engagement objectives, outcomes and activities for different stages of the CMMP
- Identified key stakeholder groups and how and when engagement with these organisations will be implemented
- Provided key evaluation questions for engagement monitoring and evaluation, along with risk management and mitigation strategies.



### Reference groups

Internal (Council) and external (stakeholder) reference groups have guided the development of the CMMP. The internal Council reference group consists of key staff from a range of Council teams.

The external project reference group includes representatives from:

- Department of Energy, Environment and Climate Action (DEECA)
- East Gippsland Catchment Management Authority (EGCMA)
- Parks Victoria
- Gippsland Ports
- Gunaikurnai Land and Waters Aboriginal Corporation (GLaWAC)
- Department of Transport and Planning
- Victorian Fisheries Authority
- East Gippsland Water

### Engagement activities

Early (Stage 1) engagement activities focussed on understanding perceived values, challenges and opportunities across East Gippsland and for individual localities.

A range of activities were carried out to help build this context, informing a background review of coastal and marine management across East Gippsland, focussed on ten localities.

Informed by this background understanding, engagement outcomes helped shape draft management principles and actions. Later (Stage 2) engagement activities focussed on presenting elements of the draft plan and informed the refinement of actions across the Shire and for each of the localities.

Engagement activities to date are detailed in Table 28.



Table 28. Engagement activities to date

Date	Event/activity	Details
January – February 2023	Branding look and feel	Communication between Council and the consultant (Alluvium) to develop a branding look and feel with graphical elements. Branding utilised Council’s existing style guide, branding and logo, with consistent images and graphical elements to provide a consistent look across CMMP communications.
March 2023	Site walks with core Council staff	Site visits including Alluvium staff and core Council Project Working Group members to share current challenges, ongoing or upcoming projects and future opportunities and aspirations for the CMMP. Included visiting each of the ten localities covered by the CMMP.
April – May 2023	Website content	Develop website content on Council’s “Your Say” page which includes information about the CMMP project, key documents and activities.
May – December 2023	Your say engagement activities Round #1	Your Say engagement content and activities, included: <ul style="list-style-type: none"> <li>• Interactive mapping exercise</li> <li>• A short survey, question prompts</li> <li>• Photo and story sharing</li> </ul> This aimed to understand what the community love about the coast and what they’d like to retain, change or improve about the management of East Gippsland marine and coastal areas. The activities ran from May to December 2023 with over 200 people participating in activities.
May – December 2023	Promotion of community online engagement and pop-ups	Media releases, newspaper adverts and social media advertising used to support project launch and communication of upcoming engagement activities.
April 2023	Internal Council Workshop #1	Introduction workshop with Council staff and Alluvium, to introduce the project to internal Council staff, foster buy-in and understand existing/future values, concerns, and opportunities, including details on projects in progress and what makes a good CMMP (what is needed).
June 2023	Project Reference Group Workshop #1	Introduction workshop with inter-agency staff and Alluvium, to introduce the project to key external stakeholder staff, foster buy-in and understand existing/future value, concerns and opportunities, including details on what makes a good CMMP (what is needed) and opportunities to work together.
June 2023	Western localities community pop-up events	On site pop-ups with communities, to develop understanding of values and experiences, discuss concerns, and priorities for each CMMP location. Feedback and contributions were collected via sticky notes. Promotion of online activities. Seven events were hosted across: Lake Tyers, Metung, Lakes Entrance, Bairnsdale and Paynesville
July – August 2023	Traditional Owner engagement approach	Communication between Council’s Aboriginal Engagement Officer, the Council project team and Alluvium to discuss approaches to fostering Traditional Owner engagement in developing the CMMP. Included initial contact with relevant Traditional Owner organisations to determine desired involvement in CMMP development.
May 2023 – February 2024	Targeted contact with Traditional Owner organisations	Council staff contacted Traditional Owner organisations to determine desired level of involvement in CMMP development and delivery. Further engagement and consultation of Draft CMMP to be determined.
October 2023	ELT and Councillor briefings #1	Briefing presented to Council’s Executive Leadership Team and East Gippsland Shire Councillors. Included background to CMMP development, purpose of the plan, progress to date and next steps. Included background to Statewide Marine and Coastal Policy.
November 2023	Eastern localities community pop-up events	On site pop-ups with communities, to develop understanding of values and experiences, discuss concerns, and priorities for each CMMP location. Feedback and contributions were collected via sticky notes. Promotion of online activities. Four events were hosted across: Mallacoota, Bemm River and Marlo
December 2023	Project update and engagement summary Round #1	A project update and summary of “what we heard” for the 1 <sup>st</sup> round of public consultation (undertaken May-December 2023). Updated progress to date and key findings from both online and in person engagement activities.
March 2024	Internal Council Workshop #2	Workshop with Council staff and Alluvium to present the work to date and further refine the principles for management, management actions and how different Council departments may contribute to CMMP implementation.



Date	Event/activity	Details
March 2024	Project Reference Group Workshop #2	Workshop with inter-agency staff and Alluvium to present the work to date and further refine the principles for management, management actions and how different agencies, rightsholders and stakeholders may contribute to CMMP implementation.
May-June 2024	ELT and Councillor briefings #2	Briefing presented to Council's Executive Leadership Team and East Gippsland Shire Councillors. Included update on work to date and presentation of Draft CMMP, in preparation for public release.
May-July 2024	Draft CMMP release - public exhibition period	Release of the Draft CMMP for public comment, including announcement in the Government Gazette and promotion on social media. The Your Say page invited people to comment on the Draft Plan using a survey function or provide a written submission. We received 30 responses from the survey and several submissions.
June 2024	Community webinars: Draft CMMP	Hosted three community webinars providing an overview of the CMMP. Included an overview of what a CMMP is, progress to date and how we have developed the draft CMMP, an overview of CMMP outcomes and actions and an opportunity for questions. We had around 20 community members join a webinar.
August 2024	Engagement summary: Draft CMMP	A summary of "what we heard" from public exhibition and comments on the Draft CMMP. Over May-June 2024. This included statistics of people who made comment, key areas for improvement that people raised and proposed updates to the CMMP.
September-October 2024	Council elections – caretaker mode (no external engagement)	
October 2024	Traditional Owner engagement	Targeted meeting with Gunaikurnai Land and Waters Aboriginal Corporation to review the draft CMMP, gather input and discuss future opportunities for involvement in CMMP implementation.
February-March 2025	ELT and Councillor briefings #3	Briefing presented to Council's Executive Leadership Team and East Gippsland Shire Councillors. Included recap of CMMP purpose and progress to date for new Councillors, findings of public feedback and presentation of updated CMMP.



Home / East Gippsland - Coastal and Marine Management Plan / Drop a pin on our interactive map

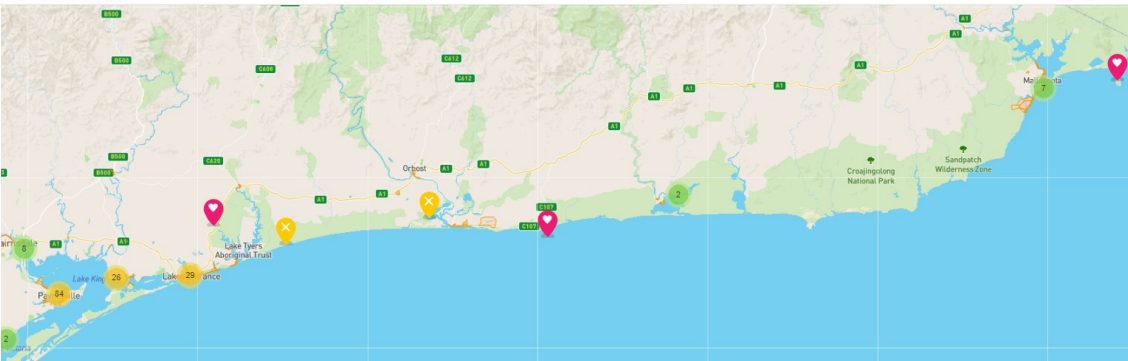
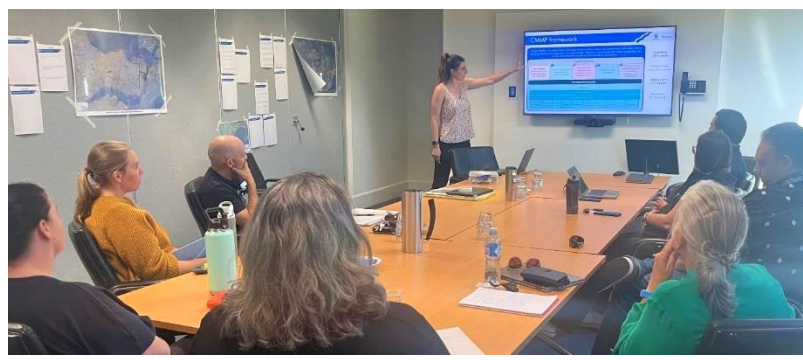
### Drop a pin on our interactive map

Thinking about the East Gippsland's coastal reserves, drop a pin on the map to share:

- what you love about these areas
- what you would change about current management
- any other comments

Council managed coastal reserves are indicated in orange.

You can also attach your favourite photo.

### Hearing from our communities

#### Understanding local perspectives

- Community, rightsholder and stakeholder feedback
  - Online and in person activities, workshops, surveys
- Background review
  - Reports and strategies
  - Projects and Council works
  - Data and mapping
- Site inspections

### Draft CMMP: What we heard (August 2024)

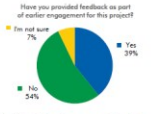
## East Gippsland Coastal and Marine Management Plan

Over the past 12 months, Council has been developing a Coastal and Marine Management Plan (CMMP) for the coastal communities across East Gippsland. Guided by Victorian Government legislation (the Marine and Coastal Act 2018) and policy (Marine and Coastal Policy, 2020), the Plan will guide sustainable management of Council-managed coastal reserves.

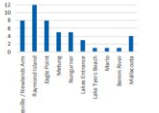
Building on and informed by community input to date, the Draft CMMP was released for public comment in June 2024. The Draft CMMP is an extensive document covering both State-wide and community-specific aspects. Throughout June and July, we welcomed comment on the Draft CMMP. People could provide their feedback through:

- Online survey activities
- Community webinars and discussion
- Written submissions

Thank you to everyone who participated and shared their thoughts on the Draft CMMP.



For the locality actions, we received most comments for Raymond Island, Pyramville and Newlands Arm, and Eagle Point.



### Draft CMMP: What we heard (August 2024)

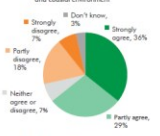
#### What We Heard

We received some positive feedback on the plan, with people appreciating the complex nature of planning in the coastal and marine space.

"I thought you did an excellent job given the complexity of what you're trying to address... congratulations on the effort you've made."

Webinar attendees: From the survey, 65% of people agreed that the management principles of the CMMP will help to guide holistic, strategic and evidence-based decision making in the marine and coastal environment.

The management principles will help to guide holistic, strategic and evidence-based decision making in the marine and coastal environment.



Feedback also indicated that actions were prioritised well. The actions that people wanted Council to address first were generally those listed as a higher priority in the Draft Plan.

Key areas for improvement that people raised included:

- **Implementation details:** Further detail on how the plan could be implemented including timelines, funding requirements, deliverables and outcomes that Council will work with other agencies.
- **Coastal based adaptation:** While actions exist to progress coastal based adaptation planning under the Draft Plan, people felt this could be prioritised as a higher priority with better-defined outcomes.
- **Integrated planning across boundaries:** Closer links to the work of other organisations and integrated management across boundaries.
- **Planning overlap and control:** Clarity for disorganised management to updating planning controls and services to better manage sensitive environments, coastal reserves and sustainable use and development.
- **Roles, responsibilities and scope:** Ongoing challenges in understanding and communicating the multiple role different agencies and organisations play in managing coastal and marine areas, and role of a CMMP.


### East Gippsland Shire Council - Follow

28 May 2024

Dive into action and help shape the future of East Gippsland's coast and marine environments. Council is seeking your input to craft a sustainable Coastal and Marine Management Plan. Our draft plan is open for public comment until June 24, 2024. And every voice counts. 🗣️

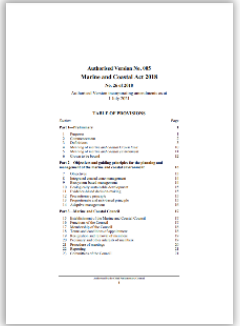
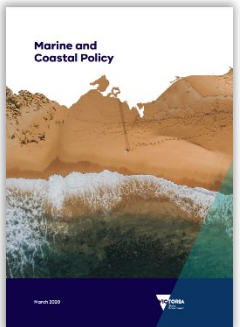
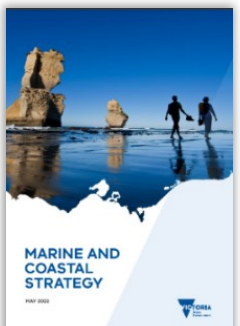
Want to know more? Join us for a series of interactive webinars on June 5 and 6, where we'll take you on a deep dive into the plan. From interactive insights to future initiatives, we've got it covered! 📺

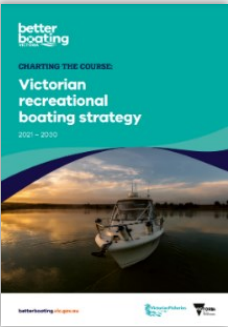

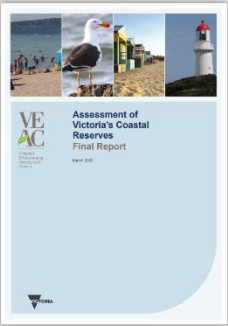
Ready to make waves? Visit our YourSay page <https://yoursay.eastgippsland.vic.gov.au/coastal-and-...> to read the draft plan, register for an info session, or drop your thoughts. 🌊


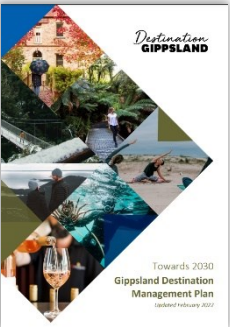
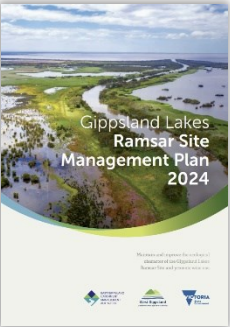


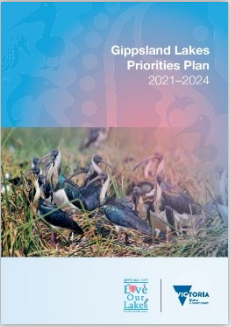

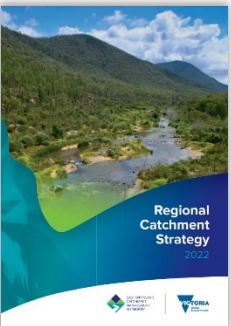

# Attachment B: Document review

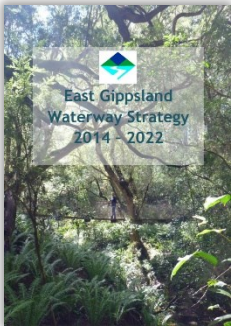
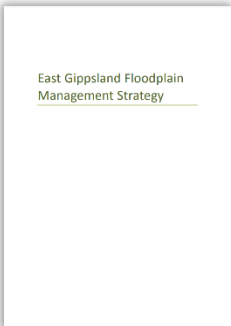
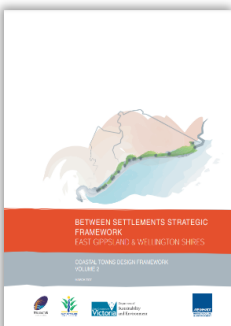
## Statewide


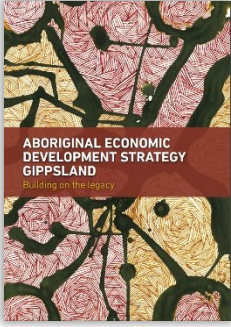
Document	Description	Relevant objectives, goals, or recommendations
<p><i>Marine and Coastal Act 2018</i></p> 	<p>The <i>Marine and Coastal Act 2018</i> (the Act) aims to provide a more coordinated, simple and integrated approach to planning and management of the Victorian marine and coastal environment. Under the new Act, Coastal &amp; Marine Management Plans (CMMPs) will be the primary management tool to guide land managers in how their area of coastal Victoria will be managed, in close consultation with the Victorian Government and the local community. The Act also established the Victorian Marine &amp; Coastal Council to provide independent advice on marine and coastal issues.</p>	<p>The Act required the development of the statewide Marine &amp; Coastal Policy, inclusive of a Marine Spatial Planning Framework and a Marine and Coastal Strategy for the state of Victoria.</p> <p>The new guiding principles of the Act specifically recognise climate change and Traditional Owners. The guiding principles from the Act to be considered in the development of a CMMP include:</p> <ul style="list-style-type: none"> <li>• Integrated coastal zone management</li> <li>• Ecologically sustainable development</li> <li>• Proportionate and risk-based</li> <li>• Evidence-based decision making</li> <li>• Ecosystem-based management</li> <li>• Adaptive management</li> <li>• Precautionary principle.</li> </ul> <p>A CMMP must gain Ministerial approval under the Act.</p>
<p>Marine and Coastal Policy (DELWP, 2020)</p> 	<p>The Marine and Coastal Policy (2020) guides land managers throughout Victoria to achieve the objectives and guiding principles outlined in the <i>Marine and Coastal Act 2018</i>. It does so through the provision of a 'Planning &amp; Decision Pathway' that allows for clear and consistent decision making. Planning, management and decision making under the Act, including development of a CMMP, must apply the policies within the steps of the Planning &amp; Decision Pathway.</p>	<p>The central tenet of the Policy, the Planning and Decision Pathway, states that decision makers (such as local councils and land managers) will:</p> <ul style="list-style-type: none"> <li>• Acknowledge Traditional Owners' rights, aspirations and knowledge</li> <li>• Protect and enhance the marine and coastal environment</li> <li>• Respect natural processes and strengthen resilience to climate change</li> <li>• Use and develop sustainably</li> </ul> <p>These steps are to be achieved through taking a stewardship approach, building understanding and knowledge, engaging fully with communities and users, and collaborating with the many management stakeholders involved to deliver an integrated and co-ordinated approach.</p>
<p>Marine and Coastal Strategy (DELWP, 2022)</p> 	<p>The Marine and Coastal Strategy (2022) is a five-year action plan to guide the implementation of the Marine and Coastal Policy at a State level. It was developed with input from Traditional Owners, the Victorian Marine &amp; Coastal Council, and many managers, communities, and interest groups from Victorian marine and coastal environments. It is the first of three such strategies that will be developed over the 15 year life of the Policy.</p>	<p>The Strategy identifies six priority actions for the next five years that lay the foundation to achieve the outcomes outlined in the Policy. These include:</p> <ol style="list-style-type: none"> <li>1. Traditional Owners determine how their rights and obligations are embedded into planning and management</li> <li>2. Improve the condition and ecological connectivity of habitat and respect and care for our marine and coastal environments</li> <li>3. Adapt to impacts of climate change</li> <li>4. Support sustainable use and development of the marine and coastal environment</li> <li>5. Implement the Marine Spatial Planning Framework</li> <li>6. Identify resource needs for sustainable marine and coastal management</li> </ol> <p>Under these six actions sit 54 activities to help deliver the Strategy. Examples of activities contained within the Strategy that are relevant to East Gippsland include:</p> <ul style="list-style-type: none"> <li>• Cultural values and sites of heritage significance are protected for current and future generations</li> <li>• Community and user groups are actively engaged and empowered to care for, protect and improve the marine and coastal environment</li> <li>• Risks from coastal hazards are understood and planned for.</li> </ul>

Document	Description	Relevant objectives, goals, or recommendations
<p>Victorian Recreational Boating Strategy 2021 – 2030 (Better Boating Victoria, 2021)</p> 	<p>The Victorian Recreational Boating Strategy 2021-2030 identifies and describes the challenges facing the management of recreational boating in Australia. These stem primarily from competition for assets, such as boat ramps and car parking, and the challenges such assets face as they age and moving into a changing climate.</p> <p>The Strategy also provides a number of objectives to address these challenges, which will require collaboration between the boating community, asset/facility users and managers, Traditional Owners, government agencies, and the wider community.</p>	<p>The Strategy provides a vision for boating in Victoria, that <i>boaters will be provided with a better boating experience through the provision of boating facilities that perform to a high standard, have adequate capacity, are well maintained, are safe and provide improved accessibility for all.</i></p> <p>The Strategy acknowledges that the East Gippsland region contains the second most popular boating location in Victoria, the Gippsland Lakes, as well as the very popular boating location of Mallacoota. It also shows the region to have some of the highest numbers of registered vessels across the state.</p> <p>The prioritisation of boat ramp renewals in East Gippsland under the boat ramp renewal program is outlined, as well as potential upgrades to boating facilities that could take place in the region to reduce congestion and improve access, factoring in future growth.</p>
<p>Assessment of the Values of Victoria's Marine Environment (Victorian Environmental Assessment Council, 2019)</p> 	<p>The Assessment of the Values of Victoria's Marine Environment aims to identify the current environmental, economic, social, and cultural values of Victoria's marine environment. The assessment examines these values and addresses any challenges, knowledge gaps, emerging uses, and trends that may impact these values. This report aimed to provide insights and support for the formulation of policies and strategies related to Victoria's marine and coastal areas.</p>	<p>The assessment centres around nine distinct themes: climate and oceanography, biodiversity, Aboriginal cultural values, non-Aboriginal heritage, coastal development, tourism and recreation, fisheries, ports and shipping, as well as energy and earth resources. This assessment identifies multiple marine values that are relevant to Victoria. It also identifies key threats and future uses, with around a 30-year outlook. Key values relevant across East Gippsland include:</p> <ul style="list-style-type: none"> <li>• Protected areas, National Parks, State Parks, UNESCO biosphere reserves, other terrestrial and marine protected areas and protected species</li> <li>• International agreements for migratory shorebird habitat (e.g. Gippsland Lakes Ramsar site)</li> <li>• Fisheries (commercial and recreational)</li> <li>• Joint management and Traditional Owner values</li> <li>• Tourism, sightseeing, wildlife spotting, recreation, boat ramps and launching facilities</li> <li>• Maritime industries and heritage</li> </ul>
<p>Assessment of Victoria's Coastal Reserves (Victorian Environmental Assessment Council, 2020)</p> 	<p>The Assessment of Victoria's Coastal Reserves looks at the coastal reserves within Victoria in relation to their legal status, significant values, and values that are at risk from the impacts of climate change. This report examines and collates data associated with these resources to help inform future coastal and marine management. Attached to this report is an online inventory and interactive map that provides information on key details for each land parcel. This can be used for decision making and support planning.</p> <p>The assessment provides no suggested changes for current uses; however it provides suggestions for future management.</p>	<p>This report highlights some of the challenges at a Statewide level in managing coastal reserves, many of these are also relevant to East Gippsland coastal and marine management, including:</p> <ul style="list-style-type: none"> <li>• Crown land management information is not always readily available</li> <li>• Complexity of legislative and planning processes, along with multiple land managers further complicates management and decision-making</li> <li>• Climate change exacerbates existing complexities</li> </ul> <p>Recommendations to assist future planning and management effectiveness include:</p> <ul style="list-style-type: none"> <li>• New legislation defining the purposes of coastal reserves.</li> <li>• Updated laws on Crown land to better implement government-accepted recommendations for areas, including the Gippsland Lakes system.</li> <li>• An assessment of multiple areas, including sections of the East Gippsland Lake system to see if areas currently defined as coastal reserves retain that title. This also involves changing boundaries, redefining areas with a low water mark as parks, etc.</li> <li>• Improving transparency and accessibility of Crown land information through the mapping/database.</li> </ul> <p>This document also recognizes multiple reserves existing within the region for their important ecological and biological significance.</p>

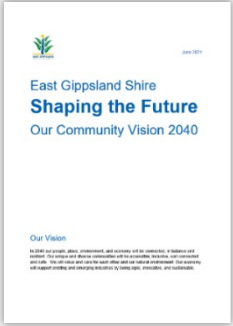
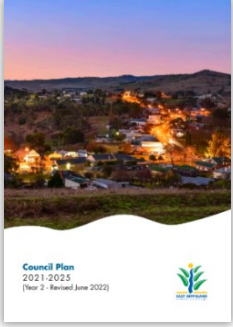
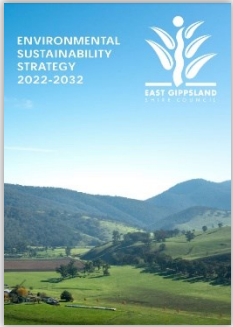
Document	Description	Relevant objectives, goals, or recommendations
<p>Gippsland Regional Plan 2020-2025</p> 	<p>The Gippsland Regional Plan 2020-2025 takes a whole-of-Gippsland approach to outline a long-term strategic vision for the region in 2040. It identifies the priority actions for the next five years to start the region on its journey to 2040.</p>	<p>The Plan's vision for the Gippsland region is: <i>By 2040 Gippsland aspires to be the most liveable region in Australia – a place to live, work, invest and play.</i> The Regional Plan describes six themes to achieve this vision:</p> <ol style="list-style-type: none"> <li>1. Collaborators &amp; partners</li> <li>2. Carer of our Country, environment &amp; natural assets</li> <li>3. Creators of a new economy</li> <li>4. A connected Gippsland</li> <li>5. Highly educated &amp; skilled people, life-long learners</li> <li>6. A healthy, happy &amp; inclusive community</li> </ol> <p>Theme 2 includes climate change considerations, acknowledging that Gippsland's coast and the Gippsland Lakes are some of the most beautiful, yet most vulnerable coastal areas to rising sea level in Australia.</p> <p>Theme 3 recognises the importance of coastal tourism and recreation for a strong Gippsland economy into the future.</p>
<p>Towards 2030 - Gippsland Destination Management Plan (updated 2022)</p> 	<p>The Gippsland Destination Management Plan has been developed to provide a clear vision for achieving long-term, sustainable growth of Gippsland's tourism economy.</p> <p>It is designed to inform and inspire all levels of government, stakeholders and the tourism industry about how Gippsland can compete in a dynamic and fast-growing tourism environment.</p>	<p>The Plan establishes five experience pillars, which all hold relevance to coastal and marine environments. These include:</p> <ol style="list-style-type: none"> <li>1. World class natural sanctuary</li> <li>2. Lakes, rivers and coastal paradise</li> <li>3. Paddock and ocean produce</li> <li>4. Inspired adventure</li> <li>5. Vibrant local communities.</li> </ol> <p>The plan recognises natural assets of the Gippsland region, such as the Gippsland Lakes, Ramsar Wetlands, and Marine and Coastal Reserves, as supporting a number of recreational activities, such as walking, hiking, cycling, kayaking, boating, fishing and other aquatic activities. Infrastructure along the coast, such as walking tracks, cycling trails, camping areas, boat launching areas, and lookouts are also recognised as supporting the visitor experience across the region.</p>
<p>Gippsland Lakes Ramsar Site Management Plan (2024)</p> 	<p>The Gippsland Lakes Ramsar Site Management Plan is a renewed version of the original 2015 plan. It provides detailed management direction for waterways, wetlands and other environments within the Gippsland Lakes Ramsar Site.</p> <p>The 2024 update is narrower in scope than the 2015 plan, being primarily concerned with components, processes and services identified in the Ecological Character Description of the site (benchmarked at 1982) as being critical to ecological character. Other values that were identified in the 2015 plan (e.g. visual amenity, recreational fishing, Burrunan dolphin) are not addressed in this plan, but through other management planning processes (e.g. Regional Catchment and Waterway Strategies). In addition, management of land outside the Ramsar site boundary is not in scope except where threats are impacting ecological character.</p> <p>The Site stretches from Sale Common to Lake Tyers covering approximately 60, 000 hectares. It comprises the coastal lagoons formed behind the barrier dune system, excluding ocean beaches and dunes of the Gippsland Coast.</p>	<p>The Plan lays out clear direction for future investment by the Victorian Government and other investors to contribute to both maintaining and improving the health and ecological character of the Ramsar site.</p> <p>The plan presents 15 high priority values for management in the next seven years across five mega-habitats:</p> <ul style="list-style-type: none"> <li>• Marine sub-tidal aquatic beds (seagrass)</li> <li>• Coastal lagoons (open water phytoplankton)</li> <li>• Fringing freshwater wetlands</li> <li>• Fringing brackish wetlands</li> <li>• Saltmarsh</li> <li>• Abundance and diversity of waterbirds</li> <li>• Abundance and diversity of native fish</li> <li>• Threatened frog species: Green and golden bell, Growling grass frog</li> <li>• Threatened fish species: Australian grayling</li> <li>• Threatened bird species: Australasia bittern, Fairy tern, Hooded plover, migratory waders</li> <li>• Waterbird breeding</li> </ul> <p>Management direction is guided by 22 high-level Resource Condition Targets and targeted management strategies to address priority values, threats and knowledge gaps. Management strategies are aligned to one of six strategic themes:</p> <ol style="list-style-type: none"> <li>1. Maintaining and restoring habitats</li> <li>2. Protecting fauna</li> <li>3. Managing nutrients and sediments</li> <li>4. Managing water regimes</li> <li>5. Cultural Landscapes</li> <li>6. Improving our understanding.</li> </ol>

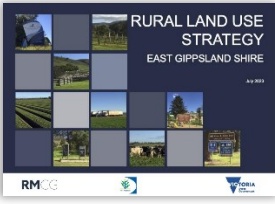
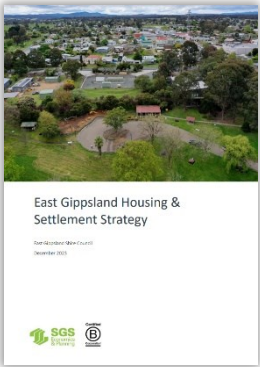

Document	Description	Relevant objectives, goals, or recommendations
<p>Gippsland Lakes Priorities Plan 2021-2024</p> 	<p>In 2016 the Victorian Government appointed the Gippsland Lakes Coordinating Committee (GLCC) to make recommendations to the Minister on specific funding priorities for the Gippsland Lakes.</p> <p>The GLCC, together with delivery managers developed the Gippsland Lakes Priorities Plan in 2016 and updated plan in 2021. The Plan serves to guide decision making and provide a clear and transparent approach for making recommendations for funding of projects.</p>	<p>Priority program areas outlined in the Plan, which relate directly to the East Gippsland region include:</p> <ol style="list-style-type: none"> <li>1. Improving environmental conditions and habitat for native flora and fauna in the fringing wetlands and shorelines of Jones Bay and Lake King</li> <li>2. Protecting significant Gunaikurnai Country of the Gippsland Lakes outer barrier through a) reducing pressure from invasive species and, b) protecting cultural values by improving our understanding of the distribution and significance of these places and addressing key risks.</li> <li>3. Improving aquatic habitats and ecosystems through improved understanding of priority species and communities and habitat protection and enhancement.</li> </ol> <p>Priority actions are given under each program area to provide more specific direction. Examples include:</p> <ul style="list-style-type: none"> <li>• Protect and where necessary, enhance, shorebird and beach nesting bird habitat in priority locations, including those predicted to be impacted by sea level rise and other climate change effect</li> <li>• Maintain and where necessary improve hydrological connectivity and freshwater inflows to the Gippsland Lakes for fish migration and breeding.</li> </ul>
<p>Gippsland Lakes Sustainable Development Plan (2016)</p> 	<p>The Gippsland Lakes Sustainable Development Plan is a 20 year strategic framework that provides a shared vision for sustainable development on and around the Gippsland Lakes. It focuses on the Gippsland Lakes and the abutting one kilometre of public and private land from Lakes Entrance to Seaspray.</p> <p>The Plan provides guidance on capitalising on the range of environmental assets and investment opportunities of the region, while balancing environmental values and natural risks with development outcomes.</p>	<p>Major coastal investment opportunities identified by the Plan include:</p> <ul style="list-style-type: none"> <li>• Eco-tourism (e.g. eco-camping, improved bird-watching locations) and Gunaikurnai cultural tourism.</li> <li>• Resort accommodation (e.g. spa/hotel development at Metung hot springs).</li> <li>• Urban foreshore precincts (e.g. “pop -up” facilities to add vitality to the precincts).</li> <li>• Boating infrastructure (including launching and retrieval, jetties, moorings and marinas).</li> <li>• Maritime services (e.g. expansion and integration of maritime services at Bullock Island).</li> <li>• Seafood processing and sales (e.g. seafood processing at Bullock Island by the Lakes Entrance Fishermen’s Co-operative Limited).</li> <li>• Recreational fishing (e.g. fishing platforms at key locations to prevent environmental damage).</li> </ul> <p>The plan also provides a development hierarchy of towns and destinations in the Gippsland Lakes to support effective development and enable the protection and enhancement of urban and natural environments.</p>
<p>East Gippsland Regional Catchment Strategy (EGCMA, 2022)</p> 	<p>The East Gippsland Regional Catchment Strategy is driven by the regional catchment strategy framework used by the 10 catchment management authorities within Victoria. This involves identifying priority areas and revolves around the RCS themes: water, land, biodiversity, coasts and marine, and community. The themes guide catchment management across East Gippsland.</p> <p>The strategy provides an overall vision: <i>Working together to conserve and enhance East Gippsland’s naturally wealthy landscapes, and the biodiversity and cultural heritage they hold, for now and into the future.</i></p>	<p>The purpose of this document is to guide natural resource management within the East Gippsland region. Specific values, threats and management directions are provided under the core themes. Relevant management directions where EGCMA is partnering with Council include:</p> <ul style="list-style-type: none"> <li>• Continue to implement the strategies of the Gippsland Lakes Ramsar Site Management Plan (including an update to the plan in 2023)</li> <li>• Support activities for improving integrated water management as specified in the East Gippsland Integrated Water Management Strategic Directions Statement.</li> <li>• Support East Gippsland Shire to implement the Environmental Sustainability Strategy (including an update to the Roadside Vegetation Management Plan).</li> <li>• Ensure appropriate land use through the implementation of the East Gippsland Rural Land Use Strategy (currently draft).</li> <li>• Working with community and regional partners, review and continue to implement the East Gippsland Estuary Opening Protocols.</li> <li>• Participate in adaptation planning and emergency management activities related to bushfire and floods in regional communities.</li> <li>• Identify new recreational opportunities appropriate landscapes and improve the condition of environmental recreational assets and infrastructure.</li> </ul>


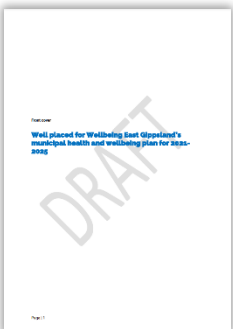

Document	Description	Relevant objectives, goals, or recommendations
<p>East Gippsland Waterway Strategy 2014-2022 (EGCMA, 2014)</p> 	<p>The East Gippsland Waterway Strategy outlines a framework management of waterways, estuaries, wetlands and floodplains across East Gippsland.</p> <p>The document recognizes six central regional objectives and priority waterways that are important for concentrated management within the next eight years. The Strategy provides targets for each of these waterways, guided by the six central objectives.</p> <p>The East Gippsland Waterway Strategy is due for renewal, with a new strategy to be released by 2024.</p>	<p>The six high-level objectives are:</p> <ol style="list-style-type: none"> <li>1. Ensure the preservation of the condition for all waterways that are in near-natural states.</li> <li>2. Enhance the condition of waterways deemed 'regionally important' due to their social, economic, and environmental significance.</li> <li>3. Maintain or enhance the state of waterways within urban water supply catchments to maximize water quality.</li> <li>4. Improve the resilience and resistance of waterways in cleared land areas to mitigate the risk of bed and bank instability, benefiting the public.</li> <li>5. Utilize the biosecurity approach to manage priority invasive plant and animal species that threaten waterway health.</li> <li>6. Where appropriate, enhance connectivity within and among rivers, estuaries, wetlands, and between these waterways and terrestrial native vegetation.</li> </ol> <p>Some relevant targets for East Gippsland include:</p> <ul style="list-style-type: none"> <li>• Targeted control of priority invasive plant and animal on priority waterways.</li> <li>• Developing and implementing a monitoring plan for the lower Mitchell River and estuary.</li> <li>• Incorporating priority wetlands into the 10-year plan for the establishment and maintenance of native vegetation in the Gippsland Lakes and Hinterland.</li> <li>• Implementing the estuary opening protocols on the Lake Tyers and lower Snowy estuaries and on Sydenham and Mallacoota inlets.</li> </ul>
<p>East Gippsland Floodplain Management Strategy (EGCMA, 2017)</p> 	<p>The East Gippsland Floodplain Management Strategy is a planning document for the East Gippsland Catchment Management Region. It aims to inform local communities of flood risks and measures to minimize damages caused by the floods.</p> <p>The document presents risk assessments for numerous waterways and summarizes previous technical documents concerning flooding and associated coastal hazards within East Gippsland. It also gives suggestions for mitigation measures and improvements for managing future flooding.</p>	<p>The strategy includes four objectives:</p> <ul style="list-style-type: none"> <li>• To build a flood resilient community</li> <li>• To reduce existing flood risks</li> <li>• To avoid future flood risks</li> <li>• To manage residual flood risks</li> </ul> <p>Paynesville, Raymond Island, Metung and Lakes Entrance are all identified as being in a high-risk tier. Actions relevant to coastal and marine management and Council's role in flood management include:</p> <ul style="list-style-type: none"> <li>• Reviewing emergency management and coordination arrangements</li> <li>• Undertaking risk assessments and investigations to upgrade road and telecommunications networks</li> <li>• Identify updated flood information and ensure the Planning Scheme is amended with most recent data.</li> <li>• Develop the Lakes Entrance Adaptation and Growth Strategy</li> <li>• Develop a strategy to reduce risk to private and commercial boats during flood events.</li> </ul>
<p>Between Settlements Strategic Framework East Gippsland &amp; Wellington Shires (2007)</p> 	<p>This Strategic Framework forms Volume 2 of the Coastal Towns Design Framework project. It examines planning policy to provide guidance on the location, type and extent of future development along the coast of Wellington and East Gippsland Shires.</p> <p>This volume focuses specifically on the non-urban areas of the coastline (urban areas are considered via individual Urban Design Frameworks, found in Volume 3).</p>	<p>The Strategic Framework highlights some key principles relating to the future development of coastal land found between settlements in East Gippsland:</p> <ul style="list-style-type: none"> <li>• Protect the natural resources and environmental values of the coastal/lake edge zone</li> <li>• Protect significant landscapes and areas of high landscape quality</li> <li>• Tourism development should be directed to activity nodes</li> </ul> <p>It notes that the East Gippsland Planning Scheme contains a variety of policy provisions that may be used to support or oppose an argument for a tourist resort or other forms of intense development in rural areas. It states there is currently little policy clarity on development outside of townships.</p> <p>The importance of cultural heritage values in non-urban areas and climate change/sea level rise are both mentioned as significant factors to consider for planning policy.</p>



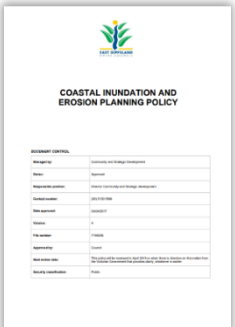
Document	Description	Relevant objectives, goals, or recommendations
<p>Gunaikurnai Whole of Country Plan (2015)</p> 	<p>This Whole-of-Country Plan has been developed by the Gunaikurnai Community, for the Community. It aims to bring together and add to the discussions that Gunaikurnai people have had over the past two decades during their fight for Native Title and paints a picture of how they are going to move forward.</p> <p>This plan guides the activities of Gunaikurnai Land and Waters Aboriginal Corporation and the Gunaikurnai Traditional Owner Land Management Board.</p>	<p>The Country Plan outlines a strategic framework to guide how Gunaikurnai peoples will move forward, manage Country and participate in society. It contains nine Whole-of-Country principles to guide decision-making and seven goal areas. The goals include:</p> <ol style="list-style-type: none"> <li>1. To have a strong, healthy and happy mob</li> <li>2. To heal our Country</li> <li>3. To protect and practice our culture</li> <li>4. To be respected as the Traditional Owners of our Country</li> <li>5. To have the right to use, manage and control our Country</li> <li>6. To be economically independent</li> <li>7. To have a strong focus on learning</li> </ol> <p>The Plan also details principles and a management approach for jointly managed areas. Coastal Joint Management areas include:</p> <ul style="list-style-type: none"> <li>• Gippsland Lakes Coastal Park</li> <li>• Lakes National Park</li> <li>• Gippsland Lakes Reserve on Raymond Island</li> <li>• Lake Tyers State Park</li> <li>• Corrringle Foreshore Reserve</li> </ul>
<p>Aboriginal Economic Development Strategy Gippsland (2021)</p> 	<p>The Strategy has been designed to explore partnerships, joint ventures and collaboration with and between Aboriginal businesses and the broader Community.</p> <p>It's about celebrating Culture and stepping forward to showcase the Community's unique abilities, and to understand how to care for Country, while developing arts and cultural tourism businesses.</p>	<p>The Strategy identifies that the geographical spread and the diversity of the Aboriginal Community in Gippsland provides some specific challenges to growing Aboriginal economic development in the region.</p> <p>The opportunity to progress cultural tourism by the Gippsland Aboriginal Community is considered a unique Community strength. The strategy states that the sector is primed and ready to provide a unique visitor experience resulting from Traditional Owners' knowledge of Culture, heritage and caring for Country, and that this will add depth of value to the visitor economy.</p> <p>Additionally, Natural Resource Management is stated as a core pillar of business for GLaWAC, driving substantial financial growth for the organisation and providing training and employment. Past projects have included planting out over 120,000 plants at the wetlands of Jones' Bay, and erosion control at Sperm Whale Head.</p>

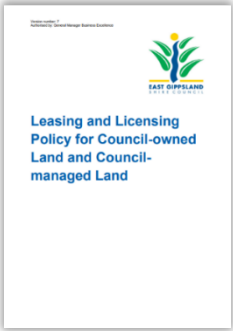
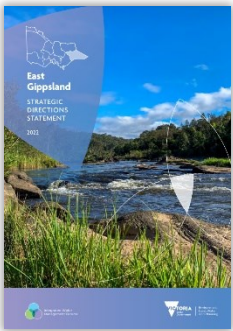
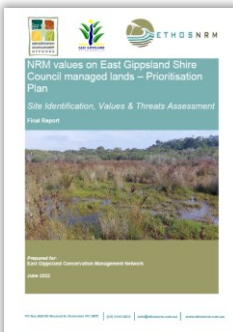
## Shire wide

Document	Description	Relevant objectives, goals, or recommendations
<p>East Gippsland Shire Shaping the Future Our Community Vision 2040 (2021)</p> 	<p>This document expresses the aspirations, values, and priorities of the East Gippsland community for the year 2040. It extends beyond Council's jurisdiction, and provides a platform for collaboration with community, municipal and regional partnerships, and advocacy. It is, in part, an expression of how Council will work with the community to apply and direct resources under its control towards achieving the Community's desired future. This vision will be reviewed and updated as the community evolves.</p>	<p>The 2040 Community vision: <i>In 2040 our people, place, environment, and economy will be connected, in balance and resilient. Our unique and diverse communities will be accessible, inclusive, well connected and safe. We will value and care for each other and our natural environment. Our economy will support existing and emerging industries by being agile, innovative, and sustainable</i></p> <p>The ecological diversity and beauty of the region's waterways, beaches, and oceans are stated as being highly valued by the Community, as well as their internationally recognised coastal wilderness landscapes.</p>
<p>Council Plan 2021-2025 (revised 2022)</p> 	<p>The Council Plan sets out the strategic direction for East Gippsland Shire Council for the next four years, with each strategic objective aligned closely to the Community's Vision for 2040.</p>	<p>Of the five strategic objectives of the Plan, those with particular relevance to coastal and marine environments include:</p> <ul style="list-style-type: none"> <li>• Planning and infrastructure that enriches the environment, lifestyle, and character of our communities</li> <li>• A natural environment that is managed and enhanced</li> <li>• A thriving and diverse economy that attracts investment and generates inclusive local employment.</li> </ul> <p>Under each objective, specific strategies give more directed guidance, such as:</p> <ul style="list-style-type: none"> <li>• Planning with local communities for natural disasters and emergencies strengthens capacity, infrastructure, resilience, preparedness, and recovery (includes climate risk analysis)</li> <li>• Sustainable land use practices are used to manage council land to protect biodiversity and to provide education and incentives to support the management of private land</li> </ul>
<p>Environmental Sustainability Strategy 2022-2032</p> 	<p>This Environmental Sustainability Strategy outlines the environmental objectives that Council will strive to achieve over the next decade. It will guide Council's work and address the environmental and sustainability challenges most prevalent in the Shire.</p> <p>The Strategy has been built on consultation, and going forward it will be about collaboration and shared ownership.</p>	<p>Of the Strategy's seven overarching goals, those with greatest relevance to coastal and marine management include:</p> <ul style="list-style-type: none"> <li>• Conservation of the natural environment and biodiversity</li> <li>• Respect and alignment with the rights of Traditional Owner Groups</li> <li>• Community resilience to respond to increasing climate risk and natural disasters</li> </ul> <p>Within these, examples of targets that hold particular relevance are:</p> <ul style="list-style-type: none"> <li>• By 2032 the community are more engaged in conservation efforts and have a greater awareness of the Shire's ecological values</li> <li>• Traditional Owners are fully involved in decision-making around management and use of natural resources, including climate change</li> <li>• Reliable climate modelling exists for East Gippsland by 2023</li> </ul>

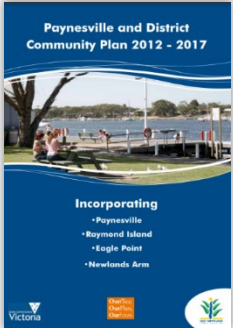
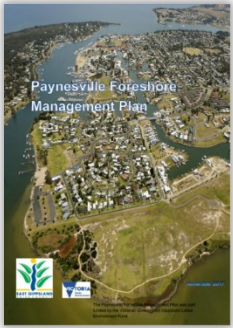
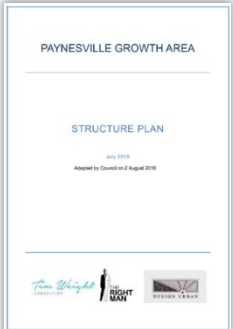
Document	Description	Relevant objectives, goals, or recommendations
<p>Rural Land Use Strategy (2023)</p> 	<p>The Rural Land Use Strategy is the first of its kind for East Gippsland. The Strategy supports a diversity of agricultural enterprises of various scales, promotes emerging opportunities for rural industries, boutique farming, rural tourism, and recognises and protects important environmental and landscape values.</p> <p>The Strategy contains two key components:</p> <ol style="list-style-type: none"> <li>1. A Strategic Framework, containing a vision, principles, and strategic directions.</li> <li>2. An Implementation Plan, including recommendations for changing to the East Gippsland Planning Scheme.</li> </ol>	<p>The Strategy presents five broad Strategic Directions for rural land use, two of which relate to coastal and marine considerations:</p> <ul style="list-style-type: none"> <li>• Rural Tourism (including nature-based tourism and Indigenous cultural experiences), and</li> <li>• Environment, Landscape, Catchments and Natural Hazards (with a focus on environmental assets contributing to the economy, liveability of the Shire, and its attractiveness for tourism)</li> </ul> <p>Specific strategies nested underneath give an indication of areas of importance, for example:</p> <ul style="list-style-type: none"> <li>• Encourage tourism development that leverages environmental, landscape and cultural values.</li> <li>• Encourage use and development to deliver high quality environmental outcomes and contribute to improved habitat and ecological connectivity.</li> <li>• Discourage use and development that fails to appropriately address natural hazards and the need to protect human life.</li> </ul>
<p>Housing and Settlement Strategy (2023)</p> 	<p>The East Gippsland Housing and Settlement Strategy addresses community and organisational expectations of diversity, sustainability, and equity to guide the location and form of future housing development in East Gippsland to 2041. It will provide greater certainty as to where new housing is expected and how it will be managed.</p> <p>East Gippsland is growing, and its demographic profile is shifting. It is important that this change is managed in a way that ensures the ongoing health and prosperity of communities, while protecting valued historic, cultural, and natural landscapes.</p> <p>The Strategy provides both a strategic planning framework, and an accompanying implementation plan.</p>	<p>The Strategy provides six strategic principles to guide growth and development across East Gippsland. Those most relevant for marine and coastal management include:</p> <ul style="list-style-type: none"> <li>• Well designed and resource-efficient developments that contribute to creating more sustainable towns and settlements will be supported</li> <li>• Development in areas of environmental and landscape significance and at risk of natural hazards will be managed to preserve natural resources and protect human life</li> </ul> <p>Taken together, these principles aim to enable people to be more resilient in response to climate change, and also ensure that any new housing will not be supported where there is an unacceptable risk to human life from flood, landslip or erosion, or in areas with high natural values.</p> <p>Specific, relevant strategies include:</p> <ul style="list-style-type: none"> <li>• Update flood mapping in the East Gippsland Planning Scheme via the introduction of relevant zones and overlays.</li> <li>• Advocate to the Victorian Government for continued monitoring of coastal vulnerability.</li> <li>• Collaborate with relevant agencies to prepare a program to review and update data and mapping of natural hazards risks.</li> </ul>
<p>Economic Development Strategy 2022-2032</p> 	<p>This ten year Economic Development Strategy was developed in the aftermath of the compounding impacts of the 2019-20 bushfires, prolonged drought, Covid-19 pandemic, and ongoing industry transition. This has re-shaped the Shire's focus and approach toward economic recovery, building business resilience and growing Shire wide prosperity for communities.</p> <p>In addition to the traditional agricultural and manufacturing industries which underpin the existing local economy, East Gippsland continues to benefit from a growing tourism sector and major infrastructure projects. Improvements to digital connectivity present new opportunities for the region, as do emerging and maturing industries of arts, culture and heritage, and education.</p>	<p>The Strategy highlights East Gippsland's considerable natural tourism assets, including waterways, inland lake landscapes, coastline, bushland reserves, tracks and trails, and National Parks. It also acknowledges that work is required to mitigate and adapt to climate change, variability and manage natural hazards.</p> <p>The strategy highlights the potential for cultural tourism, food and hospitality as ways of celebrating the region's heritage and culture, in alignment with the Aboriginal Economic Development Strategy.</p> <p>These priorities are represented in three of the Strategy's primary focus areas:</p> <ul style="list-style-type: none"> <li>• A unique and compelling tourism destination,</li> <li>• Arts, Cultural and Heritage, and</li> <li>• Climate Action Leaders.</li> </ul>

Document	Description	Relevant objectives, goals, or recommendations
<p>Reconciliation Action Plan 2015-18 (2015)</p> 	<p>The Reconciliation Action Plan (RAP) formalises Council's contribution to reconciliation by identifying clear actions with realistic targets, developed in consultation with Aboriginal and Torres Strait Islander communities, organisations and leaders.</p> <p>It also focuses on embedding cultural change within the whole organisation through building good relationships, respecting the special contribution of Aboriginal and Torres Strait Islander peoples, and creating opportunities.</p>	<p>The RAP's vision states: <i>We will improve relationships with Aboriginal and Torres Strait Islander community members by incorporating community input, involvement and contribution from the Shire's Aboriginal and Torres Strait Islander communities. The need for representation and protection for Aboriginal and Torres Strait Islander cultural heritage is increasingly recognised and the role in decision making about the future of East Gippsland is represented and protected.</i></p> <p>Relevant actions within the RAP include:</p> <ul style="list-style-type: none"> <li>• Investigate Aboriginal tourism opportunity for Lakes Entrance that supports sustainable economic growth for the region</li> <li>• Provide opportunities for the promotion of Aboriginal Arts and Culture</li> </ul>
<p>Well Placed for Wellbeing 2021-2025 (2021 draft – scheduled to be endorsed April 2023)</p> 	<p>Well Placed for Wellbeing is the Council's four year plan to guide the work of Council and its health partners for improving the health and wellbeing of the East Gippsland community.</p> <p>Through public health policy analysis, stakeholder engagement, and municipal scan data, five priorities areas have been identified for the Plan:</p> <ul style="list-style-type: none"> <li>• Liveable communities,</li> <li>• Healthy and well,</li> <li>• Safe families and communities,</li> <li>• Connections to culture and community</li> <li>• Able to participate.</li> </ul>	<p>Under each of the priority areas, strategic objectives and actions are provided. Those with particular coastal and marine relevance include:</p> <ul style="list-style-type: none"> <li>• Build community, industry and business understanding of the risks of climate change to public health</li> <li>• Support the delivery of the Joint Management Plan with Traditional Owners and delivering culturally sensitive management plans and supports</li> <li>• Support communities and individuals to engage in active living, sport, leisure, creative arts and recreation activities through recreational and facilities master planning</li> <li>• Understand, identify and deliver placed based solutions to East Gippsland housing challenges</li> <li>• Supporting community groups, clubs, organisations and volunteers</li> </ul>
<p>East Gippsland Shire Council - Advocacy Strategy</p> 	<p>Council's Advocacy Strategy provides a prioritised set of initiatives to focus Council's efforts on delivering the community's priorities. Council will promote these priorities in its advocacy to the Australian and Victorian governments. The priorities have been identified as either issues seeking support or capital works projects that require funding.</p> <p>The broad priority areas include:</p> <ul style="list-style-type: none"> <li>• Communities</li> <li>• Place</li> <li>• Environment</li> <li>• Economy</li> <li>• Council</li> </ul>	<p>Under each priority are specific 'asks' that Council will advocate for. Asks with coastal and marine relevance include:</p> <ul style="list-style-type: none"> <li>• Coastal hazards and assets renewal: An ongoing funding stream to support the aspirations of the Marine and Coastal Act.</li> <li>• Lakes Entrance training walls: Support to fund the replacement of critical marine infrastructure at the entrance to Bass Strait.</li> <li>• Coast risk management: Regular and ongoing funding for the management of Crown land foreshores (e.g. seawall replacement) and coastal hazards (e.g. inundation).</li> <li>• Gippsland Lakes health audit: Financial support for a full audit of the health of the Gippsland Lakes.</li> <li>• Develop natural resource management (NRM) strategic partnerships: Development of a multi-disciplinary, decentralised approach for NRM policy to support local management in coastal and alpine areas.</li> <li>• Supporting the visitor economy on public land: Investment in parks and state forest to strengthen visitor offering and maintenance.</li> </ul>



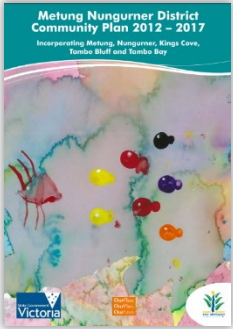
Document	Description	Relevant objectives, goals, or recommendations
<p>East Gippsland Shire Council Asset Plan 2022-2032 (2022)</p> 	<p>The Council's Asset Plan provides insight into how the community's assets are managed to support delivery of services such as sport and recreation, transport, community health, stormwater management and waste management services.</p> <p>The plan provides strategic and financial direction for the next ten years and beyond, covering all fixed, physical infrastructure that is under Council control (e.g. roads, buildings, bridges, culverts, stormwater drainage, open space assets, waste facilities).</p>	<p>Key guiding management principles of the Plan, informed by community engagement, which relate closely to coastal and marine management include:</p> <ul style="list-style-type: none"> <li>• Continue to prioritise the renewal of ageing infrastructure</li> <li>• Continue to optimise asset life and costs through timely and effective maintenance</li> <li>• Manage asset resilience to climate change impacts.</li> <li>• Continue to maintain and enhance assets supporting tourism and the natural environment</li> <li>• Continue to focus on assets that promote a healthy lifestyle for the community</li> </ul> <p>The Plan also outlines key challenges relating to asset management, such as:</p> <ul style="list-style-type: none"> <li>• Current and future climate change impacts: increased flooding of coastal properties, stormwater networks, and public facilities due to rising sea levels; beach erosion and storm damage to infrastructure</li> <li>• Coastal and river environments reduce asset lifespans due to increased corrosion and deterioration</li> <li>• In addition to Lakes Entrance, more townships will become destinations for tourism, angling and sailing, requiring continued provision of suitable open space assets and preservation of the coastal and foreshore areas of the region</li> <li>• A growing interest in conservation of bushland areas, habitat enhancement, biodiversity and Indigenous cultural links</li> </ul>
<p>Local Government Community Satisfaction Survey (2022)</p> 	<p>The annual Victorian Community Satisfaction Survey creates a vital interface between Council and their community. It asks the opinions of local people about the place they live, work and play, and provides confidence for councils in their efforts and abilities.</p> <p>The survey provides insight into views on:</p> <ul style="list-style-type: none"> <li>• Council's performance, with benchmarking against statewide results</li> <li>• Community consultation and engagement</li> <li>• Council advocacy and lobbying</li> <li>• Services, infrastructure, facilities</li> <li>• Customer service and communication</li> <li>• Council's overall direction.</li> </ul>	<p>Performance ratings for Council service areas that are relevant to coastal and marine management include:</p> <ul style="list-style-type: none"> <li>• Recreation facilities (59% very good or good, 41% average or below)</li> <li>• Emergency and disaster management (49% very good or good, 51% average or below)</li> <li>• Business/community development &amp; tourism (38% very good or good, 62% average or below)</li> <li>• Environmental sustainability (37% very good or good, 63% average or below)</li> <li>• Informing the community (36% very good or good, 64% average or below)</li> <li>• Lobbying (29% very good or good, 71% average or below)</li> <li>• Consultation &amp; engagement (29% very good or good, 71% average or below)</li> </ul>
<p>Coastal inundation and Erosion Planning Policy (2017)</p> 	<p>The Coastal Inundation and Erosion Planning Policy was established to provide a consistent approach to the consideration of applications for land use and development in Gippsland Lakes townships whilst conforming to State Planning Policy which requires Council to plan for and manage the potential impacts of climate change.</p> <p>It provides a framework for the consideration of the risks of climate change through planning and decision making processes and is applied to land within the established urban boundary of Gippsland Lakes townships.</p>	<p>This Policy highlights that the East Gippsland townships are predicted to be subject to coastal-related impacts of climate change into the future. In addition, it states that some communities are already impacted by flooding from riverine catchments, and that for townships located on the Gippsland Lakes, the combination of catchment flooding and future sea level rise means that these towns may be subject to significant future impacts.</p> <p>The Policy notes that Council has been proactively advocating for consideration to be given to the way that coastal climate change impacts are planned for in established townships to ensure that there is a planned rather than ad hoc approach to planning, and to enable any impacted communities to participate.</p>

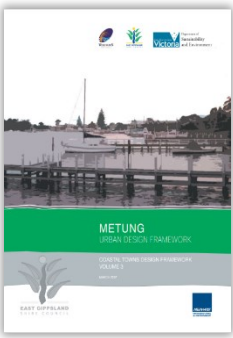
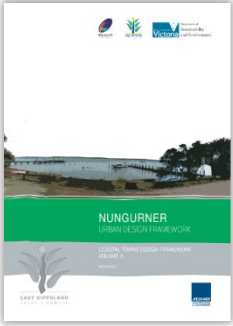
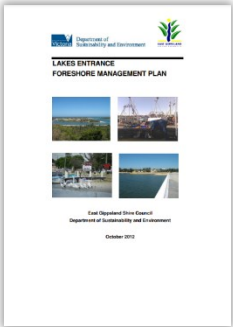
Document	Description	Relevant objectives, goals, or recommendations
<p>Leasing and Licensing Policy for Council-owned Land and Council managed Land (2021)</p> 	<p>This Policy establishes the principles to be applied for the leasing and licensing of non-residential Council-owned land or Council-managed land, including Private Jetties, to other parties to maximise the social, environmental and economic benefits to the East Gippsland Shire.</p> <p>It provides a framework for optimising occupancy of Council assets where possible through shared use by multiple tenets, and for a consistent approach when entering into agreements with Tenants.</p>	<p>The Policy may be related to any coastal or marine land that is leased or licensed, and which is designated either 'Council-managed Land' or 'Council-Owned Land'.</p> <p>The Policy establishes that Private Jetties constructed at the cost of the landowner may be located on either Council-owned or -managed land, such as on sites allocated to properties with water frontage, where Council is the responsible authority for the canal or waterway. In these instances, there may be rental amounts payable for the occupation of this land.</p>
<p>East Gippsland Integrated Water Management (IWM) Forum Strategic Directions Statement 2022</p> 	<p>The East Gippsland IWM Forum is one of 10 regional IWM forums across Victoria designed to help water managers and stakeholders work together to improve how the water cycle contributes to the liveability of towns and cities.</p> <p>The 2022 Strategic Directions Statement (SDS) updates progress on the forum's activities, its changing priorities, and future opportunities. It describes the water security challenges and opportunities of the region, sets a strategic direction for the next few years, and outlines the ways in which Integrated Water Management is and will be applied.</p>	<p>Priority opportunities related to coastal towns and coastal and marine management include:</p> <ul style="list-style-type: none"> <li>• Supporting Aboriginal Water Values in East Gippsland</li> <li>• Improving stormwater management, particularly for Paynesville, Lakes Entrance, Tambo Bluff, Marlo and Eagle Point</li> <li>• Creating a Lakes Entrance IWM Plan</li> <li>• Exploring ways to recycle from Bairnsdale and Lakes Entrance wastewater treatment plants</li> <li>• Improving the Health of Waterways Flowing into the Gippsland Lakes including the Tambo, Nicholson, and Mitchell Rivers</li> </ul> <p>The SDS also highlights work completed to date including wetland restoration, efforts to protect the Gippsland Lakes and making space for nature.</p>
<p>NRM values of East Gippsland Shire Council managed lands – Prioritisation Plan (Ethos NRM, 2022)</p> 	<p>A framework to enable prioritisation of natural resource management (NRM) values across EGSC-managed sites, including a database of values and threats, to direct the focus of management and help identify priorities for funding. Includes:</p> <ul style="list-style-type: none"> <li>• Desktop values assessments and prioritisation for all EGSC-managed properties</li> <li>• Field-based ecological values and threats assessment of high priority sites</li> <li>• Collation and analysis of field data to produce reporting and database of prioritised reserves</li> </ul>	<p>Recommended management actions include:</p> <ul style="list-style-type: none"> <li>• Develop and implement weed control plans which focus on reserves of highest biodiversity value but with lowest weed threat and/or on high threat weed species with low abundance where elimination is achievable.</li> <li>• Monitor and react promptly to reports of unauthorised native vegetation removal including firewood collecting, view enhancing, recreational expansions and slashing in EGSC-managed bushland reserves.</li> <li>• Seek funding to develop and implement revegetation strategies to improve the extent, condition and connectivity of priority EGSC-managed bushland reserves.</li> <li>• In consultation with DELWP, CFA and EGSC Fire Prevention Officers, identify and map fire sensitive vegetation types and significant values in recently burnt areas for protection from any planned burning and fuel management activities.</li> <li>• Ongoing assessment of NRM values and threat data across the Council estate to improve decision making.</li> <li>• Educate the community to improve their accuracy in identifying weeds and native plants and the recommended treatments for targeted weeds.</li> <li>• Facilitate community (targeting adjacent landholders) involvement in the management of sites in or adjacent to townships.</li> </ul>

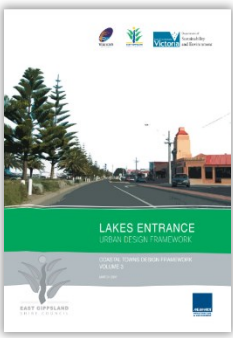
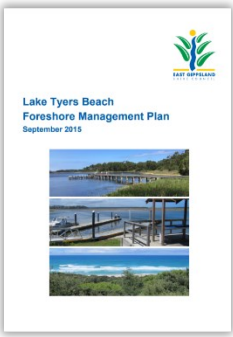
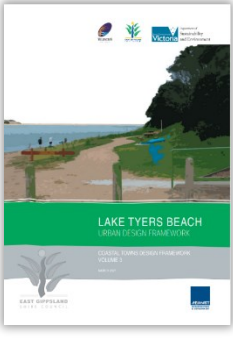
## Locality specific

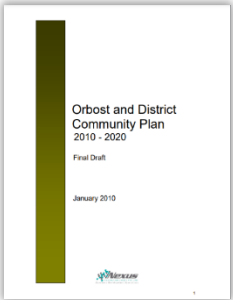
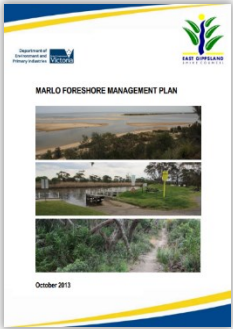
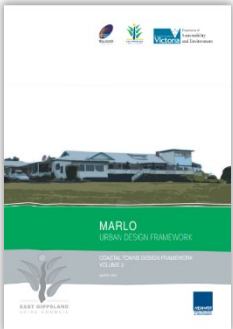
Document	Description	Relevant objectives, goals, or recommendations
<b>Paynesville and Newlands Arm</b>		
<p>Paynesville and District Community Plan 2012-2017</p> 	<p>The Community Plan aims to meet the challenges of growth and change, while preserving the community's values, and identifying opportunities that will place the community in the best position for the future. Objectives, strategies and actions were set for each locality, which were grouped under the four common themes:</p> <ul style="list-style-type: none"> <li>• Liveability</li> <li>• Sustainability</li> <li>• Productivity</li> <li>• Governance</li> </ul> <p>The Community Plan was developed with input from the residents of the Paynesville, Raymond Island, Eagle Point and Newlands Arm localities through on-going community engagement.</p>	<p>Within the Plan, communities outlined a number of objectives relating to coastal and marine environments. Examples include:</p> <ul style="list-style-type: none"> <li>• Support better policy and management of coastal climate change to meet environmental, economic and community needs</li> <li>• Undertake coastal erosion management at key locations</li> <li>• Provide more and improved basic infrastructure such as seating, foreshore facilities, bike racks, bins</li> <li>• Improve foreshore vegetation management and management of erosion</li> <li>• Ensure boating infrastructure meets the needs of existing and future Gippsland Lakes boaters and the area's brand as 'Boating Capital of Victoria (Paynesville, Eagle Point, Newlands Arm)</li> <li>• Promote eco-tourism and Aboriginal tourism opportunities</li> </ul>
<p>Paynesville Foreshore Management Plan (2017)</p> 	<p>The Paynesville Foreshore Management Plan sets the vision, objectives and specific actions for the Paynesville foreshore for the next 10 years, covering the foreshore from Kellina Court to Point Fullarton (inclusive of Raymond Island). It attempts to capture the key elements of town planning strategies and master plans, with input from community groups and individuals, as well as other government agencies.</p> <p>The Plan aims to provide a clear vision for the foreshore, clarify management responsibilities, provide a set of parameters and guidelines for infrastructure improvement and upgrades, advance selected precinct concept plans and propose a priorities list for future actions, while identifying existing projects which are currently funded.</p>	<p>Key objectives of the Plan include:</p> <ul style="list-style-type: none"> <li>• Greater connection and pathways,</li> <li>• Upgrades to signage,</li> <li>• Provision and upgrade of infrastructure (including boating facilities),</li> <li>• Implementation of a Native Vegetation Management Plan,</li> <li>• Safe swimming beaches,</li> <li>• Flood management, sea level rise and erosion,</li> <li>• Incorporation of cultural values into the foreshore,</li> <li>• Seasonal "pop-up" commercial opportunities,</li> <li>• Delineation of public vs. private land boundaries,</li> <li>• Support volunteerism &amp; community groups,</li> <li>• Increase green and open space areas,</li> <li>• Establishment of relevant agencies for reserve management.</li> </ul> <p>The Plan also makes specific mention of coastal hazards being experienced in the foreshore zone and acknowledges that these will become more challenging to manage as they are exacerbated by climate change.</p>
<p>Paynesville Growth Area Structure Plan (2016)</p> 	<p>The Structure Plan guides land use and development for the urban growth area where a planning permit is required under the East Gippsland Planning Scheme.</p> <p>The purpose of the Paynesville Growth Area Structure Plan (PGASP) is to provide a set of desired outcomes, objectives, guidelines and requirements for future development of the growth area, based on principles of good urban design and sustainability.</p>	<p>The Plan notes that while Paynesville has been transformed over the past 30 years by investment in residential canal estates, retail and commercial facilities, boating infrastructure, education, health and community facilities, it has essentially retained its local character as a small lakeside town.</p> <p>The Plan describes Paynesville as physically and visually connected to the water and surrounding landscape, with wide tree-lined streets in the older section of the town, good accessibility to the foreshore and town services, and a strong sense of local identity. The overarching aim of the Plan is to maintain and enhance that identity.</p>


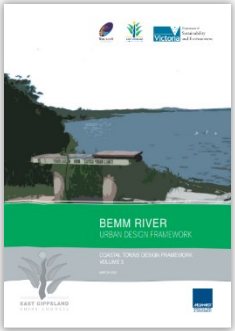
Document	Description	Relevant objectives, goals, or recommendations
<p>Paynesville Urban Design Framework (2007)</p> 	<p>The Paynesville Urban Design Framework sits within Volume 3 of the Coastal Towns Design Framework. It provides strategic direction for planning and development in urban areas of Paynesville, focusing on key issues and opportunities for enhancing the unique qualities of the township.</p> <p>The framework provides a set of strategic objectives and strategies to achieve its vision.</p>	<p>The key objectives of the Framework that relate to coastal and marine considerations include:</p> <ul style="list-style-type: none"> <li>• To build on the strengths of Paynesville as the best boating destination on the Gippsland Lakes</li> <li>• To improve access, safety, circulation and legibility of roads and pedestrian links along the foreshore, throughout the town and into the hinterland.</li> <li>• To maximise tourism opportunities.</li> <li>• Redevelop Slip Road as a tourist and marine related industrial precinct.</li> <li>• Redevelop the Yacht Club site.</li> </ul> <p>Some specific development opportunities identified include the Mariners Cove Motel on the Esplanade and the Boatyard at the eastern end of King Street.</p>
<b>Raymond Island</b>		
<p>Note: "Paynesville Foreshore Management Plan (2017)" (above) is inclusive of Raymond Island.</p>		
<p>Raymond Island Urban Design Framework (2007)</p> 	<p>The Raymond Island Urban Design Framework sits within Volume 3 of the Coastal Towns Design Framework. It establishes an integrated design vision for Raymond Island, in consultation with the community, and assists the realisation of the vision through planning scheme changes, capital works projects and guidelines for private development.</p>	<p>The key objectives of the Framework that relate closely to coastal and marine considerations include:</p> <ul style="list-style-type: none"> <li>• To protect and maintain the well vegetated coastal settlement and low intensity character of Raymond Island.</li> <li>• To have Raymond Island acknowledged as a sustainable, environmentally based community.</li> <li>• To enhance the opportunity, convenience and safety of movement for pedestrians and cyclists throughout the Island.</li> <li>• Manage the foreshore to ensure environmental protection, preserve landscape quality and facilitate community access.</li> </ul>
<b>Eagle Point</b>		
<p>"Paynesville Foreshore Management Plan (2017)" (above) also considers connectivity to Eagle Point.</p>		
<p>Eagle Point Marine and Coastal Management Plan (2019)</p> 	<p>The Eagle Point Marine and Coastal Management Plan has been prepared to guide the future management, use and development of the Eagle Point Foreshore for the next 10 years.</p> <p>The Plan has:</p> <ul style="list-style-type: none"> <li>• Engaged with community and stakeholders</li> <li>• Defined a vision for the Eagle Point Foreshore</li> <li>• Identified natural values with the aim to their protection and enhancement</li> <li>• Outlined upgrades and maintenance for infrastructure</li> <li>• Identified values, challenges, actions and management strategies</li> <li>• Created a priority and implementation plan</li> <li>• Provided a framework for monitoring and review.</li> </ul>	<p>The Plan has identified values held by the Eagle Point community, namely:</p> <ul style="list-style-type: none"> <li>• Natural values (e.g. natural geomorphological features including The Bluff and the Mitchell River Silt Jetties)</li> <li>• Social &amp; cultural values (e.g. Boat access for small powered and non-powered watercraft to Mitchell River)</li> <li>• Economic values (e.g. Eagle Point Caravan Park)</li> </ul> <p>The Plan notes coastal hazards and climate change impacts as key challenges now and into the future.</p> <p>Overall management strategies are provided to protect the identified values and address challenges. Examples include:</p> <ul style="list-style-type: none"> <li>• To integrate foreshore, community, tennis and primary school activity areas</li> <li>• To plan for upgrades to meet community needs including recreational boating facilities</li> <li>• To reinforce the foreshore precinct as the primary passive open space for outdoor activities and tourism.</li> <li>• To maintain and protect environmental values along the foreshore</li> <li>• To plan for and manage climate change considerations such as flood, sea level rise, erosion and bushfire</li> <li>• To recognise and protect cultural values found within Eagle Point</li> </ul>

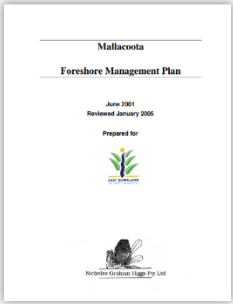
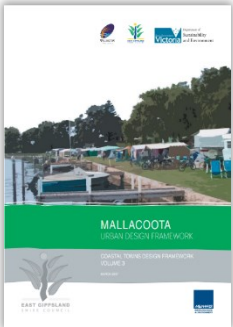
Document	Description	Relevant objectives, goals, or recommendations
<p>Eagle Point Draft Foreshore Landscape Masterplan - for Consultation (2018)</p> 	<p>This Masterplan provides the earlier options for the development of the Lake House Building. Consultation with the Eagle Point community then occurred in 2020 through online channels and in-person events to provide feedback on the concept plans.</p> <p>The project began construction in September 2022 and is to be complete by the end of 2023.</p>	<p>The new building is located to allow connectivity with the foreshore, whilst servicing the caravan park and providing shelter.</p> <p>Features of the building, playground and surrounding foreshore area design are characterised by four themes:</p> <ol style="list-style-type: none"> <li>1. Built form - views to the water and the jetty should be prioritised</li> <li>2. Landscape - understand and incorporate water activities into the landscape design</li> <li>3. Play - incorporate water play elements such as channels, streams or fountains into the playground</li> <li>4. Temporary - encourage and support temporary uses to occupy the site that activate the foreshore</li> </ol>
<p>Eagle Point Structure Plan (2019)</p> 	<p>The Eagle Point Structure Plan is a planning tool that provides guidance for East Gippsland Shire Council, residents and a range of government and non-government stakeholders about the intended planning and development outcomes for Eagle Point.</p> <p>The aim of the Plan is to protect and enhance the unique and special qualities of the town, by identifying where change is appropriate and where change will be limited. Protection of human life is prioritised over all other policy considerations, with regard to bushfire risk and sea level rise.</p>	<p>The overarching vision for the Plan highlight's Eagle Point's intrinsic natural beauty and quiet lifestyle-based appeal as being unique and highly valued by the community and visitors. It recognises the community values its low scale development, natural environment and foreshore.</p> <p>Guiding principles that relate directly to coastal considerations include:</p> <ul style="list-style-type: none"> <li>• Residential development will be influenced by the natural environment, water, landscape setting, housing style and development pattern which give Eagle Point its village character</li> <li>• Defining a community precinct and foreshore precinct as focal points for the township</li> <li>• The landscape setting and network of open spaces will be protected and enhanced</li> <li>• Future development will be appropriately managed to ensure the town is protected from the impact of natural hazards such as inundation and bushfire risk</li> </ul>
<b>Metung</b>		
<p>Metung Nungurner District Community Plan 2012-2017 (2012)</p> 	<p>This Community Plan describes the values, aspirations, projects and priorities the Metung Nungurner communities will work through in the next five years.</p> <p>It captures a range of ideas and initiatives that have been specified by residents and community stakeholders. Two community forums were held to discuss the community's values and identify opportunities for the future of the district. Views of school children were also incorporated into the plan.</p>	<p>Common themes expressed throughout the consultation that relate to the coastal environment include:</p> <ul style="list-style-type: none"> <li>• The community values the natural environment and their lifestyle, and they have a strong sense of community</li> <li>• The community sees opportunities for improvement in infrastructure, planning and the provision of services</li> <li>• The community wants to find a balance between urban growth and the preservation of their natural assets.</li> </ul> <p>Goals leading on from these themes include:</p> <ul style="list-style-type: none"> <li>• Encourage strategic partnerships between government, community groups and agencies to jointly manage the Metung Nungurner coastal environment</li> <li>• Create an economic environment that provides jobs encourages investment and caters to the needs of tourists and local residents</li> </ul>

Document	Description	Relevant objectives, goals, or recommendations
<p>Metung Urban Design Framework (2007)</p> 	<p>The Metung Urban Design Framework sits within Volume 3 of the Coastal Towns Design Framework. It provides strategic direction for future development in urban areas of Metung for the next 15-25 years. It focuses on key issues and identifies social, cultural and economic opportunities as they affect physical form.</p>	<p>The overarching vision for Metung highlights the preservation of environmental and landscape values as a key priority. It emphasised how the village character of the township is valued, as is community interaction and linking pathways.</p> <p>The Framework provides four key objectives to achieve the vision:</p> <ol style="list-style-type: none"> <li>1. To retain the landscape setting and 'village' character of Metung.</li> <li>2. To support Metung's boating centre role and improve water access.</li> <li>3. To create a cohesive and attractive village centre.</li> <li>4. To improve pedestrian circulation and safety.</li> </ol>
<b>Nungurner</b>		
<p>The Metung Nungurner District Community Plan 2012-2017 (above) is inclusive of Nungurner.</p>		
<p>Nungurner Urban Design Framework (2007)</p> 	<p>The Nungurner Urban Design Framework sits within Volume 3 of the Coastal Towns Design Framework. It establishes an integrated design vision for Nungurner, in consultation with the community, and assists the realisation of the vision through the provision of objectives, strategies, and actions.</p> <p>It considers regional influences and ensures alignment with the East Gippsland Planning Scheme.</p>	<p>The vision for Nungurner emphasises it as a small residential lakeside hamlet with highly valued natural habitat. This is further reflected through a desire for the buildings and development to be environmentally responsive, using materials and finishes that are reflective of the bush environment. The vision has a strong focus on the Lake foreshore, with desire for a small number of facilities for fishing, boating and picnics, with opportunities for walking along the foreshore and around the town.</p> <p>Four key objectives provided by the Framework include:</p> <ul style="list-style-type: none"> <li>• To maintain the low-density bushland character of Nungurner.</li> <li>• To create an attractive foreshore area catering to the needs of both residents and visitors.</li> <li>• To improve pedestrian circulation and safety.</li> <li>• To improve stormwater management in Nungurner.</li> </ul>
<b>Lakes Entrance</b>		
<p>Lakes Entrance Foreshore Management Plan (2012)</p> 	<p>The Lakes Entrance Foreshore Management Plan has been prepared to improve future use, management and development of the foreshore, as well as to protect natural, cultural and historical foreshore values.</p> <p>The Plan covers a large area that includes The Esplanade foreshore, Cunninghame Arm from the Flagstaff area at the 'entrance' to Lake Bunga, North Arm, Jemmys Point and Bullock Island.</p> <p>The plan was prepared with input from government agencies, community groups, private businesses and the public. The final management plan was adopted by all relevant management agencies as the principal tool for guiding future management of the foreshore.</p>	<p>The overarching management objective of the Plan is to maintain important environmental and cultural values whilst realising the potential for boating activities, recreational pursuits and tourism opportunities. It categorises the values of the foreshore as:</p> <ul style="list-style-type: none"> <li>• Cultural and heritage (e.g. Gunaikurnai cultural sites, the New Works historical site)</li> <li>• Recreational (e.g. swimming, fishing, boating, cycling)</li> <li>• Commercial, business, and boating (e.g. commercial fishing fleet, tourism)</li> <li>• Natural (e.g. Ramsar wetlands of the Gippsland Lakes)</li> </ul> <p>The Plan describes 17 management strategies, the majority of which hold relevance to coastal and marine management. Examples include:</p> <ul style="list-style-type: none"> <li>• Water based recreational activity</li> <li>• Boating and facilities</li> <li>• Flora and fauna management</li> <li>• Flooding and inundation</li> <li>• Coastal and tunnel erosion</li> <li>• Cultural heritage values and native title</li> </ul>

Document	Description	Relevant objectives, goals, or recommendations
<p>Lakes Entrance Urban Design Framework (2007)</p> 	<p>The Lakes Entrance Urban Design Framework sits within Volume 3 of the Coastal Towns Design Framework. The Plan:</p> <ul style="list-style-type: none"> <li>• Adopts a long-term planning view of 15-25 years,</li> <li>• Identifies strategic goals and actions through examining social, cultural and economic opportunities as they affect physical form, and</li> <li>• Identifies synergies with neighbouring towns and the greater region.</li> </ul> <p>It also outlines key issues in the area that have been identified through community and stakeholder consultation forums.</p>	<p>The Framework recognises Lakes Entrances unique position as the largest coastal town in the Gippsland area, and its strong focus on commercial fishing and recreational boating activities. The protection and enhancement of environmental and landscape values are also considered a key priority within the vision for the township.</p> <p>The key objectives of the framework are:</p> <ul style="list-style-type: none"> <li>• To enhance The Esplanade / foreshore precinct.</li> <li>• To provide for an appropriate development profile within the town centre and along The Esplanade.</li> <li>• To manage urban growth to achieve coordinated expansion and quality residential development according to regional demands.</li> <li>• To improve pedestrian circulation and safety.</li> <li>• To promote recreational and tourism-focused uses within the town.</li> <li>• To redevelop Bullock Island to provide recreation and tourist facilities.</li> </ul>
<b>Lake Tyers Beach</b>		
<p>Lake Tyers Beach Foreshore Management Plan (2015)</p> 	<p>The Council has prepared a Foreshore Management Plan for the area adjoining Lake Tyers Beach township, including Fisherman's Landing and Mill Point. The Plan has been developed with a high level of input from community groups as well as other government bodies and aims to give all parties a clear expectation of management roles, responsibilities, and proposed activities over a 15 year period.</p> <p>The aims of the Plan were to identify the current condition, values and management issues surrounding the foreshore, determine strategies to protect and enhance values identified, and establish an agreed position with all management agencies on the future use and development of foreshore areas, while clarifying responsibilities for on-ground management.</p>	<p>The values identified in the Plan include:</p> <ul style="list-style-type: none"> <li>• Natural (e.g. Gippsland Lakes Ramsar site, nationally listed Littoral Rainforest communities, panoramic coastal and water views)</li> <li>• Recreational (e.g. swimming, fishing, boating, kayaking, cycling, walking)</li> <li>• Cultural and historic (e.g. numerous Gunaikurnai cultural heritage sites, particularly the Lake Tyers estuary)</li> </ul> <p>Management strategies are focused on the provision or improvement of:</p> <ul style="list-style-type: none"> <li>• Recreational facilities</li> <li>• Car and trailer parking and roads</li> <li>• Linkages for better pedestrian access</li> <li>• Boating facilities</li> <li>• Erosion management</li> <li>• Native vegetation</li> <li>• Enhancement of natural and cultural values</li> <li>• Delineation of Crown land boundaries</li> </ul>
<p>Lake Tyers Beach Urban Design Framework (2007)</p> 	<p>The Lake Tyers Beach Urban Design Framework sits within Volume 3 of the Coastal Towns Design Framework.</p> <p>The Framework considers the future demographics and needs of the Lake Tyers Beach community to provide guidance on planning and development for its urban spaces, acknowledging that the township is likely to expand significantly relative to other nearby towns. Infrastructure availability, environmental sensitivity and strategic policy directions have also been factored into the Framework's objectives.</p>	<p>The Lake Tyers Beach community is recognised as holding strong environmental values, with new development needing to prioritise the protection of the water quality of Lake Tyers. The Framework points to the Lake and foreshore as the recreational focus of the township and the drawcard for holiday makers.</p> <p>The key objectives of the Framework are:</p> <ul style="list-style-type: none"> <li>• To accommodate population growth and residential development in a coordinated and environmentally sustainable manner.</li> <li>• To improve the water quality of Lake Tyers.</li> <li>• To expand opportunities for pedestrian movement and improve safety.</li> <li>• To protect and enhance the natural resource values of the town.</li> </ul>

Document	Description	Relevant objectives, goals, or recommendations
<b>Marlo</b>		
<p>Orbost and District Community Plan 2010-2020 (2010)</p> 	<p>The Orbost Community Action Plan outlines a set of actions and related projects, each of which are aligned with three key focus areas: environment, social and economic.</p> <p>The plan has been developed with extensive consultation with members of the communities of Orbost, Marlo, Cabbage Tree Creek and Newmerella, along with key Government agencies. Proposed projects have also been prioritised through the community consultation process.</p>	<p>In community priority order, the project list for Marlo includes:</p> <ul style="list-style-type: none"> <li>• Boat ramps (Cape Conran, Marlo, F.C.) – cleaning tables, parking, maintenance</li> <li>• Town infrastructure – footpaths, roads, drainage lighting, beautification</li> <li>• Bike trails – Marlo to Orbost and bridge across the river</li> <li>• Townscape – coach parking, jetty area and retail precinct</li> <li>• Walking trails</li> <li>• Viewing platforms along the coast</li> <li>• Signage</li> <li>• Sporting facilities</li> </ul>
<p>Marlo Foreshore Management Plan (2005)</p> 	<p>The Council has prepared a Foreshore Management Plan for the area surrounding the Marlo township, including the site of the Brodribb River boat ramp. The Plan has been developed with a high level of input from community groups as well as other government bodies and aims to give all parties a clear expectation of management roles, responsibilities, and proposed activities over a 15 year period.</p>	<p>The overarching management objective of the Plan is to recognise the potential for recreational pursuits and tourism opportunities within the area, located on the iconic Snowy River, whilst maintaining important environmental values.</p> <p>Management strategies are focused on:</p> <ul style="list-style-type: none"> <li>• Erosion management, including along the foreshore escarpment</li> <li>• Recreational facilities, such as for recreational fishing and picnicking along the foreshore</li> <li>• Pedestrian access and safety</li> <li>• Boating facilities, particularly to address demand and enable access to the Snowy River, Brodribb River and Marlo estuary</li> <li>• Native vegetation management within the foreshore area</li> <li>• PS Curlip, moored at the Brodribb River boat ramp</li> </ul>
<p>Marlo Urban Design Framework (2007)</p> 	<p>The Marlo Urban Design Framework sits within Volume 3 of the Coastal Towns Design Framework.</p> <p>The Framework gives a review of the Marlo township, including issues and opportunities, community and stakeholder values, and the planning and development context. It provides a strategic framework, inclusive of a vision and key objectives, and an accompanying implementation plan.</p>	<p>The vision for Marlo is for <i>a village with excellent facilities and a lively community hub, while retaining its character as a seaside holiday town looking out towards the river and ocean.</i></p> <p>The three key objectives for the Framework include:</p> <ul style="list-style-type: none"> <li>• To create an attractive town centre,</li> <li>• To improve pedestrian circulation and safety,</li> <li>• To enhance the town character.</li> </ul>

Document	Description	Relevant objectives, goals, or recommendations
<b>Bemm River</b>		
<p>Bemm River Community Plan 2015-2020 (2015)</p> 	<p>This plan was developed by the Bemm River Action Group with the assistance of Council following extensive community engagement with numerous community groups and residents.</p> <p>The Plan includes current issues facing the community, anticipated future challenges, and what the community priorities are.</p>	<p>The community vision is that Bemm River is a safe, friendly community for residents and visitors in a pristine environment. Three priority areas to achieve the vision have been identified:</p> <ol style="list-style-type: none"> <li>1. Improving the community's safety</li> <li>2. Improving safe access for all (including vehicle-based tourists)</li> <li>3. Enhancing the environment, both natural and built.</li> </ol> <p>Specific approaches to achieving these priorities are listed as:</p> <ul style="list-style-type: none"> <li>• Improved fire mitigation and preparedness</li> <li>• Improving safe access by foot and vehicles around the community (e.g. improving access tracks to points of interest such as Elephant Rock)</li> <li>• Improving the environment, both natural and built (e.g. investigating ways to minimise bank erosion when the inlet to the sea is closed and full)</li> </ul>
<p>Bemm River Foreshore Management Plan (2014)</p> 	<p>Council prepared a Foreshore Management Plan for Bemm River, including Luderick Point, Fingerling Jetty, Dolly's Garden, and the access walkway to Bemm River from Sydenham Parade.</p> <p>The Plan proposes a set of objectives and strategies that were developed with a high level of input from community groups as well as other stakeholders. It aims to give all parties a clear expectation of management roles, responsibilities and proposed activities.</p>	<p>The overarching management objective is to maintain the character of Bemm River whilst recognising the periodic high use of foreshore areas, supporting recreational activities, and maintaining important environmental values.</p> <p>Examples of the management objectives developed include:</p> <ul style="list-style-type: none"> <li>• Protect native vegetation and estuary shoreline habitat, whilst providing suitable access to the foreshore for recreational use.</li> <li>• Support a dedicated launching and retrieval area for non-powered watercraft to access Sydenham Inlet.</li> <li>• Control erosion of estuary shorelines utilising appropriate soft engineering or vegetation-based options.</li> </ul>
<p>Bemm River Urban Design Framework (2007)</p> 	<p>The Bemm River Urban Design Framework sits within Volume 3 of the Coastal Towns Design Framework.</p> <p>It provides strategic guidance for the future development of Bemm River's urban areas by establishing an integrated design vision that involves the generation of ideas and the preparation of realistic design concepts based on community consultation, research and analysis.</p>	<p>The vision developed for Bemm River through the Framework is: <i>Bemm River will retain its character as a remote fishing hamlet, bordered by public parks and with excellent access to Sydenham Inlet. It will have a range of recreational boating facilities and provide picnic areas and facilities for holidaymakers. The heart of the settlement, the foreshore, will be easily accessed on foot and will be enhanced as a community hub.</i></p> <p>To achieve this vision, a set of objectives are outlined:</p> <ul style="list-style-type: none"> <li>• To protect the well-vegetated coastal hamlet character of Bemm River.</li> <li>• To improve pedestrian circulation and safety.</li> <li>• To improve the foreshore area and water access.</li> </ul>

Document	Description	Relevant objectives, goals, or recommendations
<b>Mallacoota</b>		
<p>Mallacoota Foreshore Management Plan (2005)</p> 	<p>The Mallacoota Foreshore management Plan concerns foreshore land managed by Council, including the area from Bastion Point to the Croajingolong National Park boundary, and the Betka River day use area.</p> <p>It brings together community and statutory organisations' expectations for the management and care of the Crown land foreshore. It also facilitates appropriate foreshore development to meet identified needs, in character with the surrounding landscape, through providing strategic direction for management.</p>	<p>The Plan provides a number of high priority management actions, in addition to medium and low priority actions. High priority examples include:</p> <ul style="list-style-type: none"> <li>• Manage foreshore vegetation from Coull's Inlet to Buckland's Jetty as a natural environment</li> <li>• Prepare a coastal hazards study to assess the potential impact of climate change and consequent sea level change on Mallacoota foreshore infrastructure</li> <li>• Install sediment traps, erosion control structures and storm water controls.</li> <li>• Manage informal walking tracks, beach access tracks, boat launching ramps and jetty access tracks to minimise vegetation loss and soil erosion</li> </ul>
<p>Mallacoota Urban Design Framework (2007)</p> 	<p>The Mallacoota Urban Design Framework sits within Volume 3 of the Coastal Towns Design Framework.</p> <p>It provides guidance on planning and development for urban areas in Mallacoota, informed by community and stakeholder consultation. It adopts a 15-25 year view, identifies strategic goals and actions, examines social, cultural and economic opportunities as they affect the physical form of the township, and identifies synergies with neighbouring towns and the region.</p>	<p>The vision provided by the Framework for Mallacoota is that <i>Mallacoota will remain a peaceful town connected to the surrounding natural environment, including the Inlet and National Parks. It will have a lively, walkable commercial centre, linking activity to the foreshore and wharf area. There will be sufficient community facilities for resident and visitor needs with pedestrian and bicycle links. Its environmental tourism role will further develop in a sustainable manner, while coastal related industries will be encouraged to support the town's economy.</i></p> <p>Four key objectives provided to achieve the vision are:</p> <ol style="list-style-type: none"> <li>1. To enhance Mallacoota's role and character within a wilderness setting.</li> <li>2. To create a cohesive and active town centre.</li> <li>3. To improve pedestrian circulation and safety.</li> <li>4. To improve the design and siting of buildings. Each objective has a set of strategies that have been listed in the plan.</li> </ol>

## Attachment C: Mapping supplement

This attachment outlines:

- spatial data utilised in mapping, including data sources and links to data
- further information and interpretation of mapped data

Mapping themes are outlined below, with following pages detailing each themed map. Management action maps are also provided for each locality.

Map theme	Description
Traditional Owners and cultural values	Gunaikurnai Registered Aboriginal Party areas, areas of cultural heritage sensitivity and areas under Gunaikurnai and Parks Victoria Joint Management.
Environmental values	Environment, ecosystem and habitat mapping including marine habitats and native vegetation.
Environmental overlays	Environmental and land management planning overlays including: <ul style="list-style-type: none"> <li>• Environmental and landscape significance</li> <li>• Vegetation protection</li> <li>• Bushfire management</li> <li>• Erosion and salinity management</li> </ul>
Coastal hazards	Available coastal hazard mapping from: <ul style="list-style-type: none"> <li>• Gippsland Lakes/90 Mile Beach Local Coastal Hazard Assessment (LCHA) Project (Water Technology, 2014)</li> <li>• Statewide coastal hazard data as part of the Victorian Governments Future Coasts Project (2009) and Victorian Coastal Hazard Assessment (2017)</li> </ul>
Coastal protection and drainage infrastructure	Infrastructure to protect or mitigate impacts of coastal hazards including protection structures (seawalls, revetments, groynes) and stormwater drainage networks.
Recreation and transport	Open space and recreational assets, including trails, footpaths, boating facilities, playgrounds, parks and reserves.
Planning scheme zones	East Gippsland Shire Planning Scheme zoning
Planning overlays	Other planning scheme overlays including design, development, land subject to inundation and heritage overlays.
Land management arrangements	Public land management arrangements and responsible authorities.

Much of the mapped data is publicly available information or provided by Council. These maps may be of assistance to you, but we do not guarantee that the mapped data is without flaws of any kind or is wholly appropriate for your particular purpose. We disclaim any liability for any error, loss or other consequence which may arise from your relying on any information in this publication.

## Mapping supplement: Traditional Owners and cultural values

This series of maps detail Gunaikurnai Registered Aboriginal Party areas, areas of cultural heritage sensitivity and areas under Gunaikurnai and Parks Victoria Joint Management.

### Data

Name	Layer name	Source	Link
Areas of Cultural Heritage Sensitivity	SENSITIVITYPUBLIC	Department of Premier and Cabinet	<a href="https://discover.data.vic.gov.au/dataset/areas-of-cultural-heritage-sensitivity">https://discover.data.vic.gov.au/dataset/areas-of-cultural-heritage-sensitivity</a>
Registered Aboriginal Parties	RAP	Department of Premier and Cabinet	<a href="https://discover.data.vic.gov.au/dataset/registered-aboriginal-parties-rap-appointed-boundaries">https://discover.data.vic.gov.au/dataset/registered-aboriginal-parties-rap-appointed-boundaries</a>
Jointly managed parks and reserves (Gunaikurnai Land and Waters Aboriginal Corporation and Parks Victoria)	PLM25 – new attribute added, based on understanding of Joint Management areas	DEECA	<a href="https://discover.data.vic.gov.au/dataset/public-land-management-plm25">https://discover.data.vic.gov.au/dataset/public-land-management-plm25</a> (attributes added, based on available public mapping of joint management areas.

### Further information

Areas of cultural heritage sensitivity are areas that are either known to contain or are likely to contain Aboriginal cultural heritage places and objects. This dataset is based on the best available information at the time. This data is under active revision to improve the representation as better quality source data becomes available.

## Mapping supplement: Environmental values

### Data

Name	Layer name	Source	Link
Protected areas	CAPAD2020_terrestrial	Department of Climate Change, Energy, Environment and Water	<a href="https://fed.dccew.gov.au/search?q=capad2020">https://fed.dccew.gov.au/search?q=capad2020</a>
Ramsar boundary	RAMSAR25	DEECA	<a href="https://discover.data.vic.gov.au/dataset/ramsar-wetland-areas-in-victoria-at-1-25-000">https://discover.data.vic.gov.au/dataset/ramsar-wetland-areas-in-victoria-at-1-25-000</a>
Coastal bird habitat	COASTAL_BIRD_HABITAT	DEECA	<a href="https://discover.data.vic.gov.au/dataset/coastal-bird-habitats-on-the-victorian-coast">https://discover.data.vic.gov.au/dataset/coastal-bird-habitats-on-the-victorian-coast</a>
Ecological Vegetation Class	NV2005EVCBCS	DEECA	<a href="https://discover.data.vic.gov.au/dataset/native-vegetation-modelled-2005-ecological-vegetation-classes-with-bioregional-conservation-sta">https://discover.data.vic.gov.au/dataset/native-vegetation-modelled-2005-ecological-vegetation-classes-with-bioregional-conservation-sta</a>
Seamap ecosystems	SeamapAus_VIC_GippslandLakes_biotopesPolygon	Seamap Australia	Flynn A, Edmunds M, Ierodiaconou D, Rattray A, Ferns L (2016) CBiCS biotope classification of Gippsland Lakes habitat polygons. Unpublished Work by Fathom Pacific, Australian Marine Ecology Pty Ltd, Deakin University and Department of Environment, Land, Water and Planning. Melbourne. <a href="https://seamapaaustralia.org/map/">https://seamapaaustralia.org/map/</a>
Creeks and waterways	Watercourse_lines	EGSC	Council supplied
Significant marine assets	MARINE_ASSETS	DEECA	<a href="https://discover.data.vic.gov.au/dataset/marine-assets">https://discover.data.vic.gov.au/dataset/marine-assets</a>

### Further information

Ecological Vegetation Classes (EVCs) delineates the bioregional conservation status of EVCs.

The Seamap ecosystems dataset illustrates all existing benthic habitat characterisations of the Gippsland Lakes Region and were classified to conform with the Combines Biotope Classification Scheme. This dataset is hosted by the Institute for Marine and Antarctic Studies (IMAS), University of Tasmania, on behalf of Deakin University for the purposes of the Seamap Australia collaborative project.

## Mapping supplement: Environmental overlays

### Data

Name	Layer name	Source	Link
Planning Scheme Overlay Polygon	PLANOVERLAY	DEECA	<a href="https://discover.data.vic.gov.au/dataset/vicmap-planning-planning-scheme-overlay-polygon1">https://discover.data.vic.gov.au/dataset/vicmap-planning-planning-scheme-overlay-polygon1</a>

Also available at <https://mapshare.vic.gov.au/vicplan/>

### Further information

In addition to planning scheme zones (see below), the planning scheme may show that a piece of land has an overlay affecting it. Not all land has an overlay. Some land may be affected by more than one overlay. If an overlay applies, the land will have some special feature such as a heritage building, significant vegetation or flood risk. The overlay information will indicate if a planning permit is required for the construction of a building or other change to the land. It will set out requirements for subdivision, and buildings and works that apply in addition to the requirements of the zone.

This environmental overlays map shows those overlays relevant to managing environmental factors, values and risks, such as significant vegetation, bushfire risk or salinity. Land subject to inundation is shown in the other planning overlays mapping.

The below table outlines the purpose of each mapped overlay.

Overlay	Purpose
Bushfire Management Overlay	<ul style="list-style-type: none"> <li>To ensure that the development of land prioritises the protection of human life and strengthens community resilience to bushfire.</li> <li>To identify areas where the bushfire hazard warrants bushfire protection measures to be implemented.</li> <li>To ensure development is only permitted where the risk to life and property from bushfire can be reduced to an acceptable level.</li> </ul>
Environmental Significance Overlay	<ul style="list-style-type: none"> <li>To identify areas where the development of land may be affected by environmental constraints.</li> <li>To ensure that development is compatible with identified environmental values.</li> </ul>
Erosion Management Overlay	<ul style="list-style-type: none"> <li>To protect areas prone to erosion, landslip, other land degradation or coastal processes by minimising land disturbance and inappropriate development.</li> </ul>



Overlay	Purpose
Salinity Management Overlay	<ul style="list-style-type: none"><li>• To identify areas subject to saline ground water discharge or high ground water recharge.</li><li>• To facilitate the stabilisation of areas affected by salinity.</li><li>• To encourage revegetation of areas which contribute to salinity.</li><li>• To encourage development to be undertaken in a manner which brings about a reduction in salinity recharge.</li><li>• To ensure development is compatible with site capability and the retention of vegetation and complies with the objectives of any salinity management plan for the area.</li><li>• To prevent damage to buildings and infrastructure from saline discharge and high water table.</li></ul>
Significant Landscape Overlay	<ul style="list-style-type: none"><li>• To identify significant landscapes.</li><li>• To conserve and enhance the character of significant landscapes.</li></ul>
Vegetation Protection Overlay	<ul style="list-style-type: none"><li>• To protect areas of significant vegetation.</li><li>• To ensure that development minimises loss of vegetation.</li><li>• To preserve existing trees and other vegetation.</li><li>• To recognise vegetation protection areas as locations of special significance, natural beauty, interest and importance.</li><li>• To maintain and enhance habitat and habitat corridors for indigenous fauna.</li><li>• To encourage the regeneration of native vegetation.</li></ul>

## Mapping supplement: Coastal hazards

### Data

Name	Layer name	Source	Link
10% AEP Gippsland Lakes flood extent - 0.0 m sea level rise	GL_10AEP_MSL_EXTENT	Gippsland Lakes/90 Mile Beach LCHA Project (Water Technology, 2014)	<a href="https://discover.data.vic.gov.au/dataset/gippsland-lakes-10-aep-msl-inundation2">https://discover.data.vic.gov.au/dataset/gippsland-lakes-10-aep-msl-inundation2</a>
10% AEP Gippsland Lakes flood extent - 0.2 m sea level rise	GL_10AEP_20CMSLR_EXTENT		<a href="https://discover.data.vic.gov.au/dataset/gippsland-lakes-10-aep-0-2m-slr-inundation1">https://discover.data.vic.gov.au/dataset/gippsland-lakes-10-aep-0-2m-slr-inundation1</a>
10% AEP Gippsland Lakes flood extent - 0.4 m sea level rise	GL_10AEP_40CMSLR_EXTENT		<a href="https://discover.data.vic.gov.au/dataset/gippsland-lakes-10-aep-0-4m-slr-inundation">https://discover.data.vic.gov.au/dataset/gippsland-lakes-10-aep-0-4m-slr-inundation</a>
10% AEP Gippsland Lakes flood extent - 0.8 m sea level rise	GL_10AEP_80CMSLR_EXTENT		<a href="https://discover.data.vic.gov.au/dataset/gippsland-lakes-10-aep-0-8m-slr-inundation3">https://discover.data.vic.gov.au/dataset/gippsland-lakes-10-aep-0-8m-slr-inundation3</a>
Lake shoreline erosion hazard extent - 0.8 m sea level rise	GL_SHORE_HAZARD_EXTENT		<a href="https://discover.data.vic.gov.au/dataset/gippsland-lakes-shore-hazard-extent2">https://discover.data.vic.gov.au/dataset/gippsland-lakes-shore-hazard-extent2</a>
Outer barrier hazard extent	GL_COAST_HAZARD_EXTENT		<a href="https://discover.data.vic.gov.au/dataset/gippsland-lakes-coastal-hazard-extent1">https://discover.data.vic.gov.au/dataset/gippsland-lakes-coastal-hazard-extent1</a>
0.0 m sea level rise (2009 baseline)	SLR00CM_2009	Victorian Coastal Inundation Dataset (DELWP, 2009)	<a href="https://discover.data.vic.gov.au/dataset/victorian-coastal-inundation-sea-level-rise-20092">https://discover.data.vic.gov.au/dataset/victorian-coastal-inundation-sea-level-rise-20092</a>
0.2 m sea level rise	SLR20CM_2040		
0.47 m sea level rise	SLR47CM_2070		
0.82 m sea level rise	SLR82CM_2100		
1% AEP storm tide inundation – 0.82 m sea level rise	SLR82CM_ST_2100		
Erosion vulnerability	Victorian_Coastline (within Erosion_Vulnerability geopackage)	Statewide Victorian Coastal Hazard Assessment (DELWP, 2017)	<a href="https://discover.data.vic.gov.au/dataset/statewide-victorian-coastal-hazard-assessment-2017-east-gippsland-cma2">https://discover.data.vic.gov.au/dataset/statewide-victorian-coastal-hazard-assessment-2017-east-gippsland-cma2</a>

## Further information

Available coastal hazard mapping for each locality is presented. Coastal hazards include:

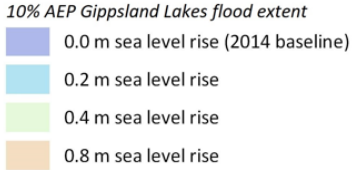
- Temporary inundation – flooding related to storms and a combination of river inflows (catchment rainfall), wind, coastal storm surge and tides.
- Sea level rise – areas likely to be regularly or permanently inundated by tides as sea levels rise
- Erosion – movement of sand and sediment which can be:
  - Short term erosion (storm bite) – event based erosion and recovery
  - Long term erosion (recession) – progressive retreat of the shoreline position over time















**AEP – Annual Exceedance Probability**  
 On average, the probability of an event occurring in any given year. A higher AEP means it is more likely the event will occur in any one year.

Coastal modelling of these hazards provides coastal hazard extents (areas). The main sources of this information for the CMMP are:

- Gippsland Lakes/90 Mile Beach Local Coastal Hazard Assessment (LCHA) Project (Water Technology, 2014)
- Statewide coastal hazard data as part of:
  - Victorian Governments Future Coasts Project (2009)
  - Victorian Coastal Hazard Assessment (2017)

The modelling and mapping from these studies use different methods and can result in different hazard extents. Coastal hazard extents indicate areas that may be impacted by coastal processes (flooding, erosion, etc.). Extents are indicative only, and do not necessarily represent a permanent loss of coastal land. The hazard mapping presented is summarised below.

Localities	Study	Mapped hazard	Description	Legend
Gippsland Lakes, including Paynesville, Newlands Arm, Raymond Island, Eagle Point,	Gippsland Lakes / 90 Mile Beach LCHA (Water Technology 2014)	Temporary inundation - 10% AEP Gippsland Lakes flood extent, with 0.0 m, 0.2 m, 0.4 m, and 0.8 m sea level rise	Modelled areas of inundation from a flood event that has a 10% chance of happening in any given year. Flood level frequency in the Gippsland Lakes may result from a combination of river inflows, wind, storm surge and tide.	<b>10% AEP Gippsland Lakes flood extent</b> 

Localities	Study	Mapped hazard	Description	Legend
Metung, Nungurner and Lakes Entrance to Lake Bunga		Lake shoreline erosion hazard extent with 0.8 m sea level rise	<p>A zone of likely shoreline hazard for the Gippsland Lakes shoreline with 0.8 m SLR, based on:</p> <ul style="list-style-type: none"> <li>Erosion susceptibility ratings and corresponding erosion rates</li> <li>Potential inundation extent</li> </ul> <p>Calculated erosion rates consider physical, environmental and biological factors. And range from &lt;0.1 m/yr (low) to 0.5 m/yr (very high).</p>	<p><i>Lake shoreline erosion hazard extent</i></p>  0.8 m sea level rise
Outer Barrier, including at Lakes Entrance		Outer Barrier hazard extent with 0.0 m, 0.2 m, 0.4 m, and 0.8 m sea level rise	<p>Hazard zone for the Outer Barrier including consideration of multiple processes. Indicates areas of barrier erosion (sand is lost and the barrier becomes thinner) and barrier translation (the entire barrier migrates inland).</p>	<p><i>Outer Barrier hazard extent</i></p>  0.0 m sea level rise (2014 baseline)  0.2 m sea level rise  0.4 m sea level rise  0.8 m sea level rise
East of Lake Bunga, including Lake Tyers Beach, Marlo, Bemm River and Mallacoota	Victorian Coastal Inundation Dataset (DELWP, 2009)	Sea level rise of 0.0 m, 0.2 m, 0.47 m, and 0.82 m	<p>Modelled areas of regular inundation from tides with various sea level rise scenarios, from a 2009 baseline. A simple 'bathtub' modelling approach was used. Where projected increase in water levels are projected, based on elevation, like filling up a bathtub or bucket.</p>	<p><i>Sea level rise<sup>^</sup></i></p>  0.0 m sea level rise (2009 baseline)  0.2 m sea level rise  0.47 m sea level rise  0.82 m sea level rise
		Temporary inundation – 1% AEP storm tide inundation with 0.82 m sea level rise	<p>Modelled areas of storm tide inundation from an event that has a 1% chance of happening in any given year, with increased wind forcing factor of 19% and 0.82 m sea level rise from a 2009 baseline.</p>	<p><i>1% AEP storm tide inundation<sup>^</sup></i></p>  0.82 m sea level rise
	Victorian Coastal Hazard Assessment (DELWP, 2017)	Erosion vulnerability	<p>Vulnerability scores for each 50 m segment of coastline from very low to very high. The score combines factors of exposure, sensitivity and adaptive capacity which included consideration of coastline types, orientation, wave energy, erodibility, sediment movement, erosion impact and level of adaptive capacity through engineering structure, vegetation or reefs.</p>	<p><i>Erosion vulnerability<sup>~</sup></i></p>  Low  Moderate  High  Very High

## Mapping supplement: Coastal protection and drainage infrastructure

### Data

Name	Layer name	Source	Link
Protection structures (includes breakwaters, groynes, revetments, seawalls, wharfs and other structures)	COAST_PROTECTION_STRUCT_LINE	DEECA	<a href="https://discover.data.vic.gov.au/dataset/coastal-protection-structures">https://discover.data.vic.gov.au/dataset/coastal-protection-structures</a>
Stormwater pits	Stormwater_Pits	EGSC	Council supplied
Stormwater pipes	Stormwater_Pipes	EGSC	Council supplied

### Further information

#### *Coastal protection structures:*

This dataset was originally created in 2011 using aerial photography. The dataset has been further reviewed in 2012 and 2017.

#### *Stormwater infrastructure:*

East Gippsland Shire Council are aware that mapped stormwater infrastructure may not be fully representative of asset locations. Additional assets may be present. Asset locations should always be confirmed with relevant authorities before any works at a site.

## Mapping supplement: Recreation and transport

### Data

Name	Layer name	Source	Link
Activity node	Activity and recreation nodes	Alluvium	
Recreation node	Activity and recreation nodes	Alluvium	
Industrial node	Activity and recreation nodes	Alluvium	
Boat mooring	VIC_BOAT_MOORING_POINTS	DEECA	<a href="https://discover.data.vic.gov.au/dataset/boat-moorings-along-the-victorian-coast">https://discover.data.vic.gov.au/dataset/boat-moorings-along-the-victorian-coast</a>
Boat ramp	Fishing_Platform	EGSC	Council supplied
Slipway	BOAT_ACCESS_POINTS	DEECA	<a href="https://discover.data.vic.gov.au/dataset/coastal-boat-access-points-boat-ramps-boat-launches-boat-slipways">https://discover.data.vic.gov.au/dataset/coastal-boat-access-points-boat-ramps-boat-launches-boat-slipways</a>
Marinas and jetties	Marinas_Jetties	EGSC	Council supplied
Playgrounds	Playground	EGSC	Council supplied
Community facilities	CoMFacilities	EGSC	Council supplied
Caravan parks	FOI_POLYGON	DEECA	<a href="https://discover.data.vic.gov.au/dataset/vicmap-features-features-of-interest-foi-polygon">https://discover.data.vic.gov.au/dataset/vicmap-features-features-of-interest-foi-polygon</a>
Education complex	FOI_POLYGON	DEECA	<a href="https://discover.data.vic.gov.au/dataset/vicmap-features-features-of-interest-foi-polygon">https://discover.data.vic.gov.au/dataset/vicmap-features-features-of-interest-foi-polygon</a>
Landfill	FOI_POLYGON	DEECA	<a href="https://discover.data.vic.gov.au/dataset/vicmap-features-features-of-interest-foi-polygon">https://discover.data.vic.gov.au/dataset/vicmap-features-features-of-interest-foi-polygon</a>
Quarry	FOI_POLYGON	DEECA	<a href="https://discover.data.vic.gov.au/dataset/vicmap-features-features-of-interest-foi-polygon">https://discover.data.vic.gov.au/dataset/vicmap-features-features-of-interest-foi-polygon</a>
Treatment plant	FOI_POLYGON	DEECA	<a href="https://discover.data.vic.gov.au/dataset/vicmap-features-features-of-interest-foi-polygon">https://discover.data.vic.gov.au/dataset/vicmap-features-features-of-interest-foi-polygon</a>
Bowling green	FOI_Polygon_Reserves	EGSC	Council supplied
Golf course	FOI_Polygon_Reserves	EGSC	Council supplied
Netball court	FOI_Polygon_Reserves	EGSC	Council supplied
Reserve (park)	FOI_Polygon_Reserves and Park_Areas	EGSC	Council supplied



Name	Layer name	Source	Link
Sports ground	FOI_Polygon_Reserves	EGSC	Council supplied
Tennis court	FOI_Polygon_Reserves	EGSC	Council supplied
Protected areas	CAPAD2020_terrestrial	Department of Climate Change, Energy, Environment and Water	<a href="https://fed.dcceew.gov.au/search?q=capad2020">https://fed.dcceew.gov.au/search?q=capad2020</a>
Roads	tr_roads	DEECA	<a href="https://discover.data.vic.gov.au/dataset/vicmap-transport-road-line">https://discover.data.vic.gov.au/dataset/vicmap-transport-road-line</a>
Footpath	Footpath	EGSC	Council supplied
Trail	Trail	EGSC	Council supplied
Creeks and waterways	Watercourse_lines	EGSC	Council supplied

## Further information

### *Activity and recreation nodes:*

This dataset was created by Alluvium specifically for the East Gippsland Shire Council Coastal and Marine Management Plan. The nodes represent existing and future activity centres, recreation and industrial developments around the marine and coastal environment. They were strategically spatially defined and mapped for the relevant coastal communities.

## Mapping supplement: Planning scheme zones

### Data

Name	Layer name	Source	Link
Planning Scheme Zone Polygon	PLANZONE	DEECA	<a href="https://discover.data.vic.gov.au/dataset/vicmap-planning-planning-scheme-zone-polygon">https://discover.data.vic.gov.au/dataset/vicmap-planning-planning-scheme-zone-polygon</a>

Also available at <https://mapshare.vic.gov.au/vicplan/>

### Further information

All land is subject to a zone. The planning scheme zones land for particular uses, for example, residential, industrial, commercial or other. The zones are listed in the planning scheme and each zone has a purpose and set of requirements. This information describes if a planning permit is required, and the matters that the council must consider before deciding to grant a permit. The below table outlines the purpose of each mapped zone.

Zone	Purpose
Commercial 1 zone	<ul style="list-style-type: none"> <li>To create vibrant mixed use commercial centres for retail, office, business, entertainment and community uses.</li> <li>To provide for residential uses at densities complementary to the role and scale of the commercial centre.</li> </ul>
Commercial 2 zone	<ul style="list-style-type: none"> <li>To encourage commercial areas for offices, appropriate manufacturing and industries, bulky goods retailing, other retail uses, and associated business and commercial services.</li> <li>To ensure that uses do not affect the safety and amenity of adjacent, more sensitive uses.</li> </ul>
Farming zone	<ul style="list-style-type: none"> <li>To provide for the use of land for agriculture.</li> <li>To encourage the retention of productive agricultural land.</li> <li>To ensure that non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture.</li> <li>To encourage the retention of employment and population to support rural communities.</li> <li>To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.</li> <li>To provide for the use and development of land for the specific purposes identified in a schedule to this zone</li> </ul>



Zone	Purpose
General residential zone	<ul style="list-style-type: none"> <li>To encourage development that respects the neighbourhood character of the area.</li> <li>To encourage a diversity of housing types and housing growth particularly in locations offering good access to services and transport.</li> <li>To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.</li> </ul>
Industrial 1 zone	<ul style="list-style-type: none"> <li>To provide for manufacturing industry, the storage and distribution of goods and associated uses in a manner which does not affect the safety and amenity of local communities.</li> </ul>
Industrial 3 zone	<ul style="list-style-type: none"> <li>To provide for industries and associated uses in specific areas where special consideration of the nature and impacts of industrial uses is required or to avoid inter-industry conflict.</li> <li>To provide a buffer between the Industrial 1 Zone or Industrial 2 Zone and local communities, which allows for industries and associated uses compatible with the nearby community.</li> <li>To allow limited retail opportunities including convenience shops, small scale supermarkets and associated shops in appropriate locations.</li> <li>To ensure that uses do not affect the safety and amenity of adjacent, more sensitive land uses.</li> </ul>
Low density residential zone	<ul style="list-style-type: none"> <li>To provide for low-density residential development on lots which, in the absence of reticulated sewerage, can treat and retain all wastewater.</li> </ul>
Mixed use zone	<ul style="list-style-type: none"> <li>To provide for a range of residential, commercial, industrial and other uses which complement the mixed-use function of the locality.</li> <li>To provide for housing at higher densities.</li> <li>To encourage development that responds to the existing or preferred neighbourhood character of the area.</li> <li>To facilitate the use, development and redevelopment of land in accordance with the objectives specified in a schedule to this zone.</li> </ul>
Public conservation and resource zone	<ul style="list-style-type: none"> <li>To protect and conserve the natural environment and natural processes for their historic, scientific, landscape, habitat or cultural values.</li> <li>To provide facilities which assist in public education and interpretation of the natural environment with minimal degradation of the natural environment or natural processes.</li> <li>To provide for appropriate resource based uses.</li> </ul>
Public park and recreation zone	<ul style="list-style-type: none"> <li>To recognise areas for public recreation and open space.</li> <li>To protect and conserve areas of significance where appropriate.</li> <li>To provide for commercial uses where appropriate.</li> </ul>
Public use zone (including cemetery/crematorium, education, local government, other public use, service and utility)	<ul style="list-style-type: none"> <li>To recognise public land use for public utility and community services and facilities.</li> <li>To provide for associated uses that are consistent with the intent of the public land reservation or purpose.</li> </ul>



Zone	Purpose
Rural conservation zone	<ul style="list-style-type: none"> <li>• To conserve the values specified in a schedule to this zone.</li> <li>• To protect and enhance the natural environment and natural processes for their historic, archaeological, and scientific interest, landscape, faunal habitat and cultural values.</li> <li>• To protect and enhance natural resources and the biodiversity of the area.</li> <li>• To encourage development and use of land which is consistent with sustainable land management and land capability practices, and which takes into account the conservation values and environmental sensitivity of the locality.</li> <li>• To provide for agricultural use consistent with the conservation of environmental and landscape values of the area.</li> <li>• To conserve and enhance the cultural significance and character of open rural and scenic non-urban landscapes.</li> </ul>
Rural living zone	<ul style="list-style-type: none"> <li>• To provide for residential use in a rural environment.</li> <li>• To provide for agricultural land uses which do not adversely affect the amenity of surrounding land uses.</li> <li>• To protect and enhance the natural resources, biodiversity and landscape and heritage values of the area.</li> <li>• To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.</li> </ul>
Special use zone	<ul style="list-style-type: none"> <li>• To recognise or provide for the use and development of land for specific purposes as identified in a schedule to this zone.</li> </ul>
Township zone	<ul style="list-style-type: none"> <li>• To provide for residential development and a range of commercial, industrial and other uses in small towns.</li> <li>• To encourage development that respects the neighbourhood character of the area.</li> <li>• To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.</li> </ul>
Transport zone	<ul style="list-style-type: none"> <li>• To provide for an integrated and sustainable transport system.</li> <li>• To identify transport land use and land required for transport services and facilities.</li> <li>• To provide for the use and development of land that complements, or is consistent with, the transport system or public land reservation.</li> <li>• To ensure the efficient and safe use of transport infrastructure and land comprising the transport system.</li> </ul>

## Mapping supplement: Planning overlays

### Data

Name	Layer name	Source	Link
Planning Scheme Overlay Polygon	PLANOVERLAY	DEECA	<a href="https://discover.data.vic.gov.au/dataset/vicmap-planning-planning-scheme-overlay-polygon1">https://discover.data.vic.gov.au/dataset/vicmap-planning-planning-scheme-overlay-polygon1</a>

Also available at <https://mapshare.vic.gov.au/vicplan/>

### Further information

In addition to planning scheme zones (see above), the planning scheme may show that a piece of land has an overlay affecting it. Not all land has an overlay. Some land may be affected by more than one overlay. If an overlay applies, the land will have some special feature such as a heritage building, significant vegetation or flood risk. The overlay information will indicate if a planning permit is required for the construction of a building or other change to the land. It will set out requirements for subdivision, and buildings and works that apply in addition to the requirements of the zone.

This overlays map shows those overlays relevant to design, development, heritage, land subject to inundation and other planning overlays.

The below table outlines the purpose of each mapped overlay.

Overlay	Purpose
Design and Development Overlay	<ul style="list-style-type: none"> <li>To identify areas which are affected by specific requirements relating to the design and built form of new development.</li> </ul>
Development Contributions Plan Overlay	<ul style="list-style-type: none"> <li>Prepare development contributions plans and infrastructure contributions plans, under the Planning and Environment Act 1987, to manage contributions towards infrastructure.</li> <li>Collect development contributions on the basis of approved development and infrastructure contributions plans.</li> <li>Require annual reporting by collecting and development agencies to monitor the collection and expenditure of levies and the delivery of infrastructure.</li> </ul>
Development Plan Overlay	<ul style="list-style-type: none"> <li>To identify areas which require the form and conditions of future use and development to be shown on a development plan before a permit can be granted to use or develop the land.</li> <li>To exempt an application from notice and review if a development plan has been prepared to the satisfaction of the responsible authority.</li> </ul>



Overlay	Purpose
Environmental Audit Overlay	<ul style="list-style-type: none"> <li>To ensure that potentially contaminated land is suitable for a use which could be significantly adversely affected by any contamination.</li> </ul>
Heritage Overlay	<ul style="list-style-type: none"> <li>To conserve and enhance heritage places of natural or cultural significance.</li> <li>To conserve and enhance those elements which contribute to the significance of heritage places.</li> <li>To ensure that development does not adversely affect the significance of heritage places.</li> <li>To conserve specified heritage places by allowing a use that would otherwise be prohibited if this will demonstrably assist with the conservation of the significance of the heritage place.</li> </ul>
Incorporated Plan Overlay	<ul style="list-style-type: none"> <li>To identify areas which require:</li> <li>The form and conditions of future use and development to be shown on an incorporated plan before a permit can be granted to use or develop the land.</li> <li>A planning scheme amendment before the incorporated plan can be changed.</li> <li>To exempt an application from notice and review if it is generally in accordance with an incorporated plan.</li> </ul>
Land Subject to Inundation Overlay	<ul style="list-style-type: none"> <li>To identify flood prone land in a riverine or coastal area affected by the 1 in 100 (1 per cent Annual Exceedance Probability) year flood or any other area determined by the floodplain management authority.</li> <li>To ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, responds to the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.</li> <li>To minimise the potential flood risk to life, health and safety associated with development.</li> <li>To reflect a declaration under Division 4 of Part 10 of the Water Act, 1989.</li> <li>To protect water quality and waterways as natural resources by managing urban stormwater, protecting water supply catchment areas, and managing saline discharges to minimise the risks to the environmental quality of water and groundwater.</li> <li>To ensure that development maintains or improves river, marine, coastal and wetland health, waterway protection and floodplain health.</li> </ul>
Public Acquisition Overlay	<ul style="list-style-type: none"> <li>To identify land which is proposed to be acquired by a Minister, public authority, or municipal council.</li> <li>To reserve land for a public purpose and to ensure that changes to the use or development of the land do not prejudice the purpose for which the land is to be acquired.</li> <li>To designate a Minister, public authority or municipal council as an acquiring authority for land reserved for a public purpose.</li> </ul>
Restructure Overlay	<ul style="list-style-type: none"> <li>To identify old and inappropriate subdivisions which are to be restructured.</li> <li>To preserve and enhance the amenity of the area and reduce the environmental impacts of dwellings and other development.</li> </ul>



## Mapping supplement: Land management arrangements

### Data

Name	Layer name	Source	Link
Public Land Management	PLM25	DEECA	<a href="https://discover.data.vic.gov.au/dataset/public-land-management-plm25">https://discover.data.vic.gov.au/dataset/public-land-management-plm25</a>
Jointly managed parks and reserves (Gunaikurnai Land and Waters Aboriginal Corporation and Parks Victoria)	PLM25 – new attribute added, based on understanding of Joint Management areas	DEECA	<a href="https://discover.data.vic.gov.au/dataset/public-land-management-plm25">https://discover.data.vic.gov.au/dataset/public-land-management-plm25</a> (attributes added, based on available public mapping of joint management areas.

### Further information

This layer is represented at a scale of 1:25 000. Any errors can be reported to [plm25.info@delwp.vic.gov.au](mailto:plm25.info@delwp.vic.gov.au).



## Mapping supplement: Management action maps

### Data

Name	Layer name	Source	Link
Boat mooring	VIC_BOAT_MOORING_POINTS	DEECA	<a href="https://discover.data.vic.gov.au/dataset/boat-moorings-along-the-victorian-coast">https://discover.data.vic.gov.au/dataset/boat-moorings-along-the-victorian-coast</a>
Slipway	BOAT_ACCESS_POINTS	DEECA	<a href="https://discover.data.vic.gov.au/dataset/coastal-boat-access-points-boat-ramps-boat-launches-boat-slipways">https://discover.data.vic.gov.au/dataset/coastal-boat-access-points-boat-ramps-boat-launches-boat-slipways</a>
Boat ramp	Fishing_Platform	EGSC	Council supplied
Playground	Playground	EGSC	Council supplied
Caravan Park	FOI_POLYGON	DEECA	<a href="https://discover.data.vic.gov.au/dataset/vicmap-features-features-of-interest-foi-polygon">https://discover.data.vic.gov.au/dataset/vicmap-features-features-of-interest-foi-polygon</a>
Activity node	Activity and recreation nodes	Alluvium	Created as part of project
Recreation node	Activity and recreation nodes	Alluvium	Created as part of project
Industrial node	Activity and recreation nodes	Alluvium	Created as part of project
Public land managed by East Gippsland Shire Council	PLM25	DEECA	<a href="https://discover.data.vic.gov.au/dataset/public-land-management-plm25">https://discover.data.vic.gov.au/dataset/public-land-management-plm25</a>
Public land managed by other authorities	PLM25	DEECA	<a href="https://discover.data.vic.gov.au/dataset/public-land-management-plm25">https://discover.data.vic.gov.au/dataset/public-land-management-plm25</a>
Jointly managed parks and reserves (Gunaikurnai Land and Water Aboriginal Corporation)	PLM25 – new attribute added, based on understanding of Joint Management areas	DEECA	<a href="https://discover.data.vic.gov.au/dataset/public-land-management-plm25">https://discover.data.vic.gov.au/dataset/public-land-management-plm25</a> (attributes added, based on available public mapping of joint management areas.
Natural resource management land parcels (high to very high priority)	EGCMN desktop prioritisation_rank	Ethos NRM	Council supplied
Roads	tr_roads	DEECA	<a href="https://discover.data.vic.gov.au/dataset/vicmap-transport-road-line">https://discover.data.vic.gov.au/dataset/vicmap-transport-road-line</a>
Ferry route	tr_roads	DEECA	<a href="https://discover.data.vic.gov.au/dataset/vicmap-transport-road-line">https://discover.data.vic.gov.au/dataset/vicmap-transport-road-line</a>
Footpath	Footpath	EGSC	Council supplied
Trail	Trail	EGSC	Council supplied
Creeks and waterways	Watercourse_lines	EGSC	Council supplied

## Further information

### *Public land management*

This layer is represented at a scale of 1:25 000. Any errors can be reported to [plm25.info@delwp.vic.gov.au](mailto:plm25.info@delwp.vic.gov.au). Various attributes of this layer have been utilised to map land management responsibilities.

Name	Attributes used to characterise the layer
Public land managed by East Gippsland Shire Council	Public land managed by East Gippsland Shire Council was defined using the attribute "MNG_SPEC" within the PLM25 layer. This attribute describes the land managers for particular parcels of public land. All parcels of land with the "MNG_SPEC" defined as Committees of Management (COM), COM Council or COM Local, were attributed to being public land managed by East Gippsland Shire Council.
Public land managed by other authorities	Public land managed by East Gippsland Shire Council was defined using the attribute "MNG_SPEC" within the PLM25 layer. This attribute describes the land managers for particular parcels of public land. All parcels of land with the "MNG_SPEC" defined as Committees of Management (COM) Parks Vicotria, Parks Vicotria, DELWP, Department of Education and Training, Department of Health, Department of Justice and Community, Department of Transport, Trustees COM or Water Authority, were defined as public land managed by other authorities.

### *Activity and recreation nodes:*

This dataset was created by Alluvium specifically for the East Gippsland Shire Council Coastal and Marine Management Plan. Nodes are described further in Section 3.7 and for each locality.

### *Natural resource management land parcels (high to very high priority)*

This layer was created by Ethos NRM for the EGSC NRM values project, which assessed the biodiversity values of all Council-managed reserves and ranked them on a scale of 1 to 5. This layer has been symbolised based on the attribute "P\_Rank" and showing council-managed reserves which have a "P\_Rank" value of 1 and 2, which reflect very high and high priority reserves, respectively.

## Attachment D: Additional mapping

### Additional coastal hazard mapping

Additional attachment aAs detailed in Attachment 3, there is a range of coastal hazard mapping available for the East Gippsland Shire Council CMMP localities for a range of coastal hazards. This includes Statewide information (as part of the Victorian State Governments 'Future Coasts' program) and the Gippsland Lakes – 90 Mile Beach Local Coastal Hazard Assessment (LCHA; Water Technology, 2014). The LCHA provides information for localities within the Gippsland Lakes and fronting 90-Mile Beach, east to Lakes Entrance. This information includes a range of hazard types, sea level rise and storm event (Annual Exceedance Probability) scenarios.

Table 29 summarises the available data and the scenarios mapped in the CMMP. Additional mapping of the Gippsland Lakes LCHA 1% AEP and 10% AEP storm tide inundation mapping for 0.0 m and 0.2 m sea level rise scenarios for Lakes Entrance and Paynesville is presented below.

Table 29. Available coastal hazard information for the CMMP.

Study	Scenario	Sea level rise (from baseline)								
		0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
<b>STORM TIDE INUNDATION</b>										
Gippsland Lakes – 90 Mile Beach LCHA	Storm tide 10% AEP	✓		✓		✓				✓
	Storm tide 1% AEP	✓		✓						
Future Coasts / Statewide	Storm tide 1% AEP + wind forcing*	✓		✓			✓#			✓#
<b>PERMANENT INUNDATION</b>										
Gippsland Lakes – 90 Mile Beach LCHA	n/a – covered in erosion information									
Future Coasts / Statewide	Sea level rise*	✓		✓			✓#			✓#
<b>OPEN COAST EROSION</b>										
Gippsland Lakes – 90 Mile Beach LCHA	Outer barrier hazard extent	✓		✓		✓				✓
	Shore erosion susceptibility of lakes									✓
Future Coasts / Statewide	n/a – qualitative data only									

- ✓ Data presented in CMMP for localities inside the Gippsland Lakes
- ✓ Data presented in CMMP for localities outside the Gippsland Lakes
- ✓ Data presented for Paynesville and Lakes Entrance in supplementary mapping (below)
- ✓ Available data not presented.

\*Simplistic 'bathtub' or static modelling approach

#Future Coasts SLR of 0.47 m and 0.82 m considered comparable with 0.5 m and 0.8 m, respectively.

## Data

Name	Layer name	Source	Link
10% AEP Gippsland Lakes flood extent - 0.0 m sea level rise	GL_10AEP_MSL_EXTENT	Gippsland Lakes/90 Mile Beach LCHA Project (Water Technology, 2014)	<a href="https://discover.data.vic.gov.au/dataset/gippsland-lakes-10-aep-msl-inundation2">https://discover.data.vic.gov.au/dataset/gippsland-lakes-10-aep-msl-inundation2</a>
10% AEP Gippsland Lakes flood extent - 0.2 m sea level rise	GL_10AEP_20CMSLR_EXTENT		<a href="https://discover.data.vic.gov.au/dataset/gippsland-lakes-10-aep-0-2m-slr-inundation1">https://discover.data.vic.gov.au/dataset/gippsland-lakes-10-aep-0-2m-slr-inundation1</a>
1% AEP Gippsland Lakes flood extent - 0.0 m sea level rise	GL1AEPMSLEXTENT		<a href="https://discover.data.vic.gov.au/dataset/gippsland-lakes-1-aep-msl-inundation">https://discover.data.vic.gov.au/dataset/gippsland-lakes-1-aep-msl-inundation</a>
1% AEP Gippsland Lakes flood extent - 0.2 m sea level rise	GL1AEP20CMSLREXTENT		<a href="https://discover.data.vic.gov.au/dataset/gippsland-lakes-1-aep-0-2m-slr-inundation">https://discover.data.vic.gov.au/dataset/gippsland-lakes-1-aep-0-2m-slr-inundation</a>





## Further information

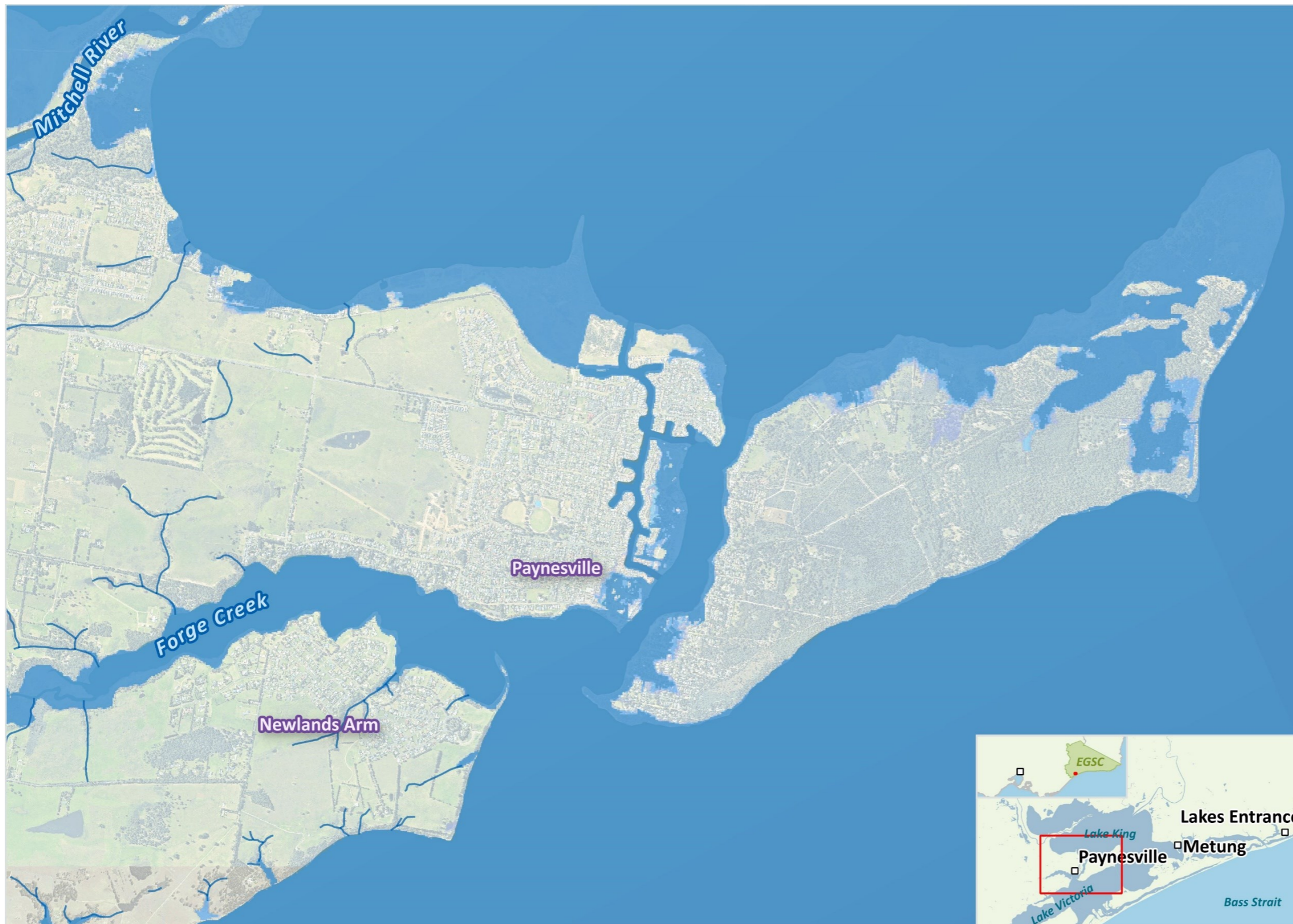
The Gippsland Lakes LCHA only provides 1% AEP storm tide inundation mapping for 0.0 m and 0.2 m sea level rise scenarios. The 10% AEP storm tide inundation scenario is mapped for all available localities in the CMMP mapping. Differences between the 10% AEP and 1% AEP scenario are seen in areas surrounding Paynesville and at Lakes Entrance. Additional mapping is provided below to present these differences.

### AEP – Annual Exceedance Probability

On average, the probability of an event occurring in any given year. A higher AEP means it is more likely the event will occur in any one year. For example, a 1% AEP even has a 1% chance of occurring in any given year. A 10% AEP event has a 10% chance of occurring in any given year. In this way, a 10% AEP event is generally less extreme and smaller in extent than a 1% AEP event.

Coastal hazard extents presented indicate areas that may be impacted by temporary storm tide inundation. Extents are indicative only, and do not necessarily represent a permanent loss of coastal land. The hazard mapping presented in this attachment is summarised below, with further detail in referenced technical reporting.

Localities	Study	Mapped hazard	Description	Legend
Paynesville, Newlands Arm, Eagle Point, Raymond Island (Figure 139) and Lakes Entrance (Figure 140)	Gippsland Lakes / 90 Mile Beach LCHA (Water Technology 2014)	Temporary inundation - 10% AEP Gippsland Lakes flood extent, with 0.0 m and 0.2 m, sea level rise	Modelled areas of inundation from a flood event that has a 10% chance of happening in any given year. Flood level frequency in the Gippsland Lakes may result from a combination of river inflows, wind, storm surge and tide.	10% AEP Catchment flood extent  0.0 m sea level rise (2014 baseline)  0.2 m sea level rise
		Temporary inundation - 1% AEP Gippsland Lakes flood extent, with 0.0 m and 0.2 m, sea level rise	Modelled areas of inundation from a flood event that has a 1% chance of happening in any given year. Flood level frequency in the Gippsland Lakes may result from a combination of river inflows, wind, storm surge and tide.	1% AEP Catchment flood extent  0.0 m sea level rise (2014 baseline)  0.2 m sea level rise



**Coastal Hazards**

Gippsland Lakes/90 Mile Beach LCHA\*

- 10% AEP Catchment flood extent
- 0.0 m sea level rise (2014 baseline)
  - 0.2 m sea level rise

- 1% AEP Catchment flood extent
- 0.0 m sea level rise (2014 baseline)
  - 0.2 m sea level rise

- Other features
- Creeks and waterways

AEP: Annual Exceedence Probability (AEP) is the probability of an event occurring in any given year.

Data sources:  
 \*Water Technology 2014 - Gippsland Lakes and 90 Mile Beach Local Coastal Hazard Assessment (LCHA) Project

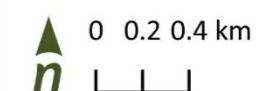


Figure 139. Additional Gippsland Lakes LCHA storm tide inundation mapping for Paynesville, Newlands Arm, Eagle Point and Raymond Island.



**Coastal Hazards**

Gippsland Lakes/90 Mile Beach LCHA\*

- 10% AEP Catchment flood extent
- 0.0 m sea level rise (2014 baseline)
  - 0.2 m sea level rise

- 1% AEP Catchment flood extent
- 0.0 m sea level rise (2014 baseline)
  - 0.2 m sea level rise

- Other features
- Creeks and waterways

AEP: Annual Exceedence Probability (AEP) is the probability of an event occurring in any given year.

Data sources:  
 \*Water Technology 2014 - Gippsland Lakes and 90 Mile Beach Local Coastal Hazard Assessment (LCHA) Project

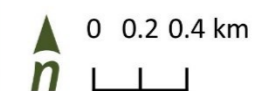


Figure 140. Additional Gippsland Lakes LCHA storm tide inundation mapping for Lakes Entrance.

## Additional Coastal Acid Sulphate Soils mapping

### Data

Name	Layer name	Source	Link
Coastal Acid Sulphate Soils	COASTALACIDSULPHATE SOILS	Department of Jobs, Skills, Industry and Regions	<a href="https://discover.data.vic.gov.au/dataset/coastal-acid-sulphate-soils">https://discover.data.vic.gov.au/dataset/coastal-acid-sulphate-soils</a>

### Further information

Coastal acid sulphate soils (CASS) occur naturally along many parts of Victoria's coastal zone and, if left undisturbed, are largely benign. However, if disturbed, i.e. water drains from the soil and air enters, they can react with oxygen and produce sulfuric acid. This can be detrimental to the environment with impacts that include acidification of water and soil, de-oxygenation of water, poor water quality, dissolution of soil, rock and concrete, and corrosion of metals. Sometimes impacts can be extreme, e.g. resulting in fish kills.

Spatial data representing Victorian coastal lands which have the potential to contain coastal acid sulphate soil (CASS), i.e. it is prospective for CASS has been mapped for East Gippsland localities. This spatial data is used for triggering an investigation of a site where proposed activities risk disturbing CASS. Disturbing CASS is defined as causing oxygen to penetrate earth material that contains metal oxides either in sulfidic material or sulfuric material. Sulfidic material is soil or sediment that contains metal sulphides which oxidise to sulfuric acid in the presence of oxygen. Sulfuric material has either partially or completely oxidised metal oxides. This data was created to help avoid disturbing potential CASS.

An explanation of Coastal Acid Sulphate Soils and their mapping is available on Victorian Resources Online:

[https://vro.agriculture.vic.gov.au/dpi/vro/vrosite.nsf/pages/soil\\_acid\\_sulfate\\_soils](https://vro.agriculture.vic.gov.au/dpi/vro/vrosite.nsf/pages/soil_acid_sulfate_soils)

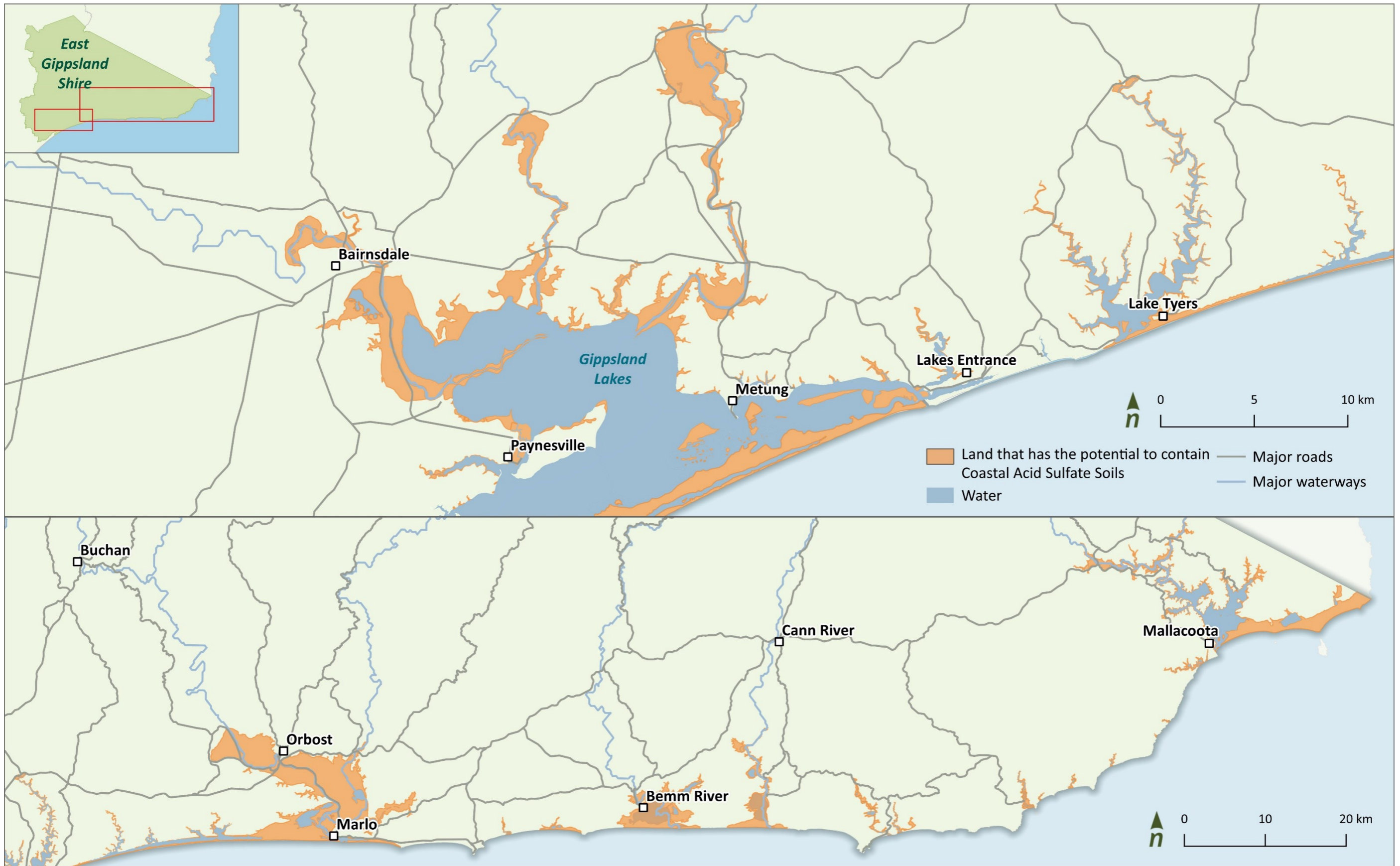


Figure 141. Land that has the potential to contain Coastal Acid Sulphate Soils across the East Gippsland coastal zone.