



**CENTRAL REGIONAL
COASTAL PLAN 2015-2020**



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Electronic copies of the plan are available
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The Central Coastal Board proudly
acknowledges Victoria's Aboriginal
communities and their rich culture; and pays
its respects to the Traditional Owners in the
Central Coastal Region. The Board also
recognises the intrinsic connection of
traditional owners to Country and
acknowledges their contribution in the
management of land, water and resources
management.

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Front Cover Top: St Kilda Harbour,
photo: Roberto Seba, Tourism Victoria.
Bottom from left to right: Mangroves at
Western Port. Cunningham Pier Geelong.
Point Lonsdale Pier and Lighthouse. Blue Devil
Fish, photo: Nicola Waldron. *The Beach, St Kilda*,
Victoria, c1920-1954 Rose Stereograph Co.

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MINISTER'S FOREWORD

The coast is close to the hearts of the many Victorians who live near it, or visit it, and enjoy all that it has to offer. Communities along the coastline are deeply connected to their local landscape and care about the future of the coast.

Our coastal environment is complex and constantly changing, and there are many pressures that need to be understood and managed better. As Minister and a Local Member of a coastal area, I appreciate how important it is to understand, protect and care for the things we love about the coast.

Victoria has a strong coastal planning and management framework, based on the Victorian Coastal Strategy (2014). The Central Coastal Board has developed this Regional Coastal Plan to build on that framework and outline how the Strategy should be put into practice.

This Plan will support government agencies, community and industry groups to work more collaboratively in managing the coast. It will help coastal managers and communities tackle challenges on the coast in their region more effectively, and with greater coordination. It will enable us to be more responsive and adaptable as pressures change over time, and our understanding of climate change implications improves.

The local knowledge, passion and enthusiasm of Victoria's coastal managers and communities is invaluable, and I look forward to working together to ensure that the diverse natural, social, cultural and economic values of the coast that we enjoy today remain for future generations.

**The Hon Lisa Neville MP
Minister for Environment, Climate
Change and Water**



CHAIR'S FOREWORD

The Central Coastal Board's vision is:

Treasuring the Central Coastal Region – a healthy and sustainable coast for current and future generations.

The Central Coastal Region, from Breamlea to Inverloch, covers nearly 1,000 kilometres of coastline. It includes the metropolis of Melbourne, the City of Greater Geelong, the peri-urban communities of the region, the two large bays of Port Phillip and Western Port and the region's open coastline and islands.

The region encompasses both public and private land and includes the foreshores, estuarine and marine environments and the hinterland and catchments that influence and impact it.

The region's coast is enjoyed by millions of residents and visitors, and this will increase as metropolitan Melbourne's current population of 4.5 million grows to 8 million by 2051. There is a need to strike the balance between maintaining functioning ecosystems and the social and economic benefits of future use and development. The coast, its marine and shore habitats, and our use and enjoyment of these areas will be affected by climate change, including a recognised increase in the mean sea level of 0.8m by 2100. It is already a highly modified coast.

This Plan provides a regional focus for all agencies and organisations with a responsibility for coastal management to interpret and implement the Victorian Coastal Strategy 2014 in the region. In particular, it will guide the development of coastal management plans for the length of the coast.

The Regional Coastal Plan is based upon the hierarchy of principles in the Strategy – protecting the natural environment, providing direction and delivering sustainable use to meet the needs and aspirations of present and future generations through integrated coastal zone management. Consistent with the Strategy, the Plan gives preference to improving, and increasing the utilisation of, existing developed sites over new development.

The Central Coastal Board has identified eight regional priorities for the Central Coastal Region:

1. Population growth – balancing access and valuing the natural environment;
2. Adapting to climate change and increased coastal hazards;
3. Integrating coastal planning and management;
4. Sustainable and equitable funding mechanisms for coastal infrastructure and management;
5. Implementing the Recreational Boating Facilities Framework;
6. Sustainable visitation and tourism infrastructure service through the development of a multi-level hierarchy;
7. Protecting significant coastal and marine ecosystems and habitats; and
8. Promoting leadership, co-ordination and capacity building.

The Central Coastal Board will use the Regional Coastal Plan to inform, engage and encourage the involvement of all persons and organisations involved in coastal planning and management to:

- reflect the regional priorities in their decisions;
- work together when they need to;
- identify and resolve systemic gaps and emerging issues; and
- together deliver the Board's vision for the region.

In parallel with the implementation of this Plan, the Victorian Coastal Strategy Implementation Coordinating Committee will be addressing some of the major issues identified for the coast. In addition, the Minister will be reviewing the *Coastal Management Act 1995* and developing a new Marine and Coastal Act. The knowledge gained in preparing and implementing this Plan will contribute to the Implementation Coordinating Committee and to the community consultation for the new Act.

The Board sincerely thanks the many organisations and people who have contributed to this Plan, and who on a daily basis contribute to ensuring the vision of the Victorian Coastal Strategy 2014: **A healthy coast, appreciated by all, now and in the future.**

Ross Kilborn
Chair, Central Coastal Board

PREPARING THE CENTRAL REGIONAL COASTAL PLAN

The process of preparing the Central Regional Coastal Plan comprised three phases:

1. preliminary planning, information gathering and identification of regional priorities;
2. development of a draft Plan for public consultation; and
3. finalising the plan in response to consultation.

As part of the first phase, an 'invitation to be involved' brochure was sent out to key stakeholders in March 2014 at the beginning of the planning process. It identified key questions to help focus feedback and guide submissions. It was followed by a workshop for local councils to further identify opportunities and gaps to address in the Plan. Key government agencies involved in managing the coast were also consulted.



Middle Brighton Beach
Photo: Werner Hennecke



Dolphins in Port
Phillip Bay
Photo: Searoad Ferries,
Tourism Victoria

The draft Regional Coastal Plan was released in February 2015. The Central Coastal Board held twelve formal meetings in Frankston, Geelong, Inverloch and Port Melbourne in February and March 2015 to provide further opportunities for consultation with stakeholders and the public. Many community groups attended, along with representatives from a wide cross-section of coastal management organisations, and mayors, executive officers and staff from the thirteen councils in the region (see Appendix 1).

Sixty-five written submissions were received with comments specific to the region, with another thirteen about state-wide issues. The Board reviewed these submissions and the feedback from face-to-face meetings to revise and finalise the Plan.

A range of issues were raised during the consultation for the initial planning and subsequent draft Plan. These helped refine the Plan and shape its eight priority actions. Some issues of local importance were raised, for example, designating areas for dogs on beaches. These issues are best dealt with in local coastal management plans.

Back Beach rock pools,
Sorrento
Photo: Ewen Bell,
Tourism Victoria



1 INTRODUCTION

1.1 What is the Regional Coastal Plan?

The Regional Coastal Plan for the Central Coastal Region is a Coastal Action Plan endorsed under part 3 of the *Coastal Management Act 1995*. Its contents meet the requirements of section 23 of that Act.

The Victorian Coastal Strategy 2014 provides the broad framework for managing the coast and for developing regional coastal plans and more local and specific coastal management plans (Figure 1). This Plan provides a regional framework for planning and decision-making on both public and freehold land at the local level. It also provides a focus for all agencies with responsibility for coastal management to act together to plan and manage the coast by:

- interpreting and implementing the Victorian Coastal Strategy 2014 and its hierarchy of principles at a regional scale;
- facilitating integration across jurisdictions to increase efficiency and effectiveness;
- identifying regional coastal values and strategic objectives (regional priorities) to be accounted for; and
- identifying solutions that address systemic gaps in coastal management.

The Plan provides a strong framework to support local planning and decision making on both public and private land. It aims to help people value and understand the coast. The Regional Coastal Plan will also provide the framework for agencies, community and industry groups working and engaging with decision makers on emerging strategic regional priorities for the Central Coastal Region.

As a statutory document, the Regional Coastal Plan has important links with other statutory instruments. As outlined in the Victorian Coastal Strategy 2014, the broader land use planning system is important for the implementation of the Strategy, regional coastal plans and coastal management plans (see Appendix 2). The relationship between these policies and plans is through:

- the State Planning Policy Framework which requires coastal planning to be consistent with the Strategy and relevant coastal action plans (including this Regional Coastal Plan); and
- sections of local planning schemes through Municipal Strategic Statements and Local Planning Policy Frameworks.



Keel boats on Port Phillip
Photo: Teri Dodds

The Plan's primary audiences are local government, committees of management, government agencies and peak bodies with a coastal focus. It has also been written to provide landowners, volunteer groups and coastal communities with an understanding of the framework for managing and protecting coastal values in the region, and how they can contribute to this outcome.

The principle of 'Integrated Coastal Zone Management' (ICZM) underpins the Central Regional Coastal Plan. ICZM is about working across a geographic area (land to sea), across different land tenures (public and private), and across organisations and jurisdictions (national, state, regional and local). ICZM is achieved through both formal and informal collaboration and coordination between the various groups using and managing the coast.

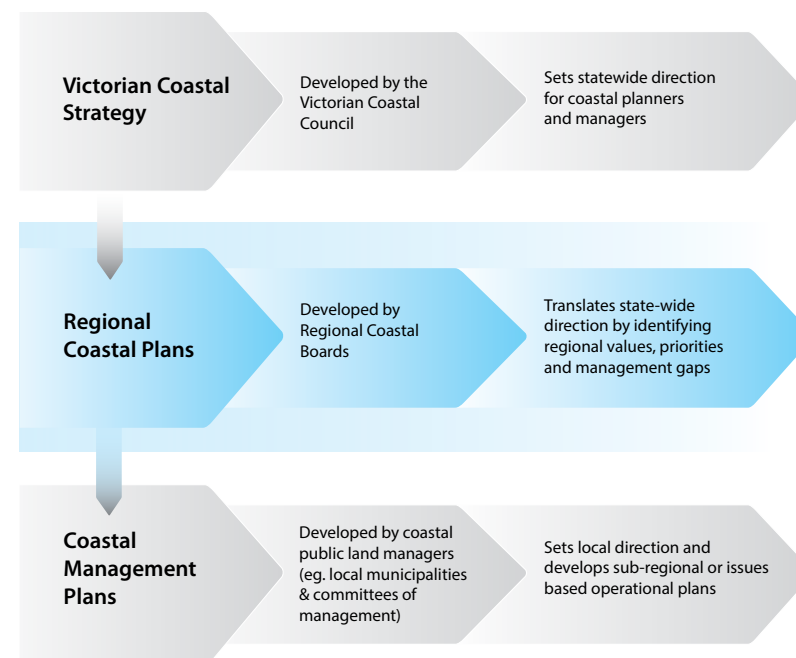


Figure 1: The three levels of planning for coastal management

The Plan has three parts:

- Chapters 2 and 3 provide an overview of the values of the Central Coastal Region and how they are changing;
- Chapters 4 to 9 set out the eight regional priorities that are a focus for action; and
- Chapter 10 explains how the plan will be implemented, including the process of monitoring, evaluating and reporting.

1.2 How the Regional Coastal Plan will be used

In line with the Victorian Coastal Strategy 2014 hierarchy of principles, the Regional Coastal Plan documents and describes key regional issues and strategic priorities. It links actions, those accountable, the outcomes to be achieved, and measures and reports on performance annually. The review period for the Plan is 2020.

This Plan takes a long-term and regional perspective.

The Regional Coastal Plan will build the evidence base to guide future planning and establish the foundations for the ongoing process of progressively improving management decisions. This will bring benefits in the future, including better targeted investment, improved coordination of management activities and promotion of best practice. The actions in the Plan have been developed to allow flexibility to adapt to new information and achieve the best outcomes for the coast. The Board will undertake a mid-term review of the Plan's implementation in 2018.

Importantly, the Board will use the Plan to work with other managers and stakeholders to increase understanding of the coast, protect coastal values and further improve management arrangements.



Sea All Dolphin Swims,
Queenscliff
Photo: Mark Chew,
Tourism Victoria

This Plan has been designed to set realistic expectations about what can be delivered, and by when. The Board anticipates that most of the key actions can be delivered within existing budgets of management agencies. However, additional funding will be needed to carry out some further planning and management steps, such as detailed coastal hazard studies and adaptation plans. Over the next five years the Plan provides the framework for Commonwealth, state, regional, local agencies and the private sector to work together on attracting funding to carry out this additional work. This is a state-wide issue raised in the Victorian Coastal Strategy 2014.



Sorrento Foreshore
Photo: Ewen Bell,
Tourism Victoria

The Plan will also guide development and implementation of coastal management plans. Where existing coastal action plans are still relevant, local managers may continue to use these plans. It is expected that over time these coastal action plans would transition into coastal management plans where needed.

During consultation for this Plan, many organisations and individuals expressed concern that funding is a limiting factor for managing the coast. The Regional Coastal Plan provides governments and coastal managers with priorities for strategic investment. Sustainable and equitable funding mechanisms are essential to enable coastal managers to meet their responsibilities and to better understand, protect and manage coastal values and assets.

Current revenue streams, such as income from parking, camping areas and caravan parks on Crown land, and leasing Crown land for other activities,

are important. However, land managers have different abilities to utilise opportunities, with some having limited or no options to generate funds locally. There are also inconsistencies in how the "user pays" principle is applied in the region.

The Central Coastal Board will participate in a review of funding arrangements by the Victorian Coastal Council and the Department of Environment, Land, Water and Planning, as outlined in the Victorian Coastal Strategy 2014.

Hierarchy of Principles

The Victorian Coastal Strategy 2014 supports the hierarchy of principles introduced in previous Strategies and also recognises that the foundation of coastal planning and management is a healthy coastal and marine environment. These principles give effect to the directions in the *Coastal Management Act 1995* and are included in the State Planning Policy Framework and in planning schemes throughout Victoria.

The principles are:

- Ensure the protection of significant environmental and cultural values;
- Undertake integrated planning and provide clear direction for the future; and
- Ensure the sustainable use of natural coastal resources.

Only when the above principles have been considered and addressed:

- Ensure development on the coast is located within existing modified and resilient environments where the demand for development is evident and any impacts can be managed sustainably.

The actions in this Regional Coastal Plan support these principles and work to make sure that decision making on the coast is guided by, and consistent with the Victorian Coastal Strategy 2014.

1.3 The role of the Central Coastal Board

The Central Coastal Board is a statutory planning and advisory body of community members with extensive experience and expertise in coastal matters. Appointed by the Minister for Environment, Climate Change and Water, it provides strategic guidance for managing the region's coast. The Board has specific functions, which are to:

- develop coastal action plans (including this overarching Regional Coastal Plan) and guidelines for coastal planning and management for the region;
- provide leadership in implementing the Victorian Coastal Strategy 2014, coastal action plans and coastal guidelines in the Central Coastal Region;
- monitor, evaluate and report on the Victorian Coastal Strategy 2014 and Regional Coastal Plan in the region;
- facilitate the involvement of individuals and organisations to participate in the planning and management of the coast in the region; and
- provide advice to the Minister for Environment, Water and Climate Change and the Victorian Coastal Council on coastal issues and development in the region.



Photo: Ross Kilborn

More broadly, the Board seeks to be an advocate for coastal issues. Where needed, it aims to raise difficult issues and questions to help resolve how best to manage and protect the region's coastal areas into the future. A key part of this is shaping future expectations about:

- how the coast, and the demands on it, will change over time;
- how to respond to those changes; and
- how to plan for and use the coast to protect its values.



Port Phillip Bay from Arthur's seat
Photo: Salahuddin Ahmad

1.4 What the Regional Coastal Plan covers

The Central Coastal Region comprises the areas of 13 local councils that form the administrative and physical interface of the catchment flows and influences on Port Phillip, Western Port and the region's open coast.

Importantly, in the Central Coastal Region it is both the region's hinterland (for example the greater metropolitan Melbourne and peri-urban area) and the large embayments of Port Phillip and Western Port that drive and influence the use and management of the region's coastline, estuarine and marine areas (see Figure 2).

Significant agricultural areas in the region's catchments, particularly around Werribee and Western Port, add to the diverse and complex land uses and pressures.

The term 'coast' encompasses both public and private land, and means:

- the marine environment - nearshore marine environment, the seabed, and waters out to the State limit of three nautical miles;
- foreshores - or coastal Crown land up to 200 m from the high water mark;
- coastal hinterland - land directly influenced by the sea or directly influencing the coastline and marine areas, and with critical impacts on the foreshore and nearshore environment;

- catchments - rivers and drainage systems that affect the coastal zone, including estuaries and wetlands; and
- atmosphere - near, around and over the coast as defined above.

Some key spatial characteristics of the region are:

- 993 kilometres¹ of coastline (inclusive of islands such as Phillip Island and French Island);
- 3600 square kilometres of marine waters and embayment (notably Port Phillip and Western Port);
- 20,246 square kilometres of catchment (Port Phillip and Western Port, Corangamite and West Gippsland catchment management authorities);
- 4.5 million resident population in the Central Coastal Region and its hinterland;
- in excess of 40 organisations managing the coast; and
- 13 local councils that form the region's coastline (see Figure 3).

¹ The length of coastline was calculated using the official coastline for Victoria (FR_FRAMEWORK_AREA_LINE, ANZLIC ID: ANZVI0803002894) which represents the state boundary zero metre contour coastline. It does include small islands such as Mud Island. It does not include rivers and estuaries such as the Yarra and Maribyrnong Rivers. For further information please go to <http://www.data.vic.gov.au>

The region's coast can be broadly characterised as:

- urban coast - intensively used public and freehold land, planned and managed for a wide range of use and development, including residential use, commercial activities, recreation, marinas and commercial ports;
- open coast - visitor and tourism destinations supported by services and infrastructure;
- natural coast - low impact use and development planned and managed to support and protect environmental values; and
- coastal waters and embayments - receptor of catchment inputs, boating, and water-based tourism and commercial shipping that is regulated and managed to protect the health and safe use of marine environments and marine protected areas.

These areas include coastal communities with defined town boundaries.



Figure 2 Central Coastal Region and region of influence

1.5 Working with other organisations

This Plan identifies lead and partner organisations for each action. The Board will work with these organisations to develop an implementation plan within six months of the Regional Coastal Plan being endorsed by the Minister. This will provide further detail about the process, the specific roles and responsibilities of each organisation, and the timing for each action in this Plan.

Managing the Central Coastal Region is complex. Many organisations are involved including 43 managers along the coastline (see Figure 8 on page 28). These organisations have their own planning processes that contribute to protecting coastal values. The Central Coastal Board will support and work with these organisations to coordinate planning activities and integrate management wherever possible. There may also be opportunities to work with industry groups and the private sector to improve management of the coast.

The Central Coastal Board will support actions in the regional catchment strategies and waterway strategies that aim to improve the condition of coastal values, particularly to maintain or improve water quality in estuaries, embayments and coastal waters.

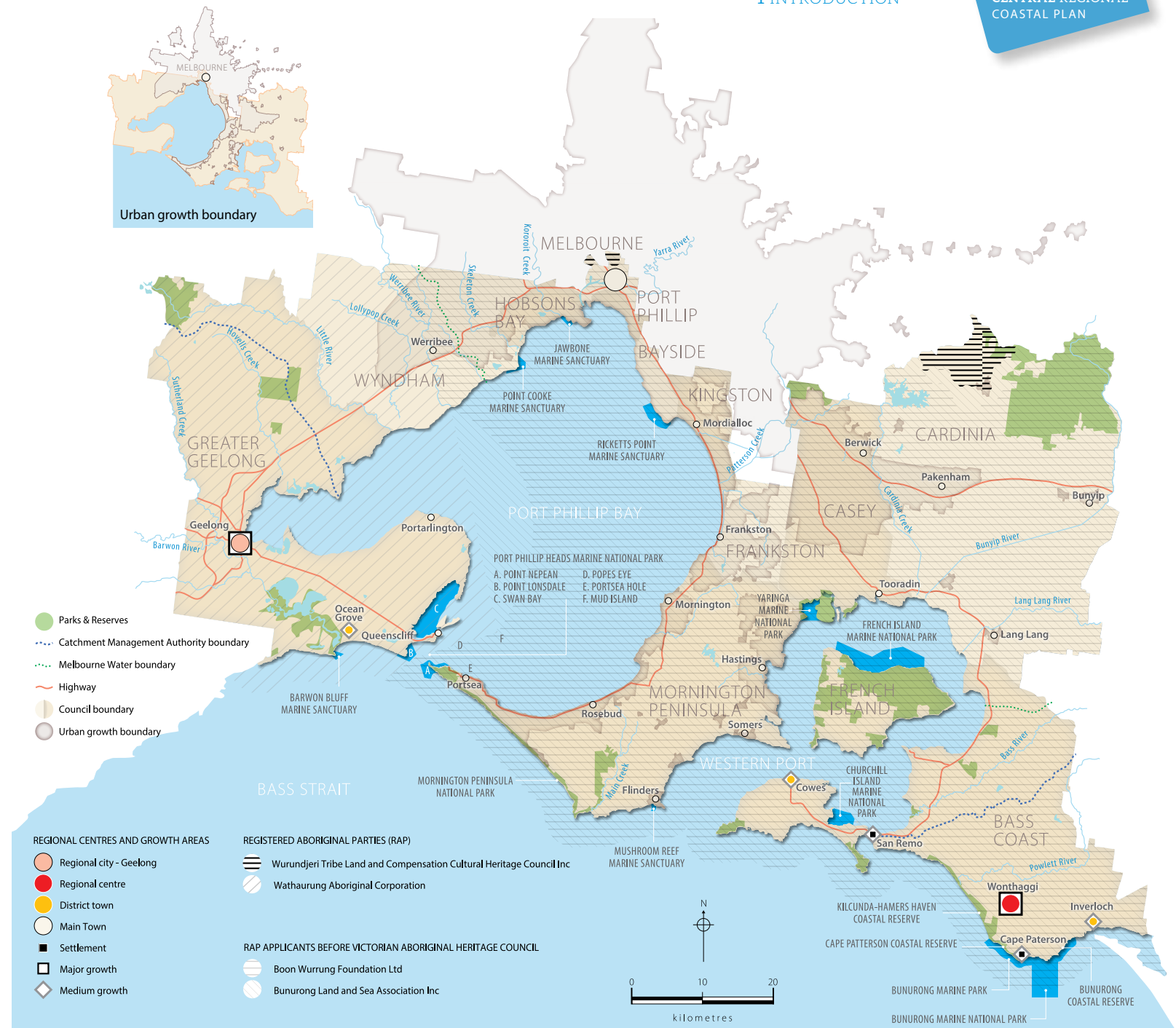


Figure 3 Melbourne's growth boundary, neighbouring regional growth centres, Registered Aboriginal Parties (RAP) and RAP applicants (Sources: Regional Growth Plans; Aboriginal Affairs Victoria)

2 VALUING AND UNDERSTANDING THE COAST

2.1 Bio-physical values

The Central Coastal Region provides a broad range of values to people. In many ways, the inherent natural features underpin many uses of coastal areas. This use brings pressures that can reduce the natural values and amenity, for example through loss of marine and terrestrial vegetation and habitat.

2.1.1 Coasts

The region's coastline has diverse bio-physical characteristics that provide benefits in the form of:

- recreational use;
- shoreline stabilisation;
- buffering for and adapting to coastal hazards and climate change;
- habitat protection and biodiversity; and
- landscape character and amenity.



Red knot on Mud Island
Photo: Annette Hatten



Little penguins on
Phillip Island

At an international level the region contains three Ramsar listed wetlands:

- Western Port (59,297 hectares which also includes the UNESCO Western Port Biosphere Reserve);
- Edithvale-Seafood Wetlands (261 hectares); and
- Port Phillip Bay (Western Shoreline) and Bellarine Peninsula (22,645 hectares) (see Figure 4).

Collectively, the Ramsar sites provide critical habitat for tens of thousands of migratory waders and water birds, and winter habitat for the critically endangered orange-bellied parrot.

The region includes Point Nepean, French Island and Mornington Peninsula national parks. Other regional

parks and reserves (for example, Phillip Island Nature Parks, North Western Port Nature Conservation Reserve, Jawbone Flora and Fauna Reserve, The Spit Wildlife Reserve, Point Cook Coastal Park and Lake Connewarre Wildlife Reserve) contribute to the protection of significant bio-physical values. The region also has extensive lengths of accessible foreshore and recreational beaches.

Most of the region's vegetation is highly modified. For example, the original vegetation of the threatened coastal Moonah woodland now only occurs in scattered remnants. This highlights the importance of protecting existing remnant stands of native vegetation wherever possible.

Estuaries form an important part of the bio-physical character of the coastline. Some of the key ones in the region are: Anderson Inlet, Balcombe Creek, Limeburners Bay and Barwon River estuaries. Estuaries are highly variable environments that from time to time undergo salinity changes due to the mixing of sea water with fresh water catchment flows. Important rivers in the region include the Barwon, Werribee, Maribyrnong, Yarra and Bass rivers.

The Victorian Waterway Management Strategy 2013 provides the framework for government, in partnership with the community, to manage rivers, estuaries and wetlands to support environmental, social, cultural and economic values for all to enjoy.



Above: Red octopus in
rock pools, Point
Lonsdale

2.1.2 Marine

The Central Coastal Region's marine area covers approximately 3600 square kilometres and includes the major embayments of Port Phillip and Western Port as well as the off-shore marine waters to three nautical miles. Important marine habitats within the region are represented within five marine national parks, five marine sanctuaries, nine marine special management areas and the Bunurong marine and coastal protected areas (see Figure 4).

The Victorian Bays and Inlets Bioregion includes both Port Phillip and Western Port, with diverse habitats including deep channels, seagrass meadows, mangroves and saltmarsh, and abundant fish fauna. Areas with high biodiversity and conservation values include:

- Popes Eye with diverse biodiversity;
- a distinctive reef habitat at Portsea Hole; and
- unique seagrass beds at Port Phillip Heads, Flinders and Bunurong.

Port Phillip is also home to resident and quite isolated communities of bottlenose and common dolphins.

The Central Victorian Bioregion from Cape Otway to west of Wilsons Promontory includes the region's open coast. Areas of high conservation value include:

- the marine community in the deep canyon at the entrance to Port Phillip;
- bull kelp at Barwon Bluff; and
- a large fur seal colony at Seal Rocks, Phillip Island.



Figure 4 Bio-physical values of the Central Coastal Region

The region also includes significant artificial habitats:

- South Channel Fort (white-faced storm petrels);
- Chinaman's Hat (Australian fur seals);
- St Kilda breakwater (Little penguins);
- Popes Eye, mentioned previously, important for nesting gannets; and
- many shipwrecks, particularly between Port Phillip Heads and Torquay.

The proximity of so many marine protected areas to a major population centre is unique on a global scale and presents the Central Coastal Region with a significant responsibility and set of challenges. Such protected areas are primarily managed for their ecological values, but also afford opportunities to provide social value through recreation (for example dive sites such as Popes Eye and Portsea Hole in Port Phillip) and community involvement in their management.

Potential threats to these protected marine areas, and the marine environment generally, include impacts from sediment, nutrients, toxicants and litter from catchments, oil spills, marine pest incursions, dredging and anticipated impacts from climate change.

2.2 Eco-system services

The natural coastal systems in the Central Coastal Region are of intrinsic value and provide a range of beneficial ecosystem services. Healthy coastal and marine ecosystems play important roles in providing services that help sustain both the ecological values of the ecosystems themselves and a variety of other values and uses for people. For example, mangroves protect against wave erosion, and sea grass beds act as nurseries for important fish species. Other benefits include:

- storm protection, erosion buffers, and flood and disease control;
- products from nature such as food and pharmaceuticals;
- habitat, biodiversity, nutrient cycling and biogeochemical services; and
- recreational opportunities, and education, aesthetics, amenity and spiritual values.

Coastal vegetation and sediments also provide important ecosystem services by sequestering significant amounts of carbon (known as "blue carbon") in mangrove forests, seagrass meadows and intertidal salt marshes.

2.3 Aboriginal cultural values

Aboriginal people have ongoing and strong connections with the coast and view the coastal lands as inseparable from the coastal waters: their stories of place, and the tens of thousands of years of physical evidence of their presence across the region remind us of these connections. Shell middens, camping places and scar trees dating back some 12,000 years are just a few physical examples of the long term connection of Aboriginal people to coastal areas in the region – a connection that continues today.

The current coastline wasn't always where it is now, and Traditional Owner interests and responsibilities extend to areas now inundated. Land and sea country is a term for the whole environment, integrating land, intertidal areas and sea, and including natural, heritage, material and spiritual components. This connection is the basis for maintaining cultural traditions and passing on knowledge across generations.

Indigenous people play an active role in managing natural resources particularly relating to 'sea country'. As custodians and owners (through Victorian legislation such as the *Aboriginal Heritage Act 2006* and the *Traditional Owner Settlement Act 2010*), Aboriginal people have responsibilities for country in a range of ways, encompassing natural resources and cultural heritage. Indigenous groups in the region include the Wathaurung, Wurundjeri, Boon Wurrung and Bunurong (see Figure 3 on page 9).

The Central Coastal Board supports incorporating cultural heritage and traditional knowledge into all coastal planning and management.



'i sea, i care'
ambassadors learning
from Traditional
Owners with a
smoking ceremony.
Photo: Jeff Weir

An Aboriginal shell
midden deposit from
Jawbone Flora and
Fauna Reserve,
Williamstown
Photo: Phillip
Wierzbowski



2.4 Social and historical values

These values include both historical connections and contemporary customs.

Victoria's first European settlement started at Sullivan Bay near Sorrento in 1803 – 30 years before Melbourne was founded. The 1852 Quarantine Station at Point Nepean played an important role in handling immigrants to the new settlement of Melbourne. Fifty heritage buildings remain from this era. A fort at The Heads and the artificial island of South Channel Fort were built in the 1880s as important parts of Victoria's defences.

The Central Coastal Region is important to past and newly arrived migrants. These communities contribute a rich fabric of cultures to the region. They are also a potential untapped source of enthusiasm in managing and protecting coastal values. For example, initiatives such as the Bilingual Coast Guides program support these communities to develop a greater understanding of the coast and a sense of custodianship.

Coastal areas give sense of place and identity for residents and visitors. This generates a strong connection to the coast for many people, which is reflected in the numerous community groups and individuals active in managing coastal areas.

In many places, the coastal landscape is a primary area for recreation and social involvement, and this contributes to the health and well-being of the community.



Cape Schanck
Lighthouse
Photo: Salahuddin
Ahmad



Brighton Bathing Boxes
Photo: Department of
Environment, Land,
Water and Planning

2.5 Coastal settings of significance

Coastal settings include the landscape types of the coastline, the underwater features of the marine environment and the vistas obtained both from land and water.

For much of the Central Coastal Region the coastal landscape is framed by built form. The views of Port Phillip and Melbourne's skyline from points on land (for example Williamstown, Pt Cook, Portarlington and Arthurs Seat) are a feature. Likewise there are picturesque views of Corio Bay and Geelong from Limeburners Point and of Phillip Island and Western Port from San Remo.

Bathing boxes are colourful icons of Port Phillip. They occupy a unique role in bayside beach life. The lighthouses along the coastal headlands provide a sense of place and have historical significance (for example Pt. Lonsdale, Queenscliff, Williamstown, Port Melbourne, Cape Schanck). The urban coast also has many piers, ports, marinas, yachting clubs, promenades and pathways contributing to an active coastline and waterways.

Natural landscapes within the region include the mangrove forests of Western Port, the Port Phillip Heads coast with views of Bass Strait and The Rip, and the impressive coastal scenery of Cape Woolamai and The Nobbies. Many locations around the bays provide a sense of isolation and 'semi-wilderness' despite the metropolis (for example Seaford or Somers) and are part of the cherished fabric of the region.

The Central Coastal Region has many sites of geomorphic and geological importance. The Beaumaris Cliffs fossil site is of international significance. Its sedimentary rocks contain fossils of marine megafauna dating back to six million years (Wakelin Associates 2009). The site contains the most diverse range of marine mammal fossils, and is the most important site of its type, in Australia.



Cape Woolamai
Photo: Phillip Wierzbowski

Other features in the region include:

- the Altona Meadows active sand spits – one of the major coastal sand bodies of Port Phillip;
- the Altona East sand bars – a sequence of about 20 intertidal and submarine bars extending unbroken for up to 600 m parallel to the coastline; and
- the areas around Lyall Inlet, Quail Island and Watson Inlet with diverse intertidal geomorphology.

The waters of the region provide a wide range of habitats and include a number of popular dive sites. Intertidal rocky reefs occur along much of the coastline facing Bass Strait. Areas such as Bunurong Marine Park and Marine National Park, Ricketts Point Marine Sanctuary and Mushroom Reef Marine Sanctuary provide easy access to the marine environment.

2.6 Coastal use and development

High population and intensive use is a distinguishing feature of the Central Coastal Region, and much of the coastline around metropolitan areas is highly modified. There are also many values and uses in close proximity to each other, and this can create conflict.

The challenge is to manage the pressures from a demanding population now, and in the future. The region is heavily urbanised and is predicted to grow to a catchment population of almost eight million by 2051 (Victoria in Future 2014). Metropolitan Melbourne is a growing tourism destination both internationally and nationally. Peak populations, particularly on the Bellarine and Mornington peninsulas, Phillip Island and Bass Coast can triple in size during holiday periods due to second home ownership and holidaymakers in caravan parks and accommodation houses.

Strategic planning for the growth of the region is set out in several documents - Plan Melbourne (Metropolitan Planning Strategy 2014), G21 Regional Growth Plan (Geelong Regional Alliance 2013) and the Gippsland Regional Growth Plan released in 2014. These have an important role in ensuring sustainable communities and delineating settlement boundaries and green breaks between settlements. The plans also identify current and future population patterns.



Queenscliff Harbour

The region has high economic, social and commercial values with high usage and ageing infrastructure. Consequently it is a high cost coastline to manage and maintain. The predominant forms of coastal use and development include residential, visitor, tourism and recreation infrastructure and commercial uses.

Recurrent maintenance and replacement costs for boat ramps, jetties, walking and bicycle paths, sea walls, beach renourishment and dredging are critical to maintaining economic, social and community value of coastal infrastructure.



Ocean Grove
Photo: Catharina Greve

2.6.1 A place to live

In the Central Coastal Region, the opportunity to reside on, or emotionally connect to, the coast is embraced by many. The most recent Victorian Coastal Council's Community Attitudes and Behaviour Survey for the coast (Ipsos-Eureka SRI 2012) estimated that a quarter of people living within five kilometres of the coast visit it daily and almost ninety percent at least once a month. This study also identified that the most enjoyable aspect of a coastal visit is the clean and unspoilt environment, the scenery and the time spent with family and friends and just 'being there'.

The study also found that one of the biggest concerns of survey participants about the coast was rubbish and litter. Recent work by CSIRO in its 2014 report, Understanding the Effects of Marine Debris on Wildlife, showed that much of the plastics and debris found in our marine environments is concentrated near cities. Litter management will continue to be a challenge for the Central Coastal Region.

The extensive urban coastline provides for relatively intensive residential uses in both established coastal communities (for example Williamstown) and new coastal developments (for example Wyndham Harbour or Martha Cove). Many locations along the region's urban coast are, and will continue to, experience higher density residential development in the form of townhouses and apartments as a result of urban consolidation and redevelopment (for example Geelong, Hampton/Sandringham, Chelsea, Frankston and Docklands).



Throughout the region there are many peri-urban towns where a key community value is the 'coastal lifestyle'. Towns such as Barwon Heads, Ocean Grove, Portarlington, Flinders, Somers, Corinella, Cowes, Inverloch and others are characterised by defined settlement boundaries with breaks of open or natural coast between the towns. Such coastal towns are experiencing growth in permanent residents due both to the lifestyle they offer and relative proximity to major employment opportunities.

For many residents of metropolitan Melbourne, for example, growth corridors to the east and west of the region, the coast is never far away. The proximity of two different bay experiences – the nature of Western Port and the activity of Port Phillip – and the rugged stretches of the open coast, means the 993 kilometres of the Central Coastal Region is inherent in how current and future residents of the region value the coast.

2.6.2 Recreation and tourism

The coast is a major contributor to Melbourne's liveability today (Figure 5). Many value a day at the beach, coastal walks, cycle paths and the views from roads along the foreshore. Smaller coastal settlements provide strong links to neighbourhood, family and place. Holiday-makers have for generations travelled to the same destinations, from hotels to family camping areas. Popular summer destination coastal caravan/camping sites include Rosebud/Rye foreshore, Portarlington, Kilcunda and Inverloch.

The region has more than half of the State's caravan and camping sites on coastal Crown land, with major year round facilities located at Barwon Heads/



The Silver Spirit docked at Cunningham Pier in Geelong
Photo: Barton van Laar, Tourism Victoria



Enjoying the beach at Rosebud
Photo: Catharina Greve

Ocean Grove, Portarlington and on the Bass Coast, as well as seasonally popular sites on the Mornington Peninsula and in many other coastal towns.

Recreational fishing and boating is a major attraction of the coast. Port Phillip and Western Port bays offer diverse boating opportunities. The Victorian



Leatherjacket in strapweed
Photo: Museum Victoria

Government's Target One Million plan will improve fishing opportunities and increase recreational fishing in Victoria to 1 million people over four years. There are some 211 boating facilities, including boat ramps, yacht and motorboat clubs and marinas. An estimated 98 percent of boats are trailerable and this places considerable pressure on boat ramps, particularly at peak periods. The Central Coastal Board has prepared a Recreational Boating Facilities Framework (2014) as an inventory of the region's boating facilities and a planning framework to help manage expectations and classify facilities based on the level of service they provide (see Regional Priority 5).

Swimming is popular at beaches in Port Phillip, Western Port and surf beaches on the open coast patrolled by surf life saving clubs. Several popular dive sites focus on the wide range of marine habitats (for example Popes Eye and Portsea Hole in Port Phillip, and Flinders Pier and Crawfish Rock in Western Port). Open coast diving destinations include several wreck sites. Surfing is popular on the Bass Coast and the outer coasts of Phillip Island, Mornington and Bellarine Peninsulas. Other activities include wind-surfing, kite-surfing and jet-skiing.

Key tourist attractions such as the Phillip Island Nature Park, the coastal and maritime areas of the Mornington and Bellarine peninsula and St Kilda are major drawcards for tourists, and the resulting service industries are of great economic importance to both the state and regional economies (for example \$140 million per annum from Phillip Island Nature Parks). See Figure 5 for some of the region's recreation and tourism facilities.

Case Study – Managing the coast to support environmental and recreational needs

One of Victoria's major natural wildlife attractions, Phillip Island's Penguin Parade, is exemplar of managing the coast for sustainable tourism development. Annual visitation to the Penguin Parade has been in excess of 500,000 visitors per year for the last 20 years. Admission to the Penguin Parade is controlled by ticket sales through Phillip Island Nature Parks, with a maximum capacity of 3,700 people per night.

Phillip Island Nature Parks is a not-for-profit, self-funded organisation operating on Crown land under its own Board of Management. It is also overseen by the state government as a committee of management appointed under section 14 of the *Crown Land (Reserves) Act 1978*. Funds generated from ecotourism activities are invested into conservation, research and education programs. The Phillip Island Nature Parks has undertaken significant management actions to improve the penguins' habitat, including the presence of rangers, the acquisition and rehabilitation of freehold land within the penguin colony on Summerland Peninsula, and fox and weed control.

Phillip Island Nature Parks was awarded the 2015 Australian Coastal Award in the category of 'Planning and Management' for the restoration of the Summerland Peninsula.

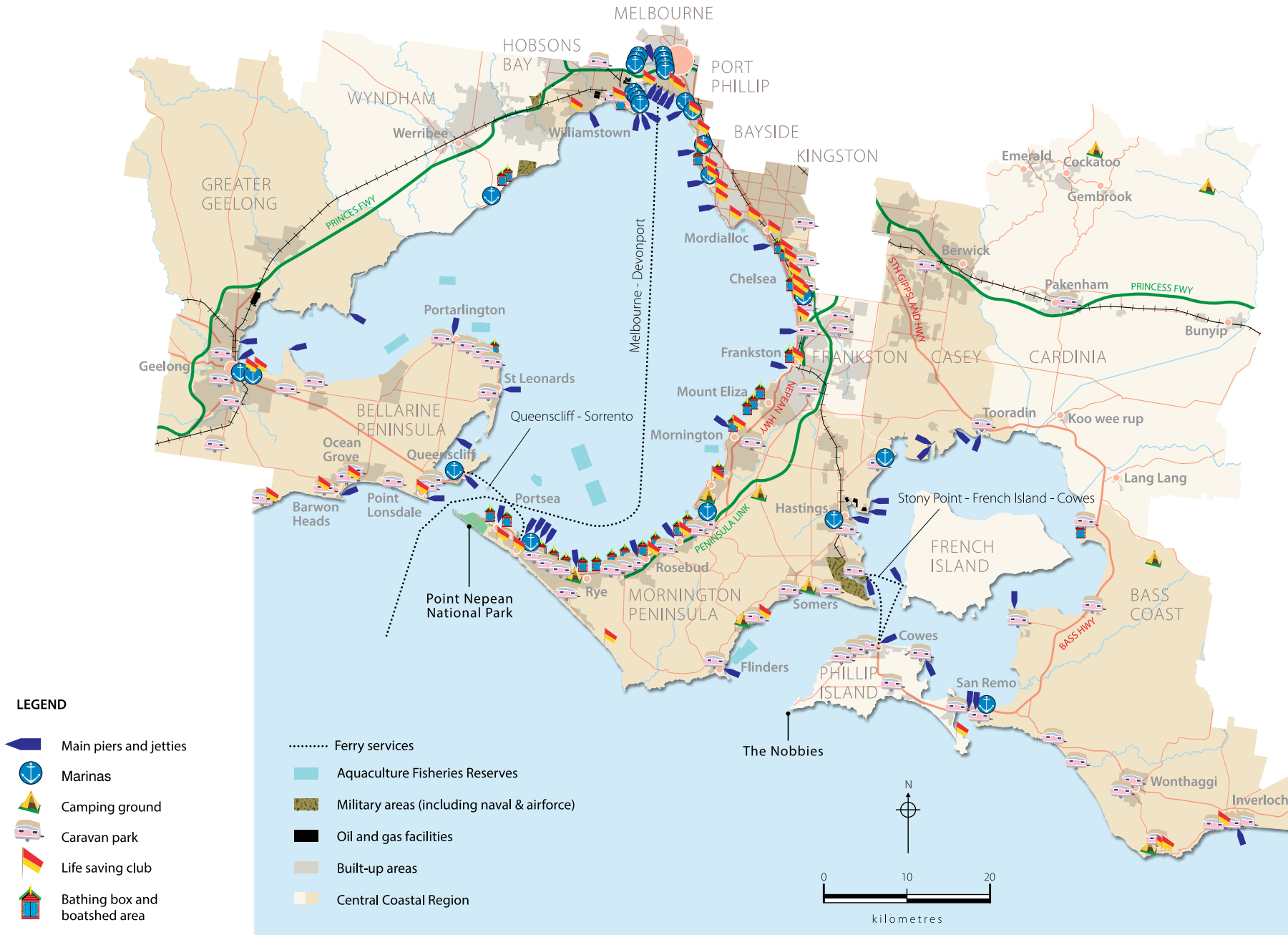


Figure 5 Economic and social values of the Central Coastal Region

2.6.3 Commercial enterprise

Commercial fishers in the region operate under the authority of a Fishery Access Licence. The total number of these licences is capped. Current government policy is for commercial netting in Port Phillip and Corio Bay to be phased out.

The *Fisheries Act (Victoria) 1995* also provides for the management, development and promotion of a viable aquaculture industry. The main species harvested in the bays are blue mussels.

The region contains the State's largest commercial ports – the Port of Melbourne, Geelong Port and the Port of Hastings. The Port of Melbourne is the largest container port in Australia and Melbourne is a major freight logistics hub in the country. These ports contribute significantly to the Victorian economy both in terms of revenue and jobs and there is a continuing demand for capacity.

The marked increase in population and trade in the next 30 years will increase freight and shipping, and may lead to future expansion of port facilities. Population growth will also increase the use of other marine craft, with the potential need to expand marine industries to service recreational boating demand. Such facilities should be established inland from the coast in marine industry precincts.



Cruise ships Melbourne
Photo: Roberto Seba,
Tourism Victoria



Swanson Dock
Photo: Port of Melbourne
Corporation



Fishing
Photo: Mark Chew,
Tourism Victoria

Commercial and local port authorities are the waterway managers for designated areas under the *Marine Safety Act 2010*. Parks Victoria is the designated waterway manager for Port Phillip and Western Port and Yarra, Maribyrnong and Patterson rivers. The Victorian Coastal Strategy 2014 and elements of the State Planning Policy Framework (including Clause 18.03 that lists port land use and development strategies) currently guide land-use planning within designated ports. The amenity values offered by ports are also recognised within regional growth plans.

Industrial use of coastal areas, for example by oil refineries, steel and aluminium works and saltworks, is reducing. There is significant potential to rehabilitate and redevelop some industrial sites adjacent to the coast. This will be facilitated with adequate planning of the industrial and land use changes.

The hospitality industry places a high value on a waterfront setting for its visual amenity and a sense of well-being it engenders. Commercial use of the coast needs to be carefully planned to protect natural values and balance demand for coastal space with community values.

Case studies – Natural coastal values in an urban setting

Jawbone Flora and Fauna Reserve and Marine Sanctuary is a little promontory, west of the beach at Williamstown. For over 80 years access was restricted to the area and it was used as a rifle range.

Today it is managed by Parks Victoria and has been transformed into a haven for coastal and marine life right next to Melbourne. This has largely been achieved by the work of volunteers, the Jawbone Marine Sanctuary Care Group, with the help of the local community and visitors who care for the area.

Warringine Coastal Reserve, south of Hastings, is a tribute to decades of community and government partnerships to restore the coastal landscape from cattle farm to a coastal asset and accessible window to Western Port's Ramsar values. Today, walking tracks and boardwalks provide access to remarkable coastal habitats including woodland, saltmarsh and mangrove communities that support diverse animal and bird life including 25 rare species.

3 COASTAL PROCESSES AND CLIMATE CHANGE

3.1 Natural coastal processes

The coast is the interface between land and sea; it is not static. It is constantly responding to the influence of tides, wind, waves and weather systems. Local conditions, such as landforms (for example sandy beaches, rocky headlands, cliffs, low-lying mud flats and estuaries) also influence coastal processes.

Inundation is the flooding of land by ocean waters or river catchments. Erosion can be long-term (a receding coastline) or short-term (cyclic movement of sand caused by storms and return to normal conditions). When coastal processes have an impact on natural or built assets they are considered a hazard.

The structures placed along the coast must be designed and sited in ways that take account of coastal processes. Several coastal land managers, such as the Bellarine Bayside Foreshore Committee of Management, Phillip Island Nature Parks Board of Management as well as the Department of Environment, Land, Water and Planning, Crown lessees such as yacht clubs and the Association of Bayside Municipalities have taken the initiative to commission studies on coastal processes to inform decisions and address coastal risk.

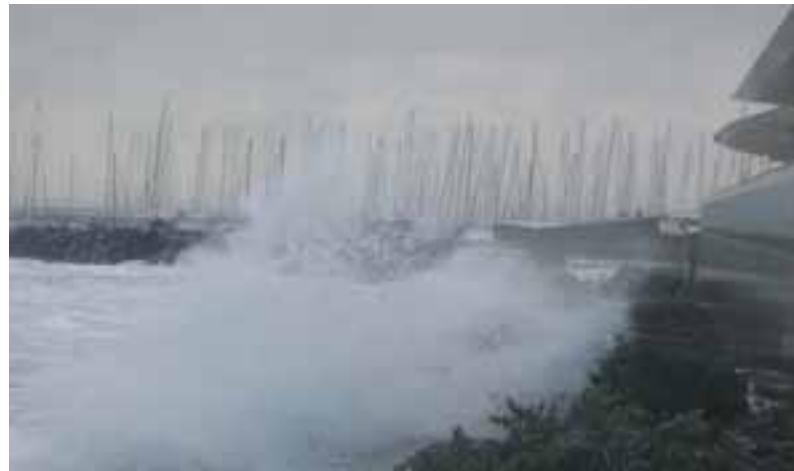
Applications for use and development in the coastal and marine environment are considered under the legislative framework of the *Coastal Management Act 1995* and *Planning and Environment Act 1987*. Improved information on coastal processes has helped to guide

decision makers (for example the Victorian Coastal Hazard Guide 2012).

There has been a legacy of managing existing coastal hazards with hard structures, such as groynes and sea walls, to minimise erosion. These structures affect coastal processes: they alter sand movement and the effects of wave energy and, consequently are expensive to maintain. Interrupting natural long shore drift of sand can result in the loss of beaches and foreshore in one area and accretion in another.

Proposals for protective works on the coast (on private or public land) should be considered and designed as part of a larger coastal compartment or “whole of coastal cell system” rather than individual sites. These larger systems are areas with the same physical characteristics and processes such as landforms and patterns of sediment movement. They are the basis for effectively managing physical hazards and establishing a consistent approach.

This is particularly important for the highly modified beach systems in Port Phillip. Only a small portion of the original dune systems remain. As a result, the natural movement of sand along the coast has been significantly altered and the beach systems need to be artificially replenished to maintain sandy beaches. More than 20 beaches around Port Phillip have been artificially renourished in the last 25 years to offset the loss of significant volumes of sand.



Storm hits Sandringham Yacht Club 2014
Photo: Werner Hennecke



Coastal processes and infrastructure, Mentone
Photo: Werner Hennecke

Coastal environments can also be affected by acid sulfate soils which occur in naturally low lying coastal areas such as wetlands and estuaries. If left undisturbed, these soils are harmless. If exposed to air, the soils react with oxygen to form sulfuric acid which in turn can lead to release of other toxic elements, killing plants and animals, contaminating water and corroding infrastructure. Drainage, excavation, drought, storm surge and climate change can trigger these reactions. The Victorian Coastal Strategy 2014, regional catchment strategies and State Planning Policy aim to avoid disturbing coastal acid sulfate soils. The Victorian Coastal Acid Sulfate Soils Strategy and the Victorian Best Practice Guidelines for Assessing and Managing Coastal Acid Sulfate Soils give advice about identifying and managing these soils.

Case study – The impact of the June-July 2014 storms

The 2014 winter storms had significant impact on the metropolitan coast particularly in erosion-prone areas and where repairs were required to ensure public safety. Damage occurred to:

- seawalls at Black Rock and Point Lonsdale (north) due to undermining and loss of sand (remediation costs of \$300,000-\$400,000), and rock revetments adjacent to St Kilda Marina and west of Portsea Pier;
- infrastructure associated with safe boat launching (for example Pt Richards groyne repair \$50,000, Half Moon Bay launching jetty and pier repairs);
- beach access paths and foreshore trails (for example Williamstown and Altona, Ramblers Road Foreshore in Geelong, and Bellarine Bayside Foreshore coastal trail \$40,000-\$50,000);
- caravan park flooding damage (for example Lang Lang foreshore);
- erosion of beach cliffs at Jam Jerrup; and
- loss of beach cliffs at Sandringham beach and others.

3.2 Climate change

Climate change will cause many significant changes to the region's coastal and marine environments, with far reaching consequences.

Rising sea levels are predicted to cause increased inundation and flooding of low lying coastal areas, greater coastal erosion, higher storm surges, and higher costs of managing coastal land. In some areas, increased inundation or erosion could lead to the loss of narrow coastal reserves. Higher ocean temperatures are likely to change ocean currents, and increased absorption of carbon dioxide is likely to lead to ocean acidification, disrupting marine and coastal ecosystems. Higher temperatures will bring longer, hotter and drier periods, with greater threats from bushfires. More intense rain events will cause increased riverine and estuarine flooding and higher inflows of catchment pollutants.

The high biodiversity of the region's coast will be affected by all of these changes. Inundation and erosion will squeeze some coastal habitats against immobile barriers such as cliffs and infrastructure, change the distribution of some species and increase pressure from pest plants and animals.

Climate change has the potential to increase the severity of coastal hazards by bringing about increased rates of erosion and more extensive inundation. Some impacts such as sea level rise are gradual and occur over a long timeframe, whereas extreme weather events can occur at any time and significantly reshape the coastline.



St Kilda foreshore during stormy weather
Photo: City of Port Phillip

The Victorian Coastal Strategy 2014 planning benchmarks are to plan for an increase of not less than 0.8 m by 2100 and 0.2 m may be used for urban infill.

This also needs to allow for the combined effects of tides, storm surges, coastal processes and location conditions when assessing the risks and impacts associated with climate change. This direction is incorporated in all planning schemes.

There is also specific guidance for decision makers to address flooding in the Central Coastal Region under Melbourne Water's Guidelines for Development in Flood-prone Areas and Planning for Sea Level Rise. Given the current body of knowledge and information, an important principle is the need to avoid future development in areas that are likely to be impacted by projected coastal hazards under climate change.

An adaptation approach is required where there is the need to address the legacy of earlier land use decisions that have resulted in coastal hazards and risk to property and infrastructure from erosion or inundation. The options may include living with the risk for the economic life of existing assets, removing or relocating the assets, or mitigating the risk.

The Victorian Climate Change Adaptation Plan 2013 sets out how the Victorian Government is managing these risks (amongst others) and acknowledges the contribution by all tiers of government, business and communities in this work.

The Climate Change Adaptation Memorandum of Understanding between state and local government also identifies sea level rise as one of the agreed priority areas for clarification of responsibilities.

There is still a need for better information on coastal hazards, particularly at a more detailed local scale. There is also a need to engage local communities in developing adaptation responses within the region.

A number of coastal managers and local governments have undertaken or are completing studies to assess the likely impacts of coastal hazards due to climate change. The projects include the Western Port and Bellarine Peninsula/Corio Bay Local Coastal Hazard Assessments and the Port Phillip Bay Coastal Adaptation Pathways.

The knowledge gained from these local studies will allow the next phase of adaptation planning. The following needs to be considered in collaboration with the local community:

- the need for technical material to be translated into language that supports increased community involvement in decision-making;
- adaptation options for an urban environment with highly modified coastal systems and high levels of use; and
- the need for hazard assessments to be turned into adaptation plans and actions.

Case study – Port Phillip Bay Coastal Adaptation Pathways Project (2011-2013)

The Port Phillip Bay Coastal Adaptation Pathways project, initiated by the Association of Bayside Municipalities with support from the Municipal Association of Victoria and the Central Coastal Board, developed a benefit-cost analysis as an approach to help decision-makers plan to adapt to climate change. Five case study sites were selected which experience coastal hazards. Government authorities, agencies, councils and communities wanted to know what 'adaptations' they should make, and when to make them.

Four broad 'pathways' were applied across the study sites: Accommodate, Moderate Protection, Major Protection and Retreat. 'Retreat' was not considered to be necessary for any of the sites. In fact, the best benefit-cost ratio in two of the case studies was associated with the 'Accommodate' pathway, which did not require any immediate physical infrastructure. In these cases, the study found that the best course of action was to work on plans, policies and community education while preparing to implement 'Moderate Protection' in the future. For the other case studies, the research suggests that 'Moderate Protection' should be considered now.

Case study – Bay Blueprint (2014-2016)

The state government funded an adaptation project to strengthen cooperation between the ten councils within the Association of Bayside Municipalities (ABM) and other stakeholders, and to better understand the context for adaptation opportunities in and around Port Phillip Bay. The project also aims to contribute to a consistent regional approach to climate change. It will improve the capacity of ABM councils to use climate and non-climate assessment information and enhance their skills and knowledge of coastal risks and vulnerability assessments.

The first stage of the project has started and is due to be completed by late 2015. It involves developing a framework, based on stakeholder and expert input, which brings together relevant knowledge, research and programs. This will clarify the context for adaptation options and guide a general approach for progressing climate adaptation around and in Port Phillip Bay. The subsequent stage will use the framework to develop *Bay Blueprint - a Bay Plan for 2070* to include triggers and scenarios as a basis for adaptation options. In the final stage of the project, training and awareness raising material will be developed to link adaptation measures more strongly to council decision-making processes.

Case study – Western Port Local Coastal Hazard Assessment

The Victorian Government's Future Coasts Program undertook four pilot Local Coastal Hazard Assessments to provide the best available information to identify how, when and where management agencies can work together to respond to the potential impacts of climate change. The three other pilot sites are at Port Fairy, East Gippsland and Bellarine.

The Western Port assessment is a collaboration between the Department of Environment, Land, Water and Planning, Melbourne Water, South East Councils Climate Change Alliance, Bass Coast and Mornington Peninsula shire councils, the Shire of Cardinia and the City of Casey. The study area includes all shorelines of Western Port and French Island, as well as the northern shorelines of Phillip Island. Western Port is an environmentally significant Ramsar listed wetland and Biosphere Reserve which is sensitive to changes in climate and requires careful management.

An initial broad scale coastal hazard assessment was done first, followed by detailed local scale assessments at four key areas:

- Balnarring to Somers;
- Tooradin and coastal villages;
- Lang Lang (main drain to Jam Jerrup); and
- Rhyll Inlet and Silverleaves.

The study focused on:

- inundation hazards from storm surge and catchment inflows with modelling for various events and three sea level rise scenarios (0.2m by 2040, 0.5m by 2070 and 0.8m by 2100); and
- erosion hazards using groupings of coastal landforms that respond to coastal processes in a similar manner.

The project showed that appropriate actions to respond to predicted climate change impacts will vary depending on the relative severity of those impacts and the characteristics of the coastline. A number of townships at low elevations will be more vulnerable to flooding; increasing rates of shoreline erosion are likely to occur at Balnarring –Somers, Lang Lang, Rhyll Inlet and Silverleaves, and saltwater intrusion may increase in the area of the former Koo Wee Rup swamp.

The partnership of agencies will use the work to engage with local communities about adaptation responses to the risks of climate change.



Mangrove habitat,
Western Port Bay
Photo: Phillip
Wierzbowski

4 PRIORITY ACTIONS FOR THE CENTRAL COASTAL REGION

4.1 The Vision

The Board's vision for the region is:

Treasuring the Central Coastal Region - A healthy and sustainable coast for current and future generations.

4.2 Regional Priorities

The Central Coastal Board has identified eight priority areas as a focus for action. These are outlined in Chapters 5 to 9.

These Regional Priorities reflect:

- key issues identified in the Victorian Coastal Strategy 2014 which are relevant for specific attention in the Central Coastal Region (see Table 1 and Appendix 3);

- topics identified by stakeholders during the consultation process as important; and
- areas where the Central Coastal Board can provide leadership and influence.

The priority actions apply across both public and private land tenures.

All of these regional priorities are important and inter-related (Figure 6). As a whole, they will strengthen and improve the way we understand, protect, use and manage the coast. None of the regional priorities can be considered in isolation. Each action is linked; recognising these linkages will lead to improved outcomes by

implementation of the Regional Coastal Plan. For example, sustainable funding is critical if we wish to retain and maintain infrastructure, improve existing recreation and visitation opportunities, and protect and rehabilitate important ecosystems and habitats in the Central Coastal Region.

VCS 2014 Key Issues	Central Regional Priorities for Action
Managing population growth	1. Population growth – balancing access and valuing the natural environment
Adapting to a changing climate	2. Adapting to climate change and increased coastal hazards
Managing coastal land and infrastructure	3. Integrating coastal planning and management 4. Sustainable and equitable funding mechanisms for coastal infrastructure and management 5. Overseeing the implementation of the Recreational Boating Facilities Framework for the Central Coastal Region 6. Sustainable visitation and tourism infrastructure service level hierarchy
Valuing the natural environment	7. Protecting significant coastal and marine ecosystems and habitats
Integrating marine planning	Contributing to the review of the <i>Coastal Management Act 1995</i> , and development of a new Marine and Coastal Act; and new management arrangements and oversight of marine parks, coasts and bays
Integration of key issues	8. Promoting leadership, co-ordination and capacity building

Table 1 Central Regional Priorities for Action

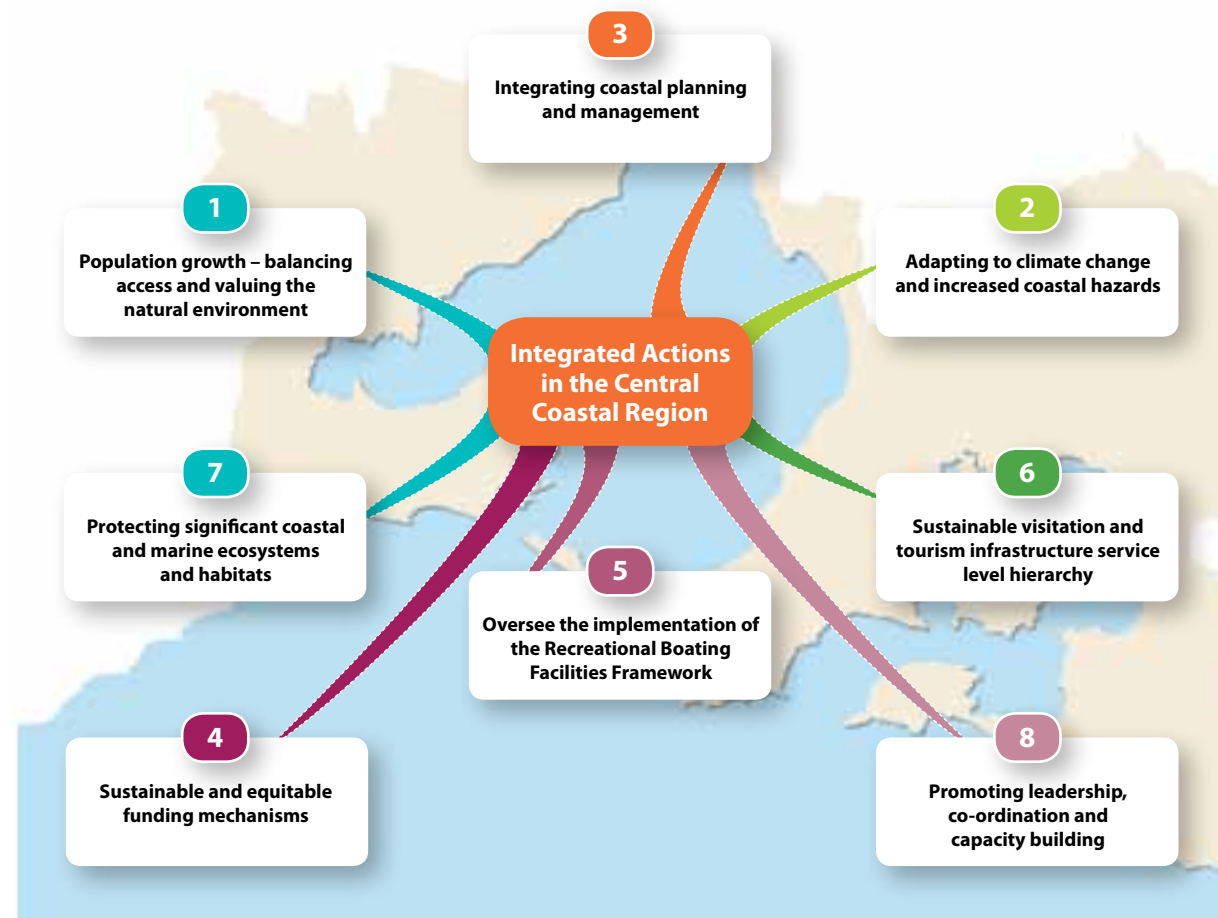
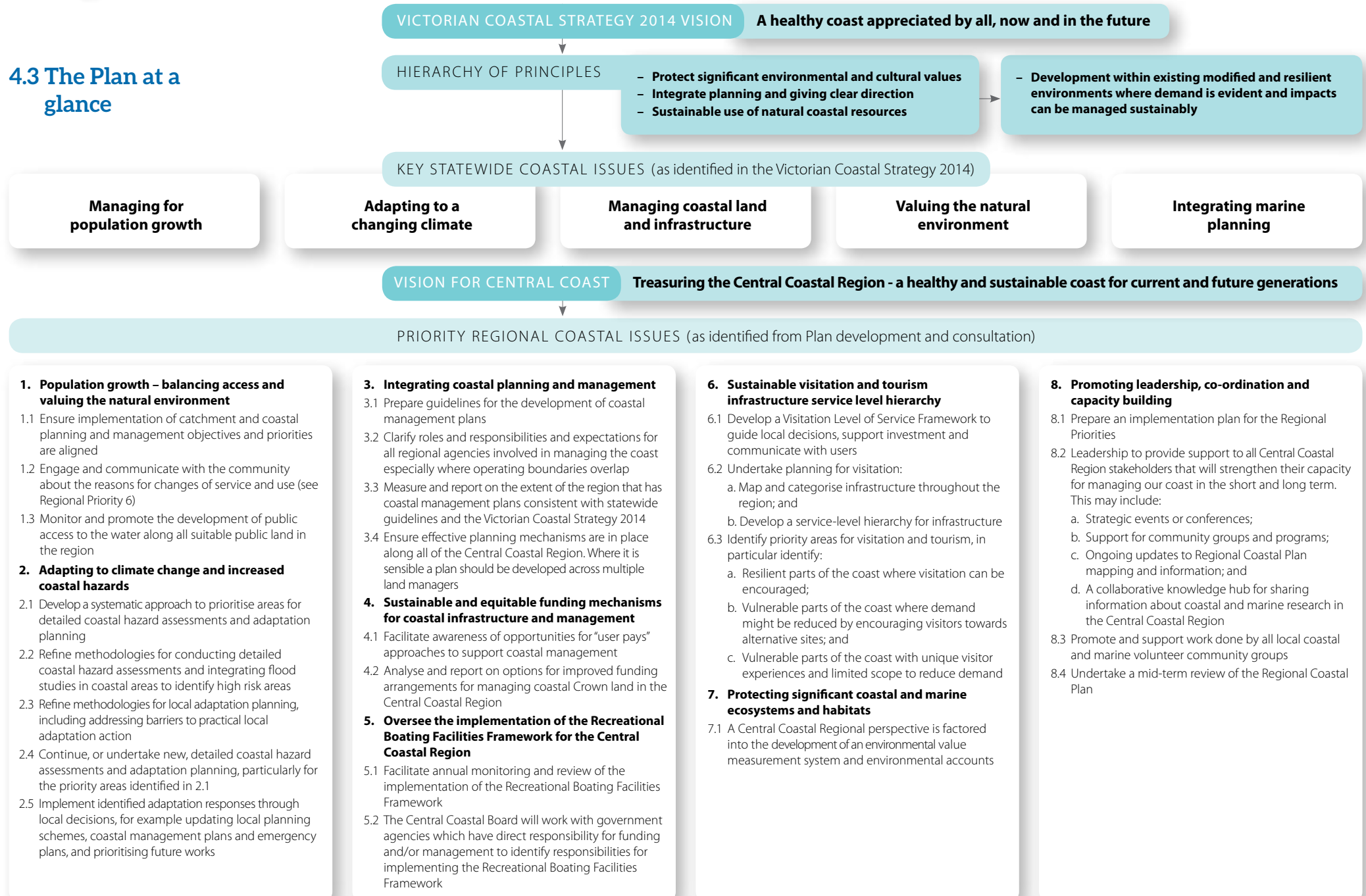


Figure 6 Mind map of how the priorities link to have integrated actions in the Central Coastal Region.

4.3 The Plan at a glance



5 MANAGING FOR POPULATION GROWTH

Regional Priority 1 – Population Growth - Balancing Access and Valuing the Natural Environment

The 4.5 million resident catchment population of the Central Coastal Region is projected to increase by 40 per cent to 6.3 million by 2031 and to almost eight million, an increase of more than 75 per cent, by 2051.

This will create 'tipping points' on the region's coast as a cumulative impact of so many people seeking to use the same resource. There is unlikely to be sufficient resources to provide and develop all coastal recreation infrastructure to the same level of service at multiple locations. Some areas have reached carrying capacity already and new approaches are needed for the future.

The projected population increase will place great pressure on the region's coastal and marine ecosystems, as well as other environmental values and services that support and maintain social, economic and cultural values. Catchment water flow from diffuse sources such as stormwater from urban areas can make swimming, fishing and other water-based recreation unsafe, as well as damaging estuaries and marine habitats. Pollution and litter, particularly plastics and plastic particles, can have major adverse impacts on coastal birdlife and marine fauna, as well as on coastal amenity. Melbourne Water, local councils and catchment management



Geelong waterfront
Photo: Paul Riley

authorities play important roles protecting the quality of runoff reaching coastal waters.

The hierarchy of principles in the Victorian Coastal Strategy 2014 (see page 6) highlights that development should only occur when the principles about protecting, planning and sustainable use of natural coastal resources are met.

The challenges will be to provide equitable access for safe and clean water based recreation while protecting significant coastal environmental values. The looming population pressures can be partly mitigated by maximising the use of existing infrastructure through for

example multiple use of buildings in foreshore areas. However, changes to recreational use and experiences will be needed over time.

A long term response is to concentrate recreation pressures to more resilient areas where increased demand can be accommodated. This will require management of community and user group expectations through engagement and communication about the reasons for change.

Balancing access to these facilities is best considered at a regional scale. Carefully distributing facilities and service levels across the region will enhance accessibility, reduce potential conflicts between users and identify vulnerable sites for protection.

Priority Actions	Lead	Partner agents	By when
1.1 Ensure implementation of catchment and coastal planning and management objectives and priorities are aligned	CMAs, MW	LC, CoM, PV, TV, EPA, DELWP, CCB	Ongoing
1.2 Engage and communicate with the community about the reasons for changes of service and use (see Regional Priority 6)	CCB	LC, CoM, PV, TV, CMAs, MW, EPA, DELWP	2018
1.3 Monitor and promote the development of public access to the water along all suitable public land in the region	CCB	DELWP, LC, CoM, PV	2020

A more immediate response is to align management objectives and priorities to recognise the importance of and improve marine, estuarine, wetland and waterway health. The A Cleaner Yarra River and Port Phillip Bay – A Plan of Action 2012 is an example in the region. This Plan responds to statewide directives from the Victorian Coastal Strategy 2014 and the Victorian Waterway Management Strategy 2013, and is supported by initiatives such as urban water reform, Melbourne Water's Healthy Waterways Strategy 2013 and Living Rivers Program.

A key outcome has been the Cleaner Yarra and Bay Report Card which identifies key environmental indicators such as water quality, wetlands and seagrass. This report card also establishes a methodology for monitoring the overall health of the Bay and catchment and identifying water quality 'hot spots'. There is an opportunity for similar reporting mechanisms to occur in other catchments in the region, in particular Western Port and the Bellarine.

Outcomes

1. Visitor infrastructure and services are matched to the resilience of the coastal location;
2. The diversity of visitors and their needs are recognised and planned for;
3. Conflicts between different uses are minimised;
4. Coastal areas where there is high demand and the need for high service levels are identified through local planning schemes, coastal management plans or Parks Victoria's plans;
5. Community and user groups engaged about reasons for changes in recreational uses; and
6. Actions to improve marine, estuarine, wetland and waterway health are prioritised and successful.

6 CLIMATE CHANGE

Regional Priority 2 – Adapting to Climate Change and Increased Coastal Hazards

Climate change has significant consequences for the Central Coastal Region, including loss of public and private land and beaches, damage to buildings and other infrastructure, changes in coastal landscapes and coastal and marine ecosystems, and destruction of cultural heritage.

To adapt, these impacts will need to be addressed at the appropriate scale and over different time periods. Increasing ocean temperatures and acidification are global scale impacts; they are being addressed through international and national initiatives. Regional-scale impacts, such as changes to biodiversity, fire regimes and water supply, are being addressed across broad landscapes by state and regional organisations.

This Regional Coastal Plan focuses on hazards that are unique to the coast – coastal flooding, erosion and long-term recession, driven by rising sea levels. There is a clear need to improve regional and local planning for these impacts - this Plan sets the framework for regional action.

The primary causes of coastal inundation and flooding are storm surges combining with high tides (especially storm-tides), extreme wave events and, sometimes, estuarine flooding. Erosion risks are determined by tides, wave action, sea levels and geology. Rising sea levels,



Middle Brighton Beach
storm event 2009
Photo: Werner Hennecke

resulting from climate change, will cause increased rates of erosion and more extensive flooding.

The state government's Future Coasts program produced guidelines, comprehensive data sets and digital models to help Victorians better understand the hazards and plan for the risks associated with sea level rise and storm surge. It also worked with local councils to engage their communities in investigating local needs and opportunities.

The Victorian Coastal Strategy 2014 sets the policy for planning for an increase of 0.2 m for urban infill and 0.8 m by 2100 for greenfield development outside town boundaries. The Victorian Government's floodplain management



Jute matting erosion
control, Curlewis,
Corio Bay
Photo: Matt Crawley,
Bellarine Catchment
Network

guidelines apply unless a council's adaptation planning makes specific alternative arrangements. The Strategy envisages that increased risks from coastal hazards will be strategically managed, on both public and private land, through regional and local adaptation planning. This involves the use of coastal hazard assessments to identify areas of public and private land vulnerable to inundation, erosion or recession, and understanding how the community's values in these areas are affected. Better understanding of the physical processes and community values that determine hazards informs the assessment of future risks and adaptive management responses.



Black Rock storm event 2009
Photo: Werner Hennecke

Adaptive management responses may provide local and/or private benefits, for instance by protecting private land. In these circumstances beneficiaries and local communities can reasonably expect to contribute to the capital and ongoing management and maintenance costs of works that protect their assets.

There are a range of management responses to coastal hazard risks. Broadly, risks can be:

- avoided, for example, by updating planning schemes to implement State coastal planning policy;
- reduced through planned retreat or protection (such as sea walls, beach renourishment or improved building construction);
- shared through insurance and better information sharing; or
- transferred, for example by accepting and living with the risk or dealing with it through emergency responses.

Certain adaptation responses may be triggered by observed changes in the environment (for example, increasing height of sea walls or relocating infrastructure when sea level reaches a predefined height, or when specific areas are flooded with a certain frequency). This allows certain actions and investments to be deferred until risks in particular locations are more certain, to ensure staged adaptation.

Having the appropriate authorities engaging with the local community – the people directly affected by the risk

and in the best position to manage it – is the best way to go about adaptation planning. Therefore much adaptation planning needs to be led at the local level, in close consultation with the affected community, and in partnership with all levels of government.

The map in Figure 7 shows the two areas where coastal hazards have been assessed (Western Port and the Bellarine Peninsula and Corio Bay) and two areas within which further detailed hazard assessment and adaptation planning are likely to be needed: Port Phillip and the Bass Coast from Phillip Island to Inverloch. These areas have particularly significant built and natural assets that are vulnerable to coastal hazards.

The Department of Environment, Land, Water and Planning will develop, with Partner Agents, a systematic regional approach to prioritise areas for more detailed hazard assessment, where adaptation planning would be beneficial. Priorities will be set in partnership with local councils, catchment management authorities and Melbourne Water, who are also working on regional prioritisation to manage the risks of riverine and estuarine flooding.

Additional funding will be needed to carry out detailed local coastal hazard assessments and adaptation planning. The Regional Coastal Plan provides the framework for Commonwealth, state, regional, local agencies and private interests to form partnerships to fund and undertake coastal hazard assessments and adaptation planning for identified priority areas in the Central Coastal Region.

Priority Actions	Lead	Partner agents	By when
2.1 Develop a systematic approach to prioritise areas for detailed coastal hazard assessments and adaptation planning	DELWP	CCB, LC, CoM, MW, PV, CMAs, relevant peak bodies*	2016
2.2 Refine methodologies for conducting detailed coastal hazard assessments and integrating flood studies in coastal areas to identify high risk areas	DELWP	LC, CCB, CoM, MW, PV, CMAs, relevant peak bodies*	2016
2.3 Refine methodologies for local adaptation planning, including addressing barriers to practical local adaptation action	DELWP	LC, CCB, CoM, MW, PV, CMAs, relevant peak bodies*	2017
2.4 Continue, or undertake new, detailed coastal hazard assessments and adaptation planning, particularly for the priority areas identified in 2.1	LC	DELWP, CCB, MW, PV, CMAs, CoM	2018
2.5 Implement identified adaptation responses through local decisions, for example updating local planning schemes, coastal management plans and emergency plans, and prioritising future works	LC	CoM, MW, PV, CMAs, DELWP, SES	2020

* Relevant Peak bodies include: ABM, SECCCA, MAV and VNPA

The results of these hazard assessments and flood studies, once they are developed in consultation with affected communities, should be incorporated into formal instruments, such as planning schemes, building controls, local emergency plans and adaptation strategies.

The Board will encourage continued building of reliable data sets and knowledge amongst coastal managers to assess emerging risks and promote continual improvement in adaptation planning.



Cliff erosion at Barwon Heads
Photo: Catharina Greve

Outcomes

1. Findings from local coastal hazard assessments are applied locally to address hazards;
2. Areas at high risk are identified and adaptation responses are included in local planning schemes, coastal management plans, and emergency management plans;
3. The full range of options for adapting to flooding and erosion risks to public and private land are properly considered (including benefits and costs) and reflected in local decisions;
4. The community has a shared understanding of erosion and flooding risks and adaptive management responses; and
5. Coastal communities and ecosystems are resilient to coastal hazards.

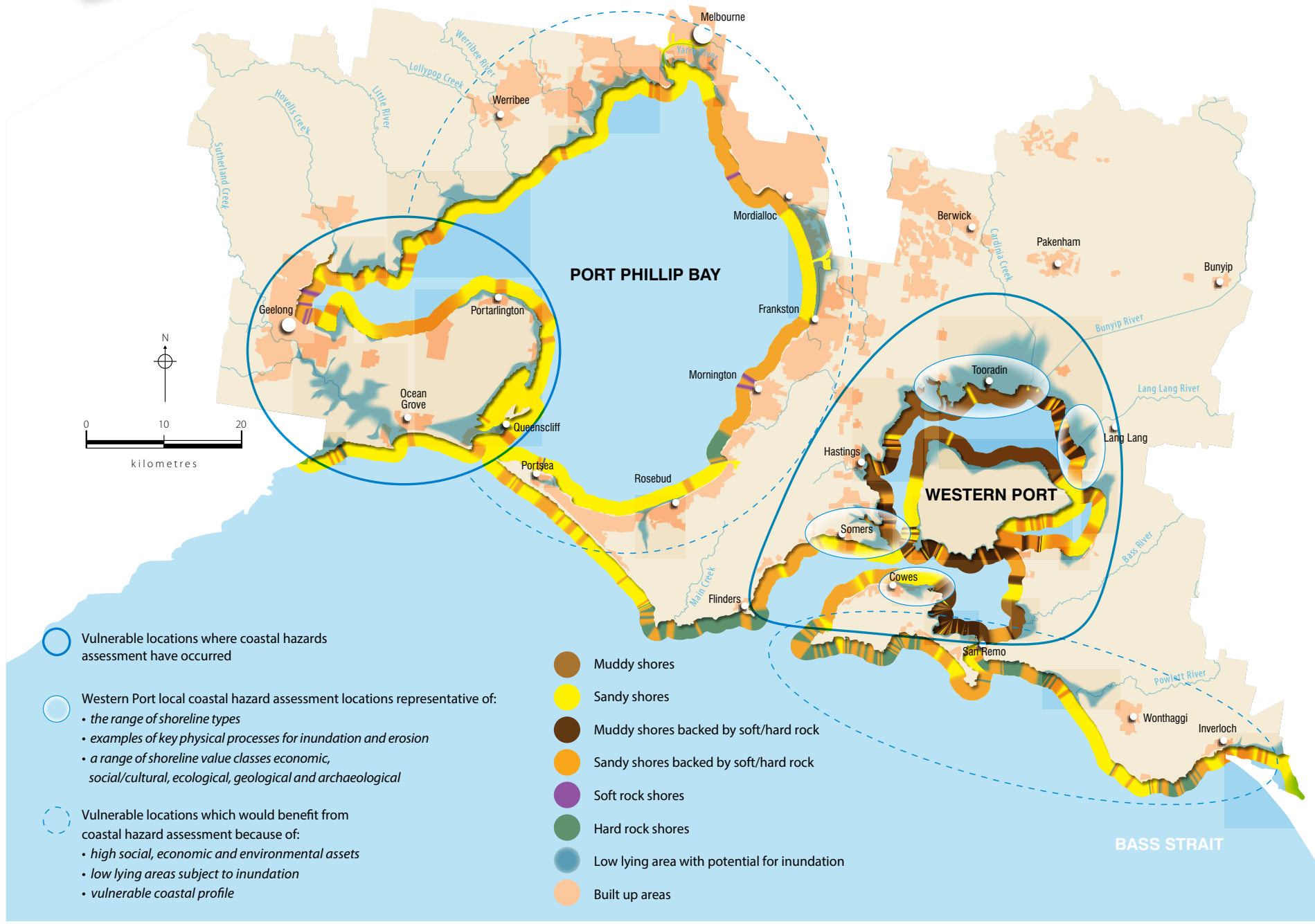


Figure 7 Map indicating areas for hazard assessment and adaptation planning (based on coastal instability and low lying areas)

DISCLAIMER: The data used in this map is from the Victorian Coastal Inundation Dataset and the Smartline Coastal Geomorphic Map of Australia and is intended to be used at a regional scale to assist strategic planning and risk management.

7 MANAGING COASTAL LAND AND INFRASTRUCTURE

Regional Priority 3 – Integrating Coastal Planning and Management

There are over forty different managers along the coastline with many more for water, waterways and catchments (see Figure 8). The complexity of the roles and responsibilities within coastal management can be confusing. Application of the principle of integrated coastal zone management will facilitate collaboration and coordination of coastal management across these boundaries.

It is important to provide clarity about the roles, responsibilities and expectations for all regional agencies involved in managing the coast – especially where operating boundaries overlap. The Board will support the Victorian Coastal Council's work in this area and ensure that important initiatives are not delayed by disputes about roles and responsibilities. The development of the new marine and coastal act and new oversight and management arrangements for marine parks, coasts and bays, led by the Department of Environment, Land, Water and Planning, will provide an opportunity to improve and clarify future roles and responsibilities for coastal management.

Clarifying the boundaries of coastal reserves helps to improve cooperative management, including clearly defining responsibilities where different tidal heights are used as the boundary.

The Department of Environment, Land, Water and Planning is developing guidelines for coastal management plans. Coastal management plans should follow the Victorian Coastal Strategy 2014 and this Regional Coastal Plan including the guiding concept of integrated coastal zone management to promote collaborative foreshore management across public and private tenure. Good management means working across land tenures where it is sensible to do so. Better integration across larger adjoining areas of both public and private land is very important. To that end the objectives of the coastal management plan guidelines will be to:

- improve strategic planning;
- support more consistent monitoring;
- strengthen local community engagement; and
- simplify coastal approvals.

Where coastal management plans cover a larger area, local managers may wish to develop more detailed precinct or master plans for specific areas or sites.

Under the *Coastal Management Act 1995*, coastal management plans apply to Crown land on the coast. As noted previously, the development of the new act and new oversight and management arrangements will provide an opportunity to improve and clarify future roles and responsibilities for coastal management.

The Department recently identified the need for strong governance processes

to ensure community expectations of coastal foreshore managers are met and these standards are maintained (Victorian Auditor General's Office report – Oversight and Accountability of Committees of Management 2014). The report also identified that there is potential to strengthen coastal management by improving the governance, oversight and support for committees of management.

One way to do this is to identify and act on opportunities to form larger, more viable and financially sustainable entities to manage the coast.

The coast is rich in coastal values; community expectations for its management are set within the Victorian Coastal Strategy 2014. One of the desired outcomes for that strategy is for the built environment on foreshores to be confined to structures providing significant community benefit and to those whose functionality depends on them being near the water.

Surf lifesaving club lookout towers, marina and boat sheds are examples of buildings whose functionality depends on being near the water. Foreshore managers need to work with the lessees of these buildings to ensure that the siting and design of facilities do not increase coastal hazards or reduce amenity for other users. Decisions about how to manage the variety of coastal values on the foreshore are made through the development of coastal management plans and planning schemes.

The Victorian Coastal Strategy 2014 notes that use and development of coastal

Priority Actions	Lead	Partner agents	By when
3.1 Prepare guidelines for the development of coastal management plans	DELWP	CCB, CoM, LC, PV	2015
3.2 Clarify roles, responsibilities and expectations for all regional agencies involved in managing the coast especially where operating boundaries overlap	VCC	CCB, DELWP, LC, CoM, PV	2018
3.3 Measure and report on the extent of the region that has coastal management plans consistent with statewide guidelines and the Victorian Coastal Strategy 2014	CCB	DELWP, LC, CoM, PV	2018
3.4 Ensure effective planning mechanisms such as coastal management plans are in place along all of the Central Coastal Region. Where it is sensible a coastal management plan should be developed across multiple land managers. From this, local public land managers can put together precinct or master plans	DELWP	CCB, CoM, LC, PV	2020

Crown land should make efficient use of that land and enhance public access. There may be opportunities to redevelop existing facilities to allow better or broader use of them (including multiple uses) and more appropriate use of the coast to benefit the community.

The voluntary efforts and the expertise offered by local coastal land managers is a great advantage in managing the values associated with coastal land. It is important to make sure that volunteering is a rewarding and productive experience.

Outcomes

1. Improved efficiency and effectiveness of coastal managers including better alignment with Victorian Coastal Strategy 2014 and Regional Coastal Plan priorities;
2. Improved governance, oversight and support for committees of management;
3. Management models based on sustainable revenue;
4. Better integration of planning and management between public land managers and private land; and
5. Strong community engagement in planning for the coast.

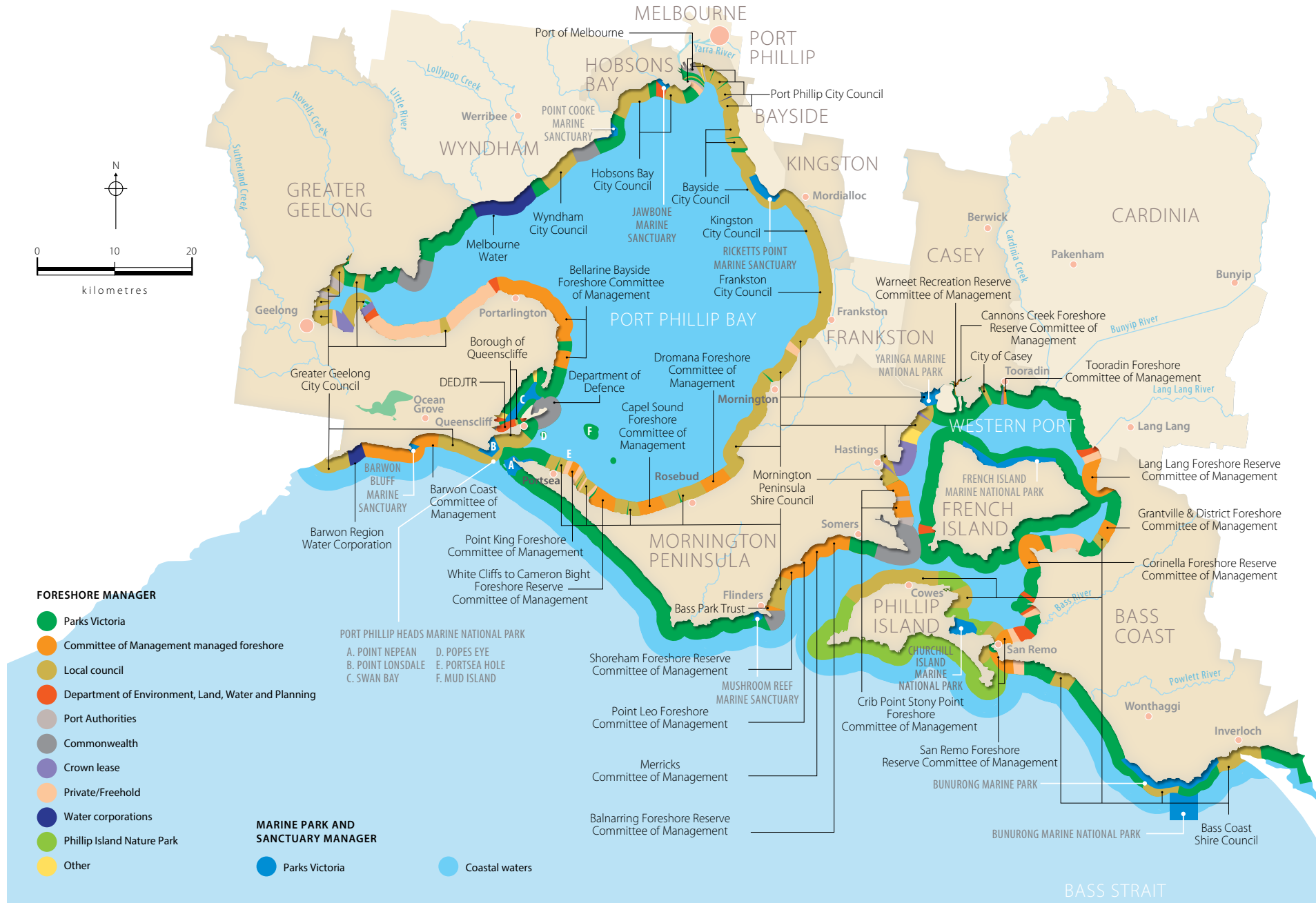


Figure 8 Indicative map of foreshore, marine park and sanctuary managers

Regional Priority 4 – Sustainable and Equitable Funding Mechanisms for Coastal Infrastructure and Management

Coastal managers work to maintain the region's economic, social and environmental coastal values. However, the costs of doing this are high because of the intensity of use of the coast in the region. For example, the Port Phillip coast receives 40 million recreational visits each year. These costs will continue to rise as managers deal with climate change and rapidly increasing populations. Coastal managers in the region are concerned about how these costs can be sustained in the future.

There are widely varying levels of resourcing available to different (often adjoining) coastal managers, reflecting their different revenue streams, such as caravan parks and campgrounds on Crown land. Investment in asset replacement and maintenance is often dependent on limited government grant programs. Ideally, funding models should account for the benefits all residents and broader users of the region derive from the coast. There should be a proportionate contribution from all these beneficiaries of the coast towards the cost of coastal management.



Living by the sea,
Chelsea

The Victorian Coastal Strategy 2014 identified this issue as significant across the state. The Strategy calls for broader and long term approaches to be explored and analysed about setting priorities for, and financing, new and existing coastal protection, infrastructure and user facilities. This aims to better align funding and capacity with accountability.

The Central Coastal Board will actively participate, and represent the views of stakeholders in the region, in a review of funding arrangements by the Victorian Coastal Council and the Department of Environment, Land, Water and Planning, as outlined in the Victorian Coastal Strategy 2014.



Williamstown

Case study – Barwon Coast Committee of Management Inc.

The Barwon Coast Committee of Management, established in 1995 through the amalgamation of the former Ocean Grove Foreshore Committee and Barwon Heads Park Committee, is responsible for the management of 13 km of coastal Crown land reserves adjoining Barwon Heads and Ocean Grove on the Bellarine Peninsula. The land the Committee manages is steeply rising, well vegetated coastal Crown land that comprises the barrier sand dune system.

Barwon Heads and Ocean Grove are year round destinations for tourists and holiday makers. The revenue from the Committee's two caravan parks, including a variety of accommodation units and one seasonal camping ground, are essential for not only maintaining high standards for those facilities, but also for protecting and enhancing the natural environment and maintaining a range of visitor facilities such as toilets, barbecues, playgrounds, car parks and safe beach access.

In 2013-14, the caravan park and accommodation operations generated \$5.02 million of the operating revenue for the Committee of \$5.35 million. The total operating expenditure for the Committee was \$4.4 million, including \$2.1 million on caravan park operations and \$1.1 million on natural resource management. The Committee's cash operating surplus for 2013-14 of approximately \$1.0 million provided funding for investment in new capital infrastructure within the caravan parks, accommodation facilities and the coastal reserve, such as upgrading toilets and firefighting services in the caravan parks, new accommodation cabins and repairs to the Barwon Heads seawall.

Complementing the revenue and operating expenses of the Committee are the valuable contributions of volunteers (volunteer capital) that are not recognised in the annual financial reporting of the Committee.

The operations of the Barwon Coast Committee of Management provide an example of sustainable funding mechanisms that support visitor infrastructure investment and maintenance and natural resource management.

Priority Actions	Lead	Partner agents	By when
4.1 Facilitate awareness of opportunities for "user pays" approaches to support coastal management	CCB	ABM, DELWP, LC, CoM	2018
4.2 Analyse and report on options for improved funding arrangements for managing coastal Crown land in the Central Coastal Region	DELWP	CCB, CoM, LC, PV, VCC	2019

Outcome

1. Sustainable and equitable funding mechanisms that reflect the benefits all residents of the region and its hinterland (Metropolitan Melbourne, City of Greater Geelong and Bass Coast Shire) derive from the coast of the Central Region.

Regional Priority 5 – Oversee the Implementation of the Recreational Boating Facilities Framework for the Central Coastal Region

The Recreational Boating Facilities Framework 2014 (RBFF) updates the information about the current state and preferred future of recreational boating facilities presented in the Boating Coastal Action Plan 2007. It is an example of how the Board has addressed a coastal issue at the regional scale. It shows that there are significant opportunities to provide a strategic approach to servicing demand for recreational boating that accounts for other values and users.

The RBFF provides an inventory of the region's boating facilities, including local port facilities, and classifies each of them into five different categories based on the level of service they provide (see Figure 9). The focus is on describing a hierarchy of boating facilities that will assist facility managers with future infrastructure planning and maintenance.

The RBFF takes a positive step towards planning for the development of boating facilities, including local port infrastructure, to balance community expectations and demands while ensuring environmental and social values are understood and considered. The RBFF's level of service approach at the regional scale lends itself to better management of all facilities.



Priority Actions	Lead	Partner agents	By when
5.1 Facilitate annual monitoring and review of the implementation of the Recreational Boating Facilities Framework	CCB	LC, PV, DELWP, DEDJTR, CoM, recreational boating industry groups	ongoing
5.2 The Central Coastal Board will work with government agencies which have direct responsibility for funding and/or management to identify responsibilities for implementing the Recreational Boating Facilities Framework	CCB	LC, PV, DELWP, DEDJTR, CoM, recreational boating industry groups	2018

Mornington
Photo: Mark Chew,
Tourism Victoria



Boating at Port
Melbourne
Photo: Ross Kilborn



Queenscliff Harbour
Photo: Department of
Environment, Land,
Water and Planning

Outcomes

1. Matching boating expectations with strategically and safely located facilities;
2. Providing access for a range of boating use consistent with the Framework's Recreational Boating Facility Hierarchy;
3. Balancing boating and other coastal uses and minimising the environmental impacts of boating use and facilities; and
4. Government agencies are responsible for implementing the Recreational Boating Facilities Framework.



Figure 9 Boating facilities in the Central Coastal Region (from the Recreational Boating Facilities Framework 2014)

Regional Priority 6 – Sustainable Visitation and Tourism Infrastructure Service Level Hierarchy

Coastal visitation and tourism infrastructure caters for the Central Coastal Region's catchment population as well as its intrastate, interstate and international visitors. Examples of activities are visiting the Penguin Parade on Phillip Island, attending international yachting events on Port Phillip and Corio Bays and holidaying at caravan parks and camping grounds.

Visitation and tourism is a key economic driver for Victoria. The Central Coastal Region experiences consistent high demand for coastal-based visitation and tourism. In part, this is due to the year round attraction of Melbourne as a global tourism destination and inter and intrastate visitation to the region's tourism attractions.

Visitation and tourism to the Central Coastal Region is expected to increase, given Melbourne's tourism status, and the proximity of significant coastal features and attractions, such as Point Nepean, the Mornington and Bellarine Peninsulas and the Bunurong Coast.



Top: Chinamans Hat, Port Phillip Bay
Photo: Mark Chew, Tourism Victoria

Above: Boardwalk, St. Kilda
Photo: Roberto Seba, Tourism Victoria

The capacity of the physical infrastructure will be challenged, leading to environmental risks and social pressures about how the coast is used. These challenges can be met by a variety of potential responses using planning, education and regulatory mechanisms.

There is also the challenge to respond to emerging coastal tourism source markets (for example Asia and India) and market sectors such as nature-based tourism and cruise shipping.

Strategically, the key will be to determine the infrastructure that is functionally important to create and maintain access for visitors and tourists – examples may include, car parking, boardwalks and coastal pathways. Where practical, levels of service should be functionally integrated across public and freehold land at particular locations.

Priority Actions	Lead	Partner agents	By when
6.1 Develop a Visitation Level of Service Framework to guide local decisions, support investment and communicate with users (refer Actions in Regional Priority 1)	CCB	DELWP, LC, PV, CoM, Local Ports, DEDJTR, Tourism Vic, other RCBs	2018
6.2 Undertake planning for visitation: a. Map and categorise infrastructure throughout the region; and b. develop a service-level hierarchy for infrastructure	DELWP CCB	LC, PV, CoM, Local Ports, Tourism Vic, other RCBs	2018
6.3 Identify priority areas for visitation and tourism, in particular identify: a. resilient parts of the coast where visitation can be encouraged; b. vulnerable parts of the coast where demand might be reduced by encouraging visitors towards alternative sites; and c. vulnerable parts of the coast with unique visitor experiences and limited scope to reduce demand.	CCB	DELWP, LC, PV, CoM, TOs, Tourism Vic and Tourism Boards, other RCBs	2018

There is a range of infrastructure that supports, and has synergies with, the provision of visitation and tourism to the coast – such as commercial uses on coastal public land or adjacent freehold land, and transport services.

The infrastructure required to support tourism facilities also helps determine the place/location's role in a service level hierarchy and the designation of the place/location as a coastal activity precinct.

The actions in this Plan will support state and regional tourism bodies responsible for planning and facilitating sustainable tourism.

Outcomes

1. Community expectations for tourism and recreation matched with a level of service that accounts for function, risk and social and economic benefits;
2. Provision of sustainable public access for a range of visitation and tourism uses;
3. Designation of coastal activity precincts in coastal management plans and local planning schemes; and
4. Increased potential for private sector investment to improve coastal management.

8 VALUING THE NATURAL ENVIRONMENT AND INTEGRATING MARINE PLANNING

Regional Priority 7 – Protecting Significant Coastal and Marine Ecosystems and Habitats

As noted in Section 2.2, the Central Coastal Region's natural systems are of intrinsic value and provide a range of services that significantly benefit human society. These ecosystems services include storm and flood protection, erosion buffers and nutrient cycling. For example, mangroves protect against wave erosion, sea grass beds act as nurseries for important fish species, and coastal salt marshes and benthos fix nutrients and carbon.

The Victorian Coastal Strategy 2014 identifies the need to consider the full values from these services, when making decisions about use and management of coastal and marine ecosystems. The Strategy calls for the development and implementation of an environmental value measurement system and environmental accounts that are consistent with international systems. The Board will work with the Victorian Coastal Council to provide the perspective of the region in developing such approaches.



Top: Dive Victoria,
Queenscliff
Photo: Mark Chew,
Tourism Victoria

Cheetham Wetland
and the City of
Melbourne
Photo: Phillip
Wierzbowski

The catchment management authorities in the region (Corangamite, Port Phillip and Westernport, and West Gippsland) have identified some important coastal and marine environmental values and threats to those values in their regional catchment strategies. A Cleaner Yarra River and Port Phillip Bay – A plan of action is another example of an environmental value measurement and accounting system that could be replicated in other areas.

Priority Actions	Lead	Partner agents	By when
7.1 A Central Coastal Regional perspective is factored into the development of an environmental value measurement system and environmental accounts	DELWP	VCC, CCB, LC, CoM, PV	2020

A new environmental management plan for Port Phillip is being developed by the Department of Environment, Land, Water and Planning, in partnership with Melbourne Water, EPA Victoria and other key organisations, to guide future investment in environmental works and address key threats. It will also contribute to developing appropriate measures of the condition of the natural features and values of the Bay.

Melbourne Water and its partnering land managers are undertaking a range of strategic research projects to improve our knowledge of the Western Port marine and coastal environment. These projects will help protect and improve the bay's health into the future.

The Victorian Government has committed to reviewing the *Coastal Management Act 1995* and developing a new Marine and Coastal Act which will be the primary mechanism for improving the integration of coastal and marine planning.

Outcomes

1. The value of ecosystem services of coastal and marine environments are explicitly taken into account in planning for coastal development; and
2. Coastal waters, estuaries, wetlands and the on-shore environment of the Central Coastal Region are planned and managed to promote healthy rich and diverse coastal and marine ecosystems.

9 INTEGRATION OF KEY ISSUES

Regional Priority 8 – Promoting Leadership, Co-ordination and Capacity Building for the Coast

The Central Coastal Board works with all stakeholders involved in the coast in the region. This includes, local government, government agencies, statutory bodies, peak organisations (such as the Association of Bayside Municipalities, the South East Councils Climate Change Alliance, and the Municipal Association of Victoria), community groups and coastal land managers. The Central Coastal Board aims to promote and lead understanding and engagement of all these players in achieving the outcomes of this Plan.

Community involvement in 'hands-on' management (for example as part of a Coastcare group) and in planning and decision-making (for example as a member of a committee of management, Regional Coastal Board or Victorian Coastal Council) is central to Victoria's model of coastal management. There is a broader range of groups and organisations involved in monitoring, managing, protecting and restoring many coastal values, and raising broader community appreciation of those values. These include numerous 'friends' groups, Coastcare, Landcare and conservation groups. For example, Birds Australia has 930 volunteers working to protect coastal bird habitat along the Victorian coastline, and is



Queenscliff Narrows and Gordon TAFE stabilising works
Photo: Matt Crawley, Bellarine Catchment network.



National Tree Day, Hobsons Bay
Photo: Coastcare

active in community education. In many areas, volunteers are critical because they do much of the management and maintenance of local public open space and recreation facilities with few resources. Also, citizen science is important for monitoring and gathering better information for ongoing management, for example Fluker post measurements of beach profiles.

The contribution of these groups is driven by passion, enthusiasm and strong connection to the coast.

The Central Coastal Board values the work of all volunteers along the coast and will work with them where possible to provide them with positive and rewarding experiences.

Coastal managers and community groups support working on joint coastal projects with Traditional Owners of the region and should be encouraged to do so. Opportunities to raise cultural awareness should be pursued including the opportunity to develop plans for land and sea country.

The Central Coastal Board has a role to support coastal stakeholder representations to the Minister in situations that will further the implementation of the Regional Coastal Plan and the Victorian Coastal Strategy 2014 in the Central Coastal Region.

The Board also has a role in providing opportunities for networking and knowledge exchange between different groups and agencies. Our coastal communities continue to change, and there is an ongoing need to support information sharing, including contemporary research to make the most of our coastal management experience and promote innovation.

Case study – ‘i sea, i care’ Marine Ambassador Program

The **‘i sea, i care’** Ambassador Program works with Victorian communities to build a strong sense of pride and stewardship for our marine treasures. The Dolphin Research Institute developed the program in 2001 in response to research showing that Victorians value the marine life in other states above their own.

‘i sea, i care’ promotes the key messages that:

- “Victoria’s Marine Treasures are Too Precious to Lose”; and
- all of us living in the catchment put our marine values at risk – we all need to change our actions.

The program develops ambassadors who work as peer educators, public speakers and champions within their communities. It works predominantly with primary schools and growing numbers of secondary schools, businesses and community groups. **‘i sea, i care’** has many elements including the whole-year school ambassador program, the Challenge Summer beach program, and social research surveys conducted by ambassadors. The program would not exist without critical partnerships, particularly with Melbourne Water since 2002. Other partners, including six councils, over 100 schools, more than 2500 ambassadors and Dolphin Research Institute’s dedicated team who all make **‘i sea, i care’** a true community program.



An ‘i sea, i care’
ambassador
Photo: Jeff Weir

Boats moored at
Sorrento
Photo: Ewen Bell,
Tourism Victoria

Priority Actions	Lead	Partner agents	By when
8.1 Prepare an implementation plan for the Regional Priorities	CCB	All partner agents	2016
8.2 Leadership to provide support to all Central Coastal Region stakeholders that will strengthen their capacity for managing our coast in the short and long term. This may include: <ul style="list-style-type: none"> a. Strategic events or conferences; b. Support for community groups and programs; c. Ongoing updates to Regional Coastal Plan mapping and information; and d. A collaborative knowledge hub for sharing information about coastal and marine research in the Central Coastal Region. 	CCB	VCC, DELWP, PV	ongoing ongoing ongoing 2016
8.3 Promote and support work done by all local coastal and marine volunteer community groups	CCB	CMAs, LC, DELWP, TOs	ongoing
8.4 Undertake a mid-term review of the Regional Coastal Plan	CCB	All partner agents	2018

Outcomes

1. Annual progress reporting about implementation of the Regional Coastal Plan;
2. Mid-term review of progress against the Plan’s implementation plan;
3. The Central Coastal Board provides leadership in the implementation of the Victorian Coastal Strategy 2014 in the region;
4. Stakeholder organisations (for example local government, peak groups including the Association of Bayside Municipalities, the Municipal Association of Victoria, Traditional Owners and industry groups) understand and are engaged in the delivery of the outcomes of the Regional Coastal Plan; and
5. Monitoring and annual review of the Regional Coastal Plan.

10 IMPLEMENTING THE REGIONAL COASTAL PLAN

10.1 Monitoring, evaluation and reporting

Monitoring, evaluation and reporting on the condition of the coast and the implementation of actions is fundamental to efficiently and effectively protect and enhance coastal values. The Victorian Coastal Council, in partnership with the Central Coastal Board and other agencies, will develop a state framework to monitor the condition of Victoria's coast and the delivery of actions set out in the Victorian Coastal Strategy 2014, the Regional Coastal Plan and coastal management plans.

There is considerable existing information about the condition of the coastal values in the region and the processes and pressures that affect them. This includes a range of monitoring programs by the Victorian Government, Melbourne Water and catchment management authorities, the Environmental Protection Authority and local councils. Results are publicly reported in the Yarra and Bay Report Card, the Beach Report, the Index of Stream Condition and the Index of Estuary Condition.

More information will help to adapt to the dynamic physical, biological and social nature of the coast, and to protect coastal values. The proposed five-yearly State of the Bays report, to be developed by the Commissioner for Environmental Sustainability, will be a pivotal part of this, providing up to date information about the health of coasts, bays and waterways.

The accountabilities and timelines for the delivery of the actions set out in the following tables provide the basis for reporting on the implementation of this Plan. The Board will develop an implementation plan within six months of the Regional Coastal Plan being approved, giving more detail about the process, responsibilities and timing for undertaking the actions.

The Board will report annually to the Victorian Coastal Council on progress. The Plan will be reviewed in 2020.

10.2 Table of Actions

Regional Priority 1 – Population growth – balancing access and valuing the natural environment	Lead	Partner agents	By when
1.1 Ensure implementation of catchment and coastal planning and management objectives and priorities are aligned	CMAs, MW	LC, CoM, PV, TV, EPA, DELWP, CCB	Ongoing
1.2 Engage and communicate with the community about the reasons for changes of service and use (see Regional Priority 6)	CCB	LC, CoM, PV, TV, CMAs, MW, EPA, DELWP	2018
1.3 Monitor and promote the development of public access to the water along all suitable public land in the region	CCB	DELWP, LC, CoM, PV	2020

Regional Priority 2 – Adapting to climate change and increased coastal hazards	Lead	Partner agents	By when
2.1 Develop a systematic approach to prioritise areas for detailed coastal hazard assessments and adaptation planning	DELWP	CCB, LC, CoM, MW, PV, CMAs, relevant peak bodies*	2016
2.2 Refine methodologies for conducting detailed coastal hazard assessments and integrating flood studies in coastal areas to identify high risk areas	DELWP	LC, CCB, CoM, MW, PV, CMAs, relevant peak bodies*	2016
2.3 Refine methodologies for local adaptation planning, including addressing barriers to practical local adaptation action	DELWP	LC, CCB, CoM, MW, PV, CMAs, relevant peak bodies*	2017
2.4 Continue, or undertake new, detailed coastal hazard assessments and adaptation planning, particularly for the priority areas identified in 2.1	LC	DELWP, CCB, MW, PV, CMAs, CoM	2018
2.5 Implement identified adaptation responses through local decisions, for example updating local planning schemes, coastal management plans and emergency plans, and prioritising future works	LC	CoM, MW, PV, CMAs, DELWP, SES	2020

* Relevant Peak bodies include: ABM, SECCCA, MAV and VNPA

Stairs to beach at Cape Woolamai
Photo: Salahuddin Ahmad



Regional Priority 3 – Integrating coastal planning and management	Lead	Partner agents	By when
3.1 Prepare guidelines for the development of coastal management plans	DELWP	CCB, CoM, LC, PV	2015
3.2 Clarify roles, responsibilities and expectations for all regional agencies involved in managing the coast especially where operating boundaries overlap	VCC	CCB, DELWP, LC, CoM, PV	2018
3.3 Measure and report on the extent of the region that has coastal management plans consistent with statewide guidelines and the Victorian Coastal Strategy 2014	CCB	DELWP, LC, CoM, PV	2018
3.4 Ensure effective planning mechanisms such as coastal management plans are in place along all of the Central Coastal Region. Where it is sensible a coastal management plan should be developed across multiple land managers. From this, local public land managers can put together precinct or master plans	DELWP	CCB, CoM, LC, PV	2020

Regional Priority 4 – Sustainable and equitable funding mechanisms for coastal infrastructure and management	Lead	Partner agents	By when
4.1 Facilitate awareness of opportunities for “user pays” approaches to support coastal management	CCB	ABM, DELWP, LC, CoM	2018
4.2 Analyse and report on options for improved funding arrangements for managing coastal Crown land in the Central Coastal Region	DELWP	CCB, CoM, LC, PV, VCC	2019

Regional Priority 5 – Oversee the implementation of the Recreational Boating Facilities Framework for the Central Coastal Region	Lead	Partner agents	By when
5.1 Facilitate annual monitoring and review of the implementation of the Recreational Boating Facilities Framework	CCB	LC, PV, DELWP, DEDJTR, CoM, recreational boating industry groups	ongoing
5.2 The Central Coastal Board will work with government agencies which have direct responsibility for funding and/or management to identify responsibilities for implementing the Recreational Boating Facilities Framework	CCB	LC, PV, DELWP, DEDJTR, CoM, recreational boating industry groups	2018

Regional Priority 6 – Sustainable visitation and tourism infrastructure service level hierarchy	Lead	Partner agents	By when
6.1 Develop a Visitation Level of Service Framework to guide local decisions, support investment and communicate with users (refer Actions in Regional Priority 1)	CCB	DELWP, LC, PV, CoM, Local Ports, DEDJTR, Tourism Vic, other RCBs	2018
6.2 Undertake planning for visitation: a. Map and categorise infrastructure throughout the region; and b. develop a service-level hierarchy for infrastructure.	DELWP CCB	LC, PV, CoM, Local Ports, Tourism Vic, other RCBs	2018
6.3 Identify priority areas for visitation and tourism, in particular identify: a. resilient parts of the coast where visitation can be encouraged; b. vulnerable parts of the coast where demand might be reduced by encouraging visitors towards alternative sites; and c. vulnerable parts of the coast with unique visitor experiences and limited scope to reduce demand.	CCB	DELWP, LC, PV, CoM, TOs, Tourism Vic and Tourism Boards, other RCBs	2018

Regional Priority 7 – Protecting significant coastal ecosystems and habitats	Lead	Partner agents	By when
7.1 A Central Coastal Regional perspective is factored into the development of an environmental value measurement system and environmental accounts	DELWP	VCC, CCB, LC, CoM, PV	2020

Regional Priority 8 – Promoting leadership, co-ordination and capacity building for the coast	Lead	Partner agents	By when
8.1 Prepare an implementation plan for the Regional Priorities	CCB	All partner agents	2016
8.2 Leadership to provide support to all Central Coastal Region stakeholders that will strengthen their capacity for managing our coast in the short and long term. This may include: a. Strategic events or conferences; b. Support for community groups and programs; c. Ongoing updates to Regional Coastal Plan mapping and information; and d. A collaborative knowledge hub for sharing information about coastal and marine research in the Central Coastal Region.	CCB	VCC, DELWP, PV	ongoing ongoing ongoing 2016
8.3 Promote and support work done by all local coastal and marine volunteer community groups	CCB	CMAs, LC, DELWP, TOs	ongoing
8.4 Undertake a mid-term review of the Regional Coastal Plan	CCB	All partner agents	2018

11 APPENDICES

Appendix 1 – Public and agency consultation about the Regional Coastal Plan

1. Submissions from public consultation about the Regional Coastal Plan

Stakeholders	Agency/Group/Person	Scoping Phase	Draft Plan Phase
Committees of Management	Barwon Coast Committee of Management	✓	✓
	Bellarine Bayside Foreshore Committee of Management	✓	
	Capel Sound Foreshore Committee	✓	
	Phillip Island Nature Parks	✓	✓
	Point Leo Foreshore Committee of Management		✓
Community Group	Beaumaris Conservation Society		✓
	Bellarine Catchment Management Network and Bellarine Landcare Group		✓
	BERG Mt Martha		✓
	Birdlife Australia	✓	✓
	Blairstown Community Fire Prevention Action Group		✓
	Bushwalking Victoria	✓	
	Frankston Beach Association		✓
	Friends of Edwards Point		✓
	Friends of Hooded Plover	✓	
	Friends of the Hooded Plover Breamlea		✓
	Geelong Environment Council	✓	
	Geelong Field Naturalists Club		✓
	Mordialloc Beaumaris Conservation League Inc		✓
	Mornington Peninsula Beach Box Association & Port Phillip Beachbox Association	✓	
	Mornington Peninsula Beachbox Association		✓
	Mornington Peninsula Ratepayers' and Residents' Association and McRae Action Group	✓	✓
	Nepean Historical Society Inc		✓
	Peninsula Speaks		✓
	Phillip Island Boardriders Club	✓	
	Phillip Island Conservation Society		✓

Stakeholders	Agency/Group/Person	Scoping Phase	Draft Plan Phase
Community Group	Preserve Western Port Action Group		✓
	Queenscliff Community Association		✓
	Sandringham Foreshore Association		✓
	Shoreham Community Association		✓
	Sorrento Foreshore Advisory Group		✓
	The Somers Residents Association		✓
	Wyndham Boatshed Association	✓	✓
Indigenous Group	Federation of Victorian Traditional Owner Corporations	✓	✓
Individual	Bessie Tyers	✓	
	Cassie Johnstone	✓	
	Chris Gurney		✓
	Chris Mitchell		✓
	Dalis Law		✓
	Dalton Koss HQ		✓
	David Curtis	✓	
	David Grace		✓
	David Kenwood		✓
	Denis More		✓
	Ian Samuel		✓
	Joy Button	✓	
	Kathleen McInnes		✓
	Kevin Chambers		✓
	Lex Chalmers		✓
	M. Fluker	✓	
	Michael Norris		✓
	Nina Earl	✓	
	Peter Merritt		✓
	Susie Inglis		✓

Stakeholders	Agency/Group/Person	Scoping Phase	Draft Plan Phase
Local Government	Bass Coast Shire Council	✓	✓
	Bayside City Council		✓
	Borough of Queenscliffe	✓	✓
	Cardinia Shire Council	✓	
	City of Greater Geelong	✓	✓
	City of Kingston	✓	✓
	City of Melbourne	✓	
	City of Port Phillip		✓
	Frankston City Council		✓
	Hobsons Bay City Council	✓	✓
	Mornington Peninsula Shire Council	✓	✓
	Western Alliance for Greenhouse Action	✓	
	Wyndham City Council		✓
Peak Body	Association of Bayside Municipalities	✓	✓
	Birdlife Bass Coast		✓
	Engineers Australia		✓
	Four Wheel Drive Victoria	✓	✓
	Greenfleet Australia		✓
	Heritage Council Victoria		✓
	Life Saving Victoria	✓	
	Mornington Peninsula Marine Alliance Inc		✓
	Parks Victoria		✓
	Port Phillip Eco Centre		✓
	Sanctuary Living		✓
	South East Councils Climate Change Alliance		✓
	The Hermal Group		✓
	Victorian Association for Environmental Education		✓
	Victorian Caravan Parks Association		✓

Stakeholders	Agency/Group/Person	Scoping Phase	Draft Plan Phase
Peak Body	Victorian Catchment Management Council	✓	
	Victorian Chapter Australian Coastal Society		✓
	Victorian National Parks Association	✓	✓
	VR Fish	✓	
	Yachting Victoria	✓	
Regional Statutory Authority	Barwon Water		✓
	Corangamite Catchment Management Authority	✓	✓
	Melbourne Water	✓	✓
	Port Phillip & Westernport Catchment Management Authority	✓	✓
	Southern Rural Water	✓	
West Gippsland CMA		✓	
State Government	Australian Fisheries Management Authority	✓	
	Department of Economic Development, Jobs, Transport and Resources		✓
	Department of Education and Early Childhood Development	✓	
	Department of Environment, Land, Water and Planning		✓
	Maritime Safety Victoria		✓
	The Hon Martin Dixon MP, State Member for Nepean		✓
	Office of the Victorian Government Architect	✓	
	Parliamentary Secretary to the Premier of Victoria	✓	

2. Agencies invited to workshops as part of Regional Coastal Plan stakeholder consultation (Phase 1 – March 2014 and Phase 2 – February 2015)

Stakeholders	Agency/ Group/ Person	Phase	
		1	2
Committees of Management	Barwon Coast Committee of Management	✓	✓
	Bellarine Bayside Foreshore Committee of Management	✓	✓
Indigenous Group	Federation of Victorian Traditional Owner Corporation		✓
	Office of Aboriginal Affairs Victoria		✓
	Victorian Aboriginal Heritage Council		✓
	Victorian Traditional Owner Land Justice Group (Land Justice Council)		✓
Local Government	Association of Bayside Municipalities	✓	✓
	Bass Coast Shire Council	✓	✓
	Bayside City Council	✓	✓
	Borough of Queenscliffe	✓	✓
	Cardinia Shire Council	✓	✓
	Casey Shire Council	✓	✓
	City of Greater Geelong	✓	✓
	City of Port Phillip	✓	✓
	Frankston City Council	✓	✓
	Hobsons Bay City Council	✓	✓
	Kingston City Council	✓	✓
	Melbourne City Council	✓	✓
	Mornington Peninsula Shire Council	✓	✓

Stakeholders	Agency/ Group/ Person	Phase	
		1	2
Peak Body	Australian Coastal Society		✓
	BirdLife Australia		✓
	Coastcare Victoria		✓
	Heritage Council Victoria		✓
	Life Saving Victoria		✓
	Municipal Authority Victoria	✓	✓
	Sustainability Victoria		✓
	Tourism Victoria		✓
	Transport Safety Victoria (Maritime)		✓
	Victorian Association of Environmental Education		✓
	Victorian Caravan Parks Association		✓
State Government	Victorian National Parks Association		✓
	Victorian Recreational Fishers		✓
	Department of Environment, Land, Water and Planning	✓	✓
	Environment Protection Authority		✓
	Parks Victoria	✓	✓
	Victorian Catchment Management Council		✓
	Victorian Coastal Council	✓	✓

Key issues raised in Phase 1 (March 2014)

Include:

- Improving integrated planning across jurisdictions – catchments coast-marine continuum;
- Adapting to climate change and increased coastal hazards;
- Managing for population growth and consequent increased demand for coastal access and infrastructure;
- Providing sustainable and equitable funding mechanisms;
- Matching recreational boating expectations with strategically and safely located facilities;
- Identifying regionally significant environmental values that are under threat;
- Promoting sustainable tourism and visitor use and development;
- Supporting coastal management and decision-making through co-ordination and capacity building; and
- Promoting evidence-based coastal management practices and decisions.

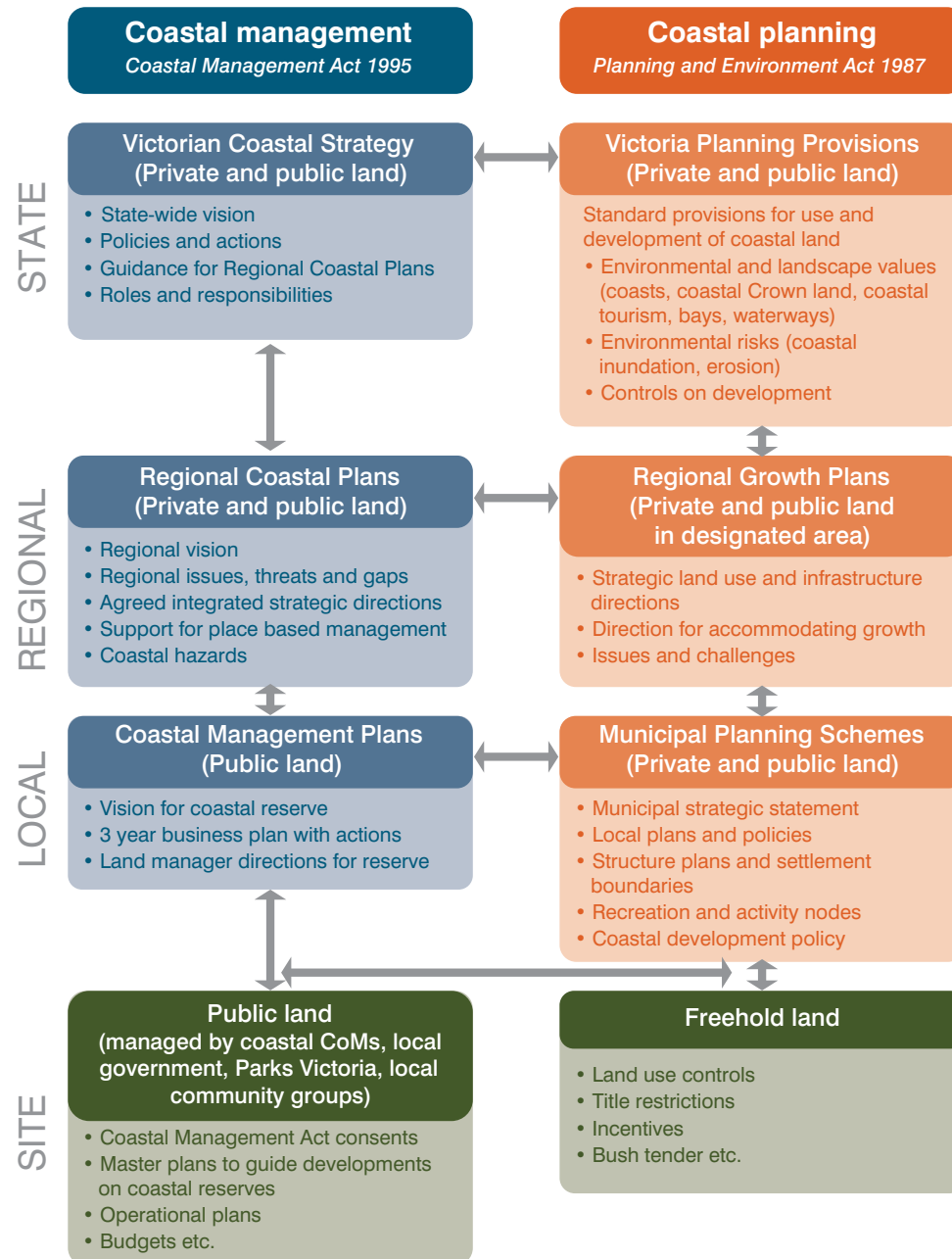
Key issues raised in Phase 2 (February 2015)

Include:

- Clarity about the role of, and links between, the Regional Coastal Plan, the Victorian Coastal Strategy 2014, statutory planning mechanisms and other key plans;
- Clarity about roles and responsibilities of coastal entities and their funding and governance structures;
- Adapting to climate change and increased coastal hazards;
- The use of inundation maps in planning scheme;
- Providing sustainable and equitable funding mechanisms;
- Valuing the natural environment and integrating marine planning including strong actions to protect significant coastal and marine ecosystems and habitat;
- Protecting areas of geological significance such as the Beaumaris Cliffs Tertiary Fossil site;
- Improving monitoring and reporting of implementation, visitations and environmental condition to help planning and management decisions; and
- Greater recognition of work done by volunteers and community groups along the coast.

A number of submissions in both phases of consultation also raised issues of local importance that are best addressed by local managers.

Appendix 2 – Coastal management and planning connections in Victoria (from Victorian Coastal Strategy 2014, page 7)



Appendix 3 – Aligning actions in the Central Regional Coastal Plan with Key Issues and Desired Outcomes in the Victorian Coastal Strategy 2014

Note: (i) Victorian Coastal Strategy 2014 Key Issues: 1. Managing population growth 2. Adapting to a changing climate 3. Managing coastal land and infrastructure
4. Valuing the natural environment 5. Integrating marine planning

Central Regional Coastal Plan			Victorian Coastal Strategy 2014	
Regional Priority	Action	Issue	Key Issues ⁽ⁱ⁾	Desired Outcome (page)
1	1	Ensure implementation of catchment and coastal planning and management objectives and priorities are aligned	4	1.5 Catchments and water quality – Better planning/management framework and collaboration (43)
	2	Engage and communicate with the community about the reasons for changes of service and use (see Regional Priority 6)	1, 3	2.2 Coastal settlements – Settlements support protection of coastal values, growth to suitable areas (54) 2.5 Community participation – Local communities value the coast (62) 3.3 Access to the coast – Community access minimises safety and environmental risks (70) 3.4 Boating and water-based activities - Balance between access and environmental values (72)
	3	Monitor and promote the development of public access to the water along all suitable public land in the region	3	3.2 Visitation and tourism – Diverse visitation in suitable areas, capacity guides service level (68) 3.3 Access to the coast – Community access minimises safety and environmental risks (70)
2	1	Develop a systematic approach to prioritise areas for detailed coastal hazard assessments and adaptation planning	2	2.1 Coastal hazards and processes – Better understanding of vulnerable areas (49)
	2	Refine methodologies for conducting detailed coastal hazard assessments and integrating flood studies in coastal areas to identify high risk areas	2, 3	
	3	Refine methodologies for local adaptation planning, including addressing barriers to practical local adaptation action	2, 3	
	4	Continue, or undertake new, detailed coastal hazard assessments and adaptation planning, particularly for the priority areas identified in 2.1	2, 3	2.1 Coastal hazards and processes – Better understanding of vulnerable areas, development siting (49) 2.2 Coastal settlements – Growth to suitable areas (54)
	5	Implement identified adaptation responses through local decisions, for example updating local planning schemes, coastal management plans and emergency plans, and prioritising future works	2, 3	2.1 Coastal hazards and processes – Development siting, no interference with natural coastal processes (49)
3	1	Prepare guidelines for the development of coastal management plans	3, 5	1.5 Catchments and water quality – Better planning and management framework and collaboration (43)
	2	Clarify roles, responsibilities and expectations for all regional agencies involved in managing the coast especially where operating boundaries overlap	3	
	3	Measure and report on the extent of the region that has coastal management plans consistent with statewide guidelines and the Victorian Coastal Strategy 2014	3	3.3 Access to the coast – Community access minimises safety and environmental risks (70)
4	4	Ensure effective planning mechanisms such as coastal management plans are in place along all of the Central Coastal Region. Where it is sensible a coastal management plan should be developed across multiple land managers. From this, local public land managers can put together precinct or master plans	3, 5	1.5 Catchments and water quality – Better planning and management framework and collaboration (43) 3.1 Coastal buildings, infrastructure and management – Building and infrastructure planning across boundaries (65)

Central Regional Coastal Plan			Victorian Coastal Strategy 2014	
Regional Priority	Action	Issue	Key Issues ⁽ⁱ⁾	Desired Outcome (page)
4	1	Facilitate awareness of opportunities for “user pays” approaches to support coastal management	3	3.3 Access to the coast – Community access minimises safety and environmental risks (70) 3.4 Boating and water-based activities - Sustainable network of facilities (72)
	2	Analyse and report on options for improved funding arrangements for managing coastal Crown land in the Central Coastal Region		
5	1	Facilitate annual monitoring and review of the implementation of the Recreational Boating Facilities Framework	1, 3	3.2 Visitation and tourism - Diverse visitation in suitable areas, capacity guides service level (68) 3.4 Boating and water-based activities - Sustainable network of facilities, balance access and environment (72)
	2	The Central Coastal Board will work with government agencies which have direct responsibility for funding and/or management to identify responsibilities for implementing the Recreational Boating Facilities Framework		
6	1	Develop a Visitation Level of Service Framework to guide local decisions, support investment and communicate with users	1, 3	1.4 Onshore environments – Access and use in onshore environments is well managed (41) 1.6 Heritage - Role of Traditional Owners recognised (46) 3.2 Visitation and tourism - Diverse visitation in suitable areas, capacity guides service level (68)
	2a-b	Undertake planning for visitation: (a) map and categorise infrastructure throughout the region and (b) develop a service-level hierarchy for infrastructure	1, 3	
	3a-c	Identify priority areas for visitation and tourism: resilient areas, vulnerable areas to reduce demand, and vulnerable areas with limited scope to reduce demand	1, 2, 3	3.3 Access to the coast – Community access minimises safety and environmental risks (70) 3.4 Boating and water-based activities - Sustainable network of facilities, balance between access and environmental values (72)
7	1	A Central Coastal Regional perspective is factored into the development of an environmental value measurement system and environmental accounts	4	1.1 Valuing the coast - Environment values recognised (33) 1.2 and 1.3 Marine environments (35), wetlands estuaries (38) - Planning and management of coastal waters, estuaries wetlands, onshore environments
8	1	Prepare an implementation plan for the Regional Priorities	1, 2, 3, 4	
	2	Leadership to provide support to all Central Coastal Region stakeholders that will strengthen their capacity for managing our coast in the short and long term		2.4 Research and knowledge sharing - Information exchange (60) 2.5 Community participation – Local communities value the coast and actively participate in planning and management(62), communities supported, community participation with best information (62)
	3	Promote and support work done by all local coastal and marine volunteer community groups		
	4	Undertake a mid-term review of the Regional Coastal Plan		

Appendix 4 – List of Coastal Management Plans in the Central Coastal Region

1. Coastal Action Plans (under the *Coastal Management Act 1995*)

Coastal Action Plan
Mount Eliza to Point Nepean Coastal Action Plan 2005
Corio Bay Coastal Action Plan 2005
Boating Coastal Action Plan 2007

2. Coastal Management Plans prepared since 2005

Title of Plan	Responsible Agent
Barwon Coast Coastal Management Plan 2013/14 to 2015/16	Barwon Coast Committee of Management
Balnarring Foreshore Reserve Coastal Management Plan 2012	Balnarring Committee of Management
Bayside Coastal Management Plan 2014	Bayside City Council
Bonnie Watson Foreshore Reserve Coastal Management Plan 2013	Cannons Creek Foreshore Reserve Committee of Management
Breamlea Foreshore Masterplan and Management Plan Update 2010	City of Greater Geelong
Buckley Park Coastal Management Plan	
Cannons Creek Foreshore Reserve Coastal Management Plan 2013	Cannons Creek Foreshore Reserve Committee of Management
Clifton Springs Coastal Management Plan 2008	City of Greater Geelong
Dromana Foreshore Coastal Management Plan 2010 (Review)	Dromana Foreshore Committee of Management & DELWP
Flinders Foreshore Reserve Coastal Management Plan 2010	Parks Victoria, Mornington Peninsula Shire Council
Foreshore Management Plan 2011 (City of Port Phillip) 2011	City of Port Phillip
Frankston Foreshore Coastal Management Plan 2012	Frankston City Council
Kingston Coastal Management Plan 2009	Kingston City Council

Title of Plan	Responsible Agent
Lang Lang Foreshore Reserve Coastal Management Plan 2012 Draft	DELWP
Limeburners Bay Management Plan	
Merricks Beach Foreshore Reserve Coastal Management Plan 2012 Draft	Merricks Beach Foreshore Committee of Management & DELWP
Mornington Coastal Management Plan 2012 Draft	Mornington Peninsula Shire
Mornington Harbour Precinct Plan 2013	Mornington Peninsula Shire
Mount Martha Coastal Management Plan 2008	Mornington Peninsula Shire
Northern Bellarine Foreshore Plan 2012	Bellarine Bayside Foreshore Committee of Management
Phillip Island Nature Parks Strategic Plan 2012-17	
Point Henry Foreshore Management Plan 2006	City of Greater Geelong
Point Leo Coastal Management Plan 2012 Draft	Point Leo Foreshore Committee of Management & DELWP
Ramblers Road Foreshore Management Plan	
Rosebud Coastal Management Plan 2012	Mornington Peninsula Shire
Sandringham Foreshore Coastal Management Plan 2010	Bayside City Council, DELWP, Parks Victoria
San Remo Foreshore Reserve Management Plan 2010	DELWP
Somers Foreshore Reserve Management Plan 2014 Draft	Somers Foreshore Committee of Management
Stony Point and Hastings Foreshore Management Plan 2001	Foreshore Committee of Management
Warneet Foreshore Coastal Management Plan 2012	Warneet Foreshore Reserve Committee of Management
Whitecliffs to Camerons Bight Foreshore Reserve Coastal Management Plan 2012	Whitecliffs to Camerons Bight Foreshore Committee of Management

3. Other Coastal Plans prepared since 2005

Title of Plan	Responsible Agent
Anderson Inlet Fisheries Reserve Management Plan 2006	DPI Fisheries Victoria
Barwon Bluff Marine Sanctuary Management Plan 2007	Parks Victoria
Bunurong Marine National Park Management Plan 2006	Parks Victoria
Corangamite Fishery Management Plan 2008	DPI Fisheries Victoria
Eastern Port Phillip Bay Aquaculture Fisheries Management Plan 2005	DPI Fisheries Victoria
Flinders Aquaculture Fisheries Reserve Management Plan 2005	DPI Fisheries Victoria
Flinders Pier Master Plan 2008	Parks Victoria
Hastings South Coastal Management Plan & Recreational Boating Precinct 2008 Draft	Mornington Peninsula Shire
Hastings Structure Plan and Coastal Management Plan 2010 Draft	Mornington Peninsula Shire
Jawbone Marine Sanctuary Management Plan 2007	Parks Victoria
Mornington Peninsula National Park and Arthurs Seat State Park Management Plan 1998	Parks Victoria
Mushroom Reef Marine Sanctuary Management Plan 2007	Parks Victoria
Phillip Island Nature Parks Strategic Plan 2012-17	Phillip Island Nature Parks Board of Management
Point Cook Coastal Park and Cheetham Wetlands Future Directions Plan 2005	Parks Victoria
Point Cooke Marine Sanctuary Management Plan 2007	Parks Victoria
Point Lonsdale Foreshore Master Plan 2009	Borough of Queenscliffe & Greater Geelong
Point Nepean National Park and Point Nepean Quarantine Station Management Plan 2009	Parks Victoria
Port Phillip and Western Port Fisheries Management Plan 2009	DPI Fisheries Victoria
Port Phillip Heads Marine National Park Management Plan 2006	Parks Victoria
Port Phillip (Western Shoreline) & Bellarine Peninsula Ramsar Site Strategic Management Plan 2003	Parks Victoria & DELWP
Ricketts Point Marine Sanctuary Management Plan 2005	Parks Victoria
Rye Recreational Boating Precinct Master Plan 2013	Mornington Peninsula Shire
Sorrento Recreational Boating Precinct Plan 2011	Mornington Peninsula Shire
St Kilda Pier Conservation Management Plan 2004	Parks Victoria
Tooradin Foreshore and Boating Infrastructure Master Plan 2009	Tooradin Foreshore Committee of Management & DELWP
Western Port Marine National Parks Management Plan (Yaringa, French Island & Churchill Island) 2007	Parks Victoria
Western Port Ramsar Site Strategic Management Plan 2003	Parks Victoria
Williamstown Foreshore Strategic Plan 2010	Parks Victoria

Acronyms

AAV	Aboriginal Affairs Victoria	NCR	Nature Conservation Reserve
ABM	Association of Bayside Municipalities	NP	National Park
CAP	Coastal Action Plan	PV	Parks Victoria
CCB	Central Coastal Board	OAAV	Office of Aboriginal Affairs Victoria
CMA	Catchment Management Authority	RAP	Registered Aboriginal Party
CMP	Coastal Management Plan	RCB	Regional Coastal Board
CoM	Committee of Management	RCP	Regional Coastal Plan
CSIRO	Commonwealth Science and Industrial Research Organisation	RDV	Regional Development Victoria
DEDJTR	Department of Economic Development, Jobs, Transport and Resources	SECCCA	South East Councils Climate Change Alliance
DELWP	Department of Environment, Land, Water and Planning	SES	State Emergency Services
EPA	Environment Protection Authority	TV	Tourism Victoria
FFR	Flora and Fauna Reserve	TO	Traditional Owners
HV	Heritage Victoria	VAGO	Victorian Auditor General's Office
ICZM	Integrated coastal zone management	VCC	Victorian Coastal Council
IPCC	Intergovernmental Panel on Climate Change	VCS	Victorian Coastal Strategy
LCHA	Local Coastal Hazard Assessment	VNPA	Victorian National Parks Association
LC	Local Council	VIF	Victoria in Future
LPPF	Local Planning Policy Framework	WC	Water corporation
MAV	Municipal Association of Victoria	WR	Wildlife Reserve
MW	Melbourne Water		



Bathing Boxes,
Mornington Peninsula
Photo: Roberto Seba,
Tourism Victoria

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NOTES



The Beach, St Kilda, Victoria.
c1920-1954 Rose Stereograph Co.

