

BARWON COAST
COASTAL AND MARINE
MANAGEMENT PLAN (CMMP)



Barwon
Coast



2020/2025

Issued: <11 Sept 2019>

FOREWORD

FROM THE MINISTER

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nam id lacus varius, dictum risus euismod, molestie urna. Nulla ornare, nulla non luctus blandit, orci odio bibendum nunc, et rutrum velit magna dignissim est. Donec urna erat, tincidunt sed dictum eget, congue quis risus. Fusce dapibus molestie tellus, vel pharetra ex hendrerit ut. Sed varius tristique nunc nec ullamcorper. Nunc iaculis molestie mi nec mattis. Etiam bibendum interdum arcu, at fermentum nulla semper ultrices.

Suspendisse pretium sem eu nisl pulvinar, et aliquet diam ultrices. Nullam justo ligula, placerat id felis quis, vehicula volutpat arcu. Sed feugiat eleifend ligula, a mollis odio rutrum at. Etiam sit amet orci urna. Vivamus libero justo, tincidunt in felis id, venenatis pretium nunc. Integer sit amet pharetra leo.

Quisque dictum sagittis quam vitae posuere. Donec porta ex vel odio viverra sodales sed ac dui. Nunc ullamcorper risus quis augue commodo, eget posuere nunc hendrerit. Integer euismod suscipit libero id ullamcorper.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nam id lacus varius, dictum risus euismod, molestie urna. Nulla ornare, nulla non luctus blandit, orci odio bibendum nunc, et rutrum velit magna dignissim est. Donec urna erat, tincidunt sed dictum eget, congue quis risus. Fusce dapibus molestie tellus, vel pharetra ex hendrerit ut. Sed varius tristique nunc nec ullamcorper. Nunc iaculis molestie mi nec mattis. Etiam bibendum interdum arcu, at fermentum nulla semper ultrices.

Suspendisse pretium sem eu nisl pulvinar, et aliquet diam ultrices. Nullam justo ligula, placerat id felis quis, vehicula volutpat arcu. Sed feugiat eleifend ligula, a mollis odio rutrum at. Etiam sit amet orci urna. Vivamus libero justo, tincidunt in felis id, venenatis pretium nunc. Integer sit amet pharetra leo.

Quisque dictum sagittis quam vitae posuere. Donec porta ex vel odio viverra sodales sed ac dui. Nunc ullamcorper risus quis augue commodo, eget posuere nunc hendrerit. Integer euismod suscipit libero id ullamcorper.



The Hon. Lily D'Ambrosio MP
Minister for Energy, Environment,
Climate Change

FROM THE CHAIR

As chair and on behalf of Barwon Coast Committee of Management, I have great pleasure in presenting this 2020 – 2025 *Coastal and Marine Management Plan (CMMP)* as the strategic plan and guiding document for our current and future operations.

As a highly successful, long term, motivated and dedicated coastal land manager, Barwon Coast has been operating under its previous Coastal Management Plan 2012 – 2015 and achieved most of the objectives and goals of this plan, while many of the objectives are ongoing such as responding to coastal erosion situations.

Since 2017, Barwon Coast has been working towards developing this CMMP. During this time the *Marine and Coastal Act 2018* has been introduced, placing more emphasis on the protection of marine environments and introducing a marine spatial planning framework. However, at the time of writing, the policy implications of this new Act for coastal land managers are still being finalised.

This new CMMP is based upon our ongoing responsibilities as per our previous CMP and has been informed by the views of the community and stakeholders, the Committee of Management and the Barwon Coast senior management team. Our CMMP is consistent and totally aligned with several important State-wide directives including:

- *Victorian Coastal Strategy (2014)*
- *The Marine and Coastal Act 2018* and draft Marine and Coastal Policy setting out requirements of coastal land managers
- DELWP guidelines for Coastal Management Plans (2017), and
- DELWP Statement of Expectations for Committees of Management

Importantly, we have been able to include highly nuanced and appropriate plans with objectives that best meet the needs of this unique, magnificent and precious coastal environment while catering for the access needs of an ever-growing number of regular and visiting coast users.

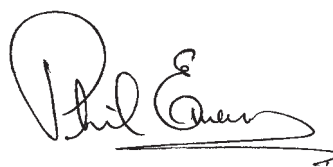
Major efforts were made to improve this CMMP as our new strategic guiding document in several significant ways including:

- Extensive engagement and consultation with local and visiting communities, Traditional Owners and key stakeholders to ensure we are meeting community as well as environmental needs – see Section 1.2 for details.

- Extensive engagement and input from our own highly experienced, knowledgeable and dedicated staff who best know the precise needs of the land we manage and who will commit their support for implementing the direction of this new CMMP
- Placing great emphasis on setting deliverables and five-year outcomes against our values and objectives.
- Incorporating a MERI plan (Monitoring, Evaluation, Reporting and Improvement) to become the basis for:
 - more objectively and accurately evaluating progress towards our objectives and outcome targets and
 - providing more meaningful reports to the Committee of Management enabling better, more informed decision making
- Aligning actions with a business plan which realistically supports the requirements of this CMMP
- Ensuring that the CMMP is readable, meaningful and understandable by its intended audiences

Enormous thanks for the development over the last 2 years of this ambitious and exciting CMMP must be attributed to the hardworking, visionary, and highly principled CMMP subcommittee together with senior Barwon Coast personnel and a number of assisting consultants who reported back to the full Committee of Management for final approval. (See acknowledgements).

On behalf of Barwon Coast, I commend this CMMP as our strategic plan for the next 5 yrs. and beyond directing our management and service provision for this high value coastal Crown Land we all cherish.



Phil Emery,
Chair, Barwon Coast Committee
of Management Inc





ACKNOWLEDGEMENT (TRADITIONAL OWNER)

Barwon Coast acknowledges the coastline of the southern Bellarine Peninsulas as the traditional lands of the Wadawurrung people and wishes to recognise the Wadawurrung as Traditional Owners. The Barwon coastline is rich in Aboriginal culture, and we pay our respects to their Elders past present and future; and the Elders from other communities who may visit our coast.

Barwon Coast acknowledges Aboriginal people as Australia's first people, and as Traditional Owners and custodians of the land on which we work and live.

Barwon Coast recognises the intrinsic connection to Country, acknowledging the contribution of Aboriginal people to the management of land, water, the natural landscape and our built environment.

Barwon Coast also recognises the legislative obligations to Traditional Owners which are paramount in our responsibilities in managing our coastline.

ACKNOWLEDGEMENTS

This *Coastal and Marine Management Plan (CMMP)* has been completed through work undertaken by Barwon Coast staff, the CMMP sub-committee of the Barwon Coast Committee of Management, with input from ARUP & Hansen (engagement, draft inputs and mapping) and Blue Sense Consulting (production of final CMMP and development of MERI plan).

Barwon Coast CMMP sub-committee members

- Mark Rodrigue
- Phil Emery
- Ross Middleton
- Elisa Zavadil
- Shelly Fanning

Barwon Coast staff

- Gary McPike
- Maddie Glynn
- Warren Chapman
- John Henderson
- Abi Adams
- Kate Wynn

EXECUTIVE SUMMARY

The Barwon Coast Committee of Management manages 15km of coastal Crown land reserve on the southern Bellarine Peninsula from 7W at Collendina in the east to 42W at the west end of Thirteenth Beach and includes the lower Barwon River.

The Barwon Coast Committee of Management has been appointed to manage this part of the coastline by the Minister for Environment and Climate Change under the *Crown Land (Reserves) Act 1978*.

Barwon Coast has the charter to protect and enhance the natural environment and provide opportunities for the community to enjoy the coastline. This includes the responsibility to set the strategic direction for management of the Reserve via the preparation of a Coastal and Marine Management Plan (CMMP).

The CMMP is the key strategic document for Barwon Coast, providing the foundation for planning and operations over the next five-year period (2020–2025) with due consideration of a longer-term vision.

The CMMP informs the development and revision of supporting plans and documents, including precinct master plans, vegetation management plans, and other issues-based plans. It will also help to set priorities for annual budgets.

A monitoring, evaluation, reporting and improvement (MERI) plan will inform the implementation of the CMMP. MERI activities will be supported by research, investigations and planning to enable

Barwon Coast to prepare for and respond to both short-term issues and long-term changes. This includes responding to climate change, coastal hazards and increased demand for access and visitation.

Extensive consultation provided valuable early input on the community aspirations for management of the Barwon coastline. Community and stakeholder views together with legislative and policy directions have informed the planning process to create a sustainable plan for the future use of the Barwon coastline.

In line with these inputs, this CMMP has a focus on:

- Meeting the demands of increased visitation due to population growth
- Planning for the increasing effects of climate change
- Programs to care for, rehabilitate and protect natural habitats and biodiversity
- Increasing Barwon Coast's level of community, user and stakeholder engagement in setting priorities
- Ensuring Barwon Coast's financial viability.

The *Coastal and Marine Management Plan* sets the vision, ten-year objectives, priority actions and outcomes for the next five years.

For the operational management of the reserve, Barwon Coast divides the Reserves into six distinct landscape precincts, and accommodation services incorporating the caravan parks and camp grounds.

Barwon Coast's operating model will continue to be underpinned by profitable accommodation services with surpluses contributing significantly to the achievement of the CMMP objectives. In addition to these surpluses, Barwon Coast will seek grant funding for financially significant projects.

Executive Summary	3	6. Precinct Priorities	37
Abbreviations	4	6.1 Precinct 1 – Ocean Grove Dunes (7W To 13W)	39
1. Introduction	5	6.2 Precinct 2 – Ocean Grove Main Beach (13W To 16W)	40
1.1 Purpose	6	6.3 Precinct 3 – Ocean Grove Spit (16W To 20W)	42
1.2 Community and stakeholder views	9	6.4 Precinct 4 – Barwon River Estuary (22W To 27W)	43
2. Strategic framework	11	6.5 Precinct 5 – The Barwon Bluff (27W To 30W)	45
2.1 Vision for the Coastal and Marine Management Plan	12	6.6 Precinct 6 – Thirteenth Beach (30W To 42W)	47
3. Natural and cultural values	15	6.7 Accommodation Services	49
3.1 Native vegetation, biodiversity and dune systems	16	7. Implementation arrangements	55
3.2 Cultural heritage	19	7.1 Monitoring, evaluation, reporting and improvement	56
4. Planning and integration	21	Appendix 1. Legislation and policy framework	58
4.1 Planning, risk and adaptation	22	Appendix 2: Details of reserve status and gazetted purpose	60
4.2 Integration and partnerships	27	Appendix 3. Monitoring overview and knowledge gaps	61
4.3 Good governance and financial management	29	Appendix 4. Precinct maps	64
5. Use and enjoy sustainably	31		
5.1 Community awareness and participation	32		
5.2 Population growth, access and infrastructure	33		
5.3 Competing uses and improved compliance	35		
5.4 Sustainable practices	36		

ABBREVIATIONS

Assn	Association	GORCC	Great Ocean Road Coast Committee
BB	Bellarine Bayside Foreshore Committee	ICZM	Integrated Coastal Zone Management
BHFNC	Barwon Heads Football Netball Club	LCHA	Local Coastal Hazard Assessment
CCMA	Corangamite Catchment Management Authority	LSV	Life Saving Victoria
CFA	Country Fire Authority	MERI	Monitoring, Evaluation, Reporting and Improvement
CMMP	Coastal and Marine Management Plan	MSV	Marine Safety Victoria
COGG	City of Greater Geelong	RRV	Regional Roads Victoria
CVA	Conservation Volunteers Australia	VFA	Victorian Fisheries Authority
DELWP	Department of Environment, Land, Water and Planning	WAC	Wathaurung Aboriginal Corporation
FoB	Friends of the Bluff	7W	Emergency Beach Access Number

INTRODUCTION



1.1 Purpose

6

1.2 Community and stakeholder views

9

1.1 PURPOSE

This Coastal and Marine Management Plan (CMMP) provides the strategic direction for coastal Crown land managed by the Barwon Coast Committee of Management.

The CMMP identifies:

- The values of the coastal and marine environment
- Management challenges and threats to values
- A vision and objectives that reflect both community aspirations and directions from the *Marine and Coastal Act 2018*
- Actions and outcomes for the next five years, to protect and enhance values whilst providing for the sustainable use and enjoyment of the marine and coastal environment
- A framework for implementation and monitoring, evaluation, reporting and improvement

THE RESERVE AND MANAGEMENT RESPONSIBILITY

The Barwon Coast Committee of Management Inc. (Barwon Coast) is appointed by the Minister for Environment and Climate Change under the *Crown Land (Reserves) Act 1978*. Barwon Coast has responsibility for managing 15km of the Barwon coastline (the Reserve) to the low watermark between 7W at Collendina and 42W Connewarre including the lower Barwon river. The Reserve area is shown in Figure 1 and described in Table 1 with further detail in Appendix 2.

Figure 1. Barwon Coast Reserve





Table 1. Reserve status and gazetted purpose

Reserve	Gazetted Purpose	Area
Barwon Heads Foreshore LEGL./14-031	Public purposes and Public Park purposes	201 ha
Ocean Grove Foreshore LEGL./14-032	Public purposes	92 ha

The Barwon coastline is an area of great natural beauty with unique landscapes and a diversity of coastal ecosystems. It comprises a well-vegetated barrier dune system and low coastal cliffs that define a low-lying hinterland. Other significant coastal features include the long Ocean Grove dune system, the Barwon River estuary and Ocean Grove spit, the limestone bluff at Barwon Heads and basalt platforms at its base, Thirteenth Beach, its dune system, and the exposed rocky foreshore.

The coastline offers a mix of developed areas with high recreational value such as Ocean Grove Main Beach, Barwon Heads river foreshore, as well as surfing, beach walking and shared trails dispersed across the entire coastal reserve. The Reserve supports informal recreation and formal tourism uses, including year-round and seasonal camping and accommodation. For the purposes of management, Barwon Coast divides the area into six distinct landscape precincts. Management of accommodation services incorporates the operation of two caravan parks and a camp ground. Barwon Coast is also responsible for the Local Port operation under a management agreement with Department of Transport. Objectives and strategic actions have been identified for the entire Reserve, as well as specific actions for each precinct and the management of accommodation services.

Barwon Coast is responsible for:

- Protecting and enhancing the natural environment and cultural values (beaches and sand dunes, open spaces, vegetation and wildlife, cultural heritage sites)
- Public access, use and provision of facilities
- Community education and engagement
- Accommodation services (Barwon Heads Caravan Park, Riverview Family Caravan Park, and the seasonal Riverside Camp Ground)
- Commercial leases and licences
- Local Port of Barwon Heads operations which includes responsibilities for the two jetties, and navigation aids and moorings under a management agreement with Department of Transport.

Management of the Reserve is funded primarily from surplus revenue generated through accommodation services. Additional revenue is generated from a range of sources including leases, licences, permit fees, and grants.

Barwon Coast has over 55 employees led by a Chief Executive Officer and a senior management team. The Barwon Coast Committee of Management is a skills-based committee and is made up of community representatives appointed for three-year terms by the Minister for Energy, Environment and Climate Change. The Barwon Coast Committee of Management works to set the strategic directions for Barwon Coast and ensure that it remains aligned with its guiding principles, legislation, government policy and guidelines. It responds to community and State Government expectations that align with these principles and directions.



DEVELOPING THE PLAN

The process of developing the CMMP has included consultation with the community, Traditional Owners, industry and government agencies. Initial work included a review of policy and previous plans and updating of the vision, objectives and actions. This was followed by the preparation of a monitoring, evaluation, reporting and improvement (MERI) framework and identification of five-year outcomes.

Planning commenced in 2017 and the first draft was prepared in mid-2018. The introduction of new legislation, the *Marine and Coastal Act 2018* and feedback from the Department of Environment, Land, Water and Planning (DELWP) resulted in additional revisions prior to the release of this version of the Draft CMMP.

Achievements from the previous Coastal Management Plan have been documented and are available on the Barwon Coast website.

Figure 2. Steps in the CMMP process



Further consultation will be undertaken for this Draft *Coastal and Marine Management Plan* and will include:

- Agency stakeholder workshops
- Community listening posts
- Meetings with community groups and Traditional Owners
- Online feedback

For more information visit www.barwoncoast.com.au

1.2 COMMUNITY AND STAKEHOLDER VIEWS

The views and perspectives of community members, partner agencies and organisations were collected through workshops, online forums, agency and stakeholder focus sessions, community pop-up sessions and meetings with Traditional Owners held between in 2017 and 2018. Initial consultation for the CMMP focussed around values, challenges and opportunities.

Community and stakeholder perspectives have directly informed the vision, guiding principles and objectives of the Plan as well as the management responses and actions. A summary of the findings from the consultation to date is outlined below.

Table 2. Community views and priorities for the Coastal and Marine Management Plan

 VALUES	 CHALLENGES	 OPPORTUNITIES
<p>Environment:</p> <ul style="list-style-type: none"> ■ Conservation of natural environments, vegetation and fauna, landscape, water quality. <p>Social and cultural:</p> <ul style="list-style-type: none"> ■ Land and water-based recreation, aesthetic values, safety, isolation and a sense of place. <p>Public amenities and facilities:</p> <ul style="list-style-type: none"> ■ Safe and accessible public shelters, toilets, picnic settings, life-saving buildings, pathways and trails. 	<ul style="list-style-type: none"> ■ Population growth and increased visitation ■ Poor signage ■ Cycling infrastructure ■ Traffic management and car parking ■ Dog regulations ■ Public and beach safety ■ Climate change impacts including storm surge, erosion and flooding 	<ul style="list-style-type: none"> ■ Conservation and protection of the environment and landscape features ■ Transport, traffic and parking ■ The inclusion and/or upgrade of facilities and infrastructure. ■ Collaboration with adjacent landholders and managers.

VALUES OF THE MARINE AND COAST

Nature, unobstructed views and the natural beauty of the Barwon coastline were highlighted as important values through community consultation.

Community members also indicated that they enjoyed being able to 'escape' from the city to the coast. Participants placed a strong sense of importance on clean water and beaches, the river, greenery, good surf, healthy vegetation and dune system, and the general upkeep of the area.

Barwon Coast provides residents and visitors with a wealth of outdoor recreation options that are valued for their quality and accessibility, as well as the associated lifestyle that the recreational facilities offer. In particular, the community values, water-based recreation and marine life, surfing, camping, fishing, sailing and running and cycling paths.

The infrastructure and beach facilities were highlighted as providing easy access to enjoy the foreshore area. The consultation sessions noted the importance of the look and feel of the coastal area and the recreational facilities.

Many community members expressed their appreciation of public amenities such as toilet blocks and their good upkeep. The beach accesses were further noted, with the community noting the value of ramp access and stairs, especially upgraded stairs.

CHALLENGES FOR THE FUTURE

The community recognises the challenges of a growing population and increased visitation. The need to protect biodiversity and the dune system, and control pollution, and improve management of the Reserve were identified as priorities during consultation.

Concerns were shared about the availability of car parks and parking compliance, especially during the summer months. Traffic congestion and the lack of cycling infrastructure was an issue repeatedly raised by respondents.

A proposed extension of bike trails to Point Lonsdale generated community concern. Some community members thought that it was necessary, while others were worried about the potential impacts on the dune ecosystem and vegetation.

The lack of good-quality signage and outdated signage was raised consistently as an area for improvement, the community considered signage to be a vital asset and one that is lacking in the area.

Dog regulations, ensuring compliance and enforcement of regulations was a commonly raised topic. Whilst many community members valued their ability to bring their dog to the beach, concerns were expressed about dogs off lead and not under effective control. A key issue the community had with dogs on beaches was the lack of clear signage and the inability of Barwon Coast to enforce regulations.

Public and beach safety was seen as an increasing challenge, resulting from increased numbers of beach goers without beach knowledge, as well as the extent of patrol activity. In the estuary, there was a general concern about boats not adhering to speed limits.

The community finally noted the challenge of climate change and the impact that it may have on the area. Of key concern was storm surge, coastal erosion and flooding.

Agency stakeholders and Barwon Coast identified funding and the protection and maintenance of infrastructure and public assets as a challenge that requires an integrated response from government and coastal Crown land managers.

OPPORTUNITIES FOR THE FUTURE

Community members and agency stakeholders identified a range of future management opportunities in response to the values and challenges.

The protection and conservation of the natural environment and landscape features will ensure the community continues to value the coastline without having to worry about its future.

Changes in parking restrictions and fees would allow more people access to the beach at peak times.

Improving infrastructure and signage to provide safe access and meet the increased demand for use. The community expressed a desire to improve walking and cycling paths, provision of all abilities access to the beach and upgrades to toilet blocks.

Agencies indicated they would like to see more coordination and collaboration with each other and with landholders neighbouring the Crown land. This would see resources that cross land boundaries better managed.

A Barwon Coast staff and agency workshop identified an opportunity to address the impacts of climate change and provide renewable sources of energy.

Additional suggestions included the opportunity to seek alternative revenue streams to maintain and improve financial viability and resilience, and including coastal usage charges as competition increases in the future.

STRATEGIC FRAMEWORK





Ocean Grove Main Beach

Barwon Coast has refined its vision and drawn on the *Marine and Coastal Act (2018)* and relevant policy documents¹ to provide strategic direction for this CMMP.

2.1 VISION FOR THE COASTAL AND MARINE MANAGEMENT PLAN

The natural environment of our coastline will flourish whilst meeting the needs of our engaged communities.

The CMMP vision reflects the community aspirations for the Barwon coastline and marine environment and aims to ensure a healthy landscape for future generations through the implementation of sustainable management approaches. The term sustainable is recognised as conserving and enhancing the coast in a way that ensures ecological processes and community resources are maintained now and into the future.

The vision has been developed with consideration of:

- The unique landscape setting and ecosystems
- The significance of the coastline for our communities
- The need to protect and enhance the natural environment
- The need to engage and partner with the community and stakeholders to foster stewardship and sustainability

1. A Draft Marine and Coastal Policy was released in July 2019 replacing the Victorian Coastal Strategy.

GUIDING PRINCIPLES

The Barwon Coast guiding principles, shown in Table 3 will frame the organisation's strategic planning and decision making in the future and are designed to support Integrated Coastal Zone Management (ICZM). These are consistent with the vision and guide management decisions in relation to objectives, priority actions and five-year outcomes.

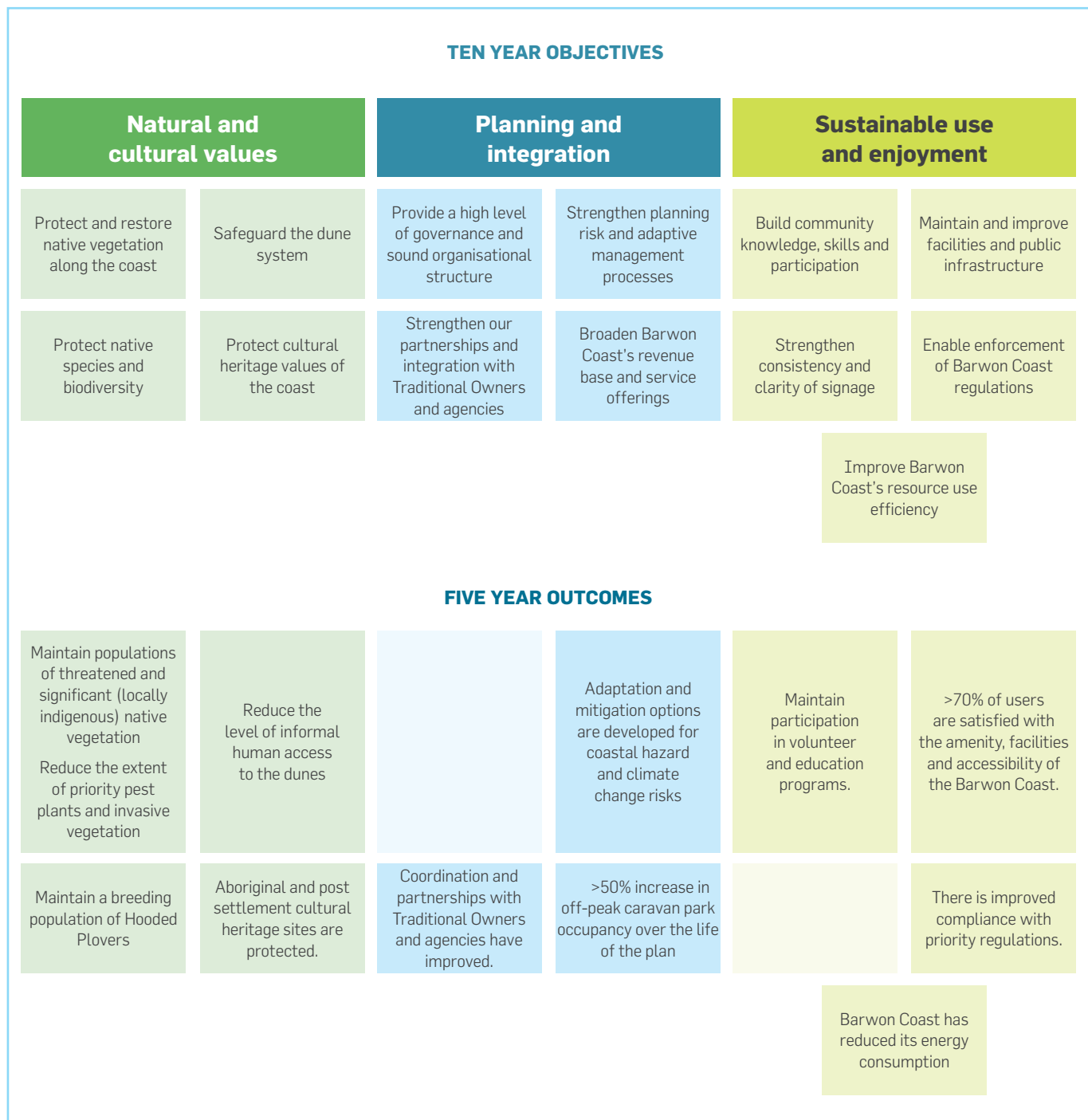
Table 3. Barwon Coast Guiding Principles

Natural and cultural values	Natural environment first	The protection and restoration of the natural environment of our coast is Barwon Coast's highest priority.
	Cultural heritage protection	Barwon Coast acknowledges the long and deep connections between the coast and Aboriginal people and will continue to work collaboratively to care for the coast with respect to its cultural significance and to promote awareness of cultural values. Barwon Coast acknowledges post-settlement heritage and will continue to care for and respect sites of significance and promote awareness of these cultural values.
Planning and integration	Good governance	Observing ethical and compliant procedures at all times, Barwon Coast has an organisational structure with sufficient resources to maintain effective operations.
	Adaptive management	Barwon Coast uses an evidenced based approach to support effective planning and decision making. Barwon Coast monitors the outcomes of programs and uses this information to improve management.
	Integration and partnerships	Barwon Coast takes an integrated approach to the management of our coast together with our community and coastal management partners. We are committed to Traditional Owner inclusion in coastal planning and management.
	Risk management	Recognition and management of risk are applied across all areas of Barwon Coast's operations and management responsibilities.
	Climate change preparedness	Barwon Coast proactively identifies and prepares adaptation plans in response to climate change and its potential impacts including inundation, erosion, heat, fire, rain and storm events.
	Financial sustainability	Barwon Coast ensures that it remains financially viable and maintains adequate revenues to meet its management needs.
Use and enjoy sustainably	Inclusive stewardship	Barwon Coast actively promotes community and stakeholder awareness and participation in caring for our coast.
	Education, culture and arts	Barwon Coast recognises, respects and supports opportunities to protect and enhance our strong community, heritage and traditional values and encourages the use of creative and performing arts to involve and engage our communities in this endeavour.
	Access to the coast	Barwon Coast maintains access to the coast for those wishing to undertake active and passive pursuits where this is consistent with protecting the natural environment.
	Sustainable practices	Barwon Coast seeks to reduce our operational environmental footprint in all our activities.

OBJECTIVES, OUTCOMES AND PRIORITY ACTIONS

Using the vision together with the guiding principles as a starting point, Barwon Coast has set ten-year objectives for the Plan. These objectives guide the priority actions of the CMMP in order to protect and enhance the natural, cultural and social values of the Reserve. A set of five-year outcomes describe the changes and results Barwon Coast expect to see as a result of implementing the CMMP. Monitoring and evaluation will form part of a structured approach to reporting and improvement for this CMMP (see section 7 for more detail).

Figure 3. Barwon Coast CMMP objectives and outcomes (aligned in figure)



NATURAL AND CULTURAL VALUES



Red-necked Stints at the waters edge

3.1	Native vegetation, biodiversity and dune systems	16
3.2	Cultural heritage	19

3.1 NATIVE VEGETATION, BIODIVERSITY AND DUNE SYSTEMS

TEN-YEAR OBJECTIVES	5-YEAR OUTCOMES
<ul style="list-style-type: none"> ■ Protect and restore native vegetation along the coast ■ Protect native species and biodiversity ■ Safeguard the dune system 	<ul style="list-style-type: none"> ■ Maintain populations of threatened and significant (locally indigenous) native vegetation² ■ Reduce the extent of priority pest plants and invasive vegetation³ ■ Maintain a breeding population of Hooded Plover⁴ ■ Reduce the level of informal human access to the dunes⁵

The Barwon coastline has a diverse range of habitats and marine environments and is one of Victoria's significant coastal landscapes. The natural environment is highly valued by the community and the protection of native (locally indigenous) vegetation, biodiversity and the dune system were identified during community consultation as the highest priorities for this CMMP.

The Reserve from 7W Collendina has a long expanse of sandy beaches, whilst the Spit in Ocean Grove is unique in providing access to both estuarine and marine environments. The Barwon Bluff and Thirteenth Beach provide a wild coastal experience of cliffs, rock platforms, sand dunes and surf and the Barwon Bluff Marine Sanctuary managed by Parks Victoria is rich in marine life. The Barwon River Estuary falls within the broader Port Phillip (Western Shoreline) and Bellarine Peninsula Ramsar Site, a wetland of international importance and management of this area intersects with Parks Victoria responsibilities.

The Reserve is part of the last remnants of native vegetation forming a continuous vegetation corridor along the southern Bellarine Peninsula. It contains valuable remnants of Coastal Moonah Woodland, which is protected under the *Victorian Flora and Fauna Guarantee Act 1988*. Other listed plant species include the endangered Coast Bitter Bush, Lotus australis, rare Coast Wirilda, Coast Twin Leaf, *Coast Fescue and Trailing Coast Poa*. The *Barwon Coast Vegetation Management Plan (2013)* guides priority projects for the restoration and management of vegetation including revegetation and pest plant control.

Within the Reserve, more than 500 native animal sightings have been recorded. This includes observations of visiting marine mammals such as seal haul-outs on beaches. A focus of staff and volunteer effort is action to protect the Hooded Plover, an endangered bird species in Victoria.

Barwon Coast delivers pest animal control programs to address impacts from rabbits, foxes, rats and feral cats supported by communication to the general public through on-ground signage, public notices and media bulletins.

To support all wildlife, including Hooded Plovers human access is controlled at certain times to ensure the protection of their habitat. This includes establishing temporary exclusion zones around a nest or limiting access to areas of the beach when a seal 'hauls out' to rest.

During this CMMP, Barwon Coast will complete a comprehensive fauna survey and continue monitoring vegetation communities and pest plants and pest animals. Barwon Coast will also establish a cross boundary approach to pest animal and pest plant control to ensure control efforts are coordinated and effective. A mid-term review of the *Barwon Coast Vegetation Management Plan (2013)* and the development of a Biodiversity Strategy will determine updated priorities to protect and enhance native fauna and vegetation.

The delicate nature of the dune system means that it is sensitive to erosion and disturbance by people and the long-term effects of a changing climate. Barwon Coast will continue a holistic approach to sand dune protection, including erosion protection, controlling informal access as well as compliance and education initiatives.

Barwon Coast has an important management role in the protection of natural values and works with a range of government agencies and community groups to deliver a comprehensive range of environmental programs.

Community and agency partners include: DELWP, Wathaurung Aboriginal Corporation (Wadawurrung -WAC), Conservation Volunteers Australia (CVA), City of Greater Geelong (CoGG), Birdlife Australia, Parks Victoria, Corangamite Catchment Management Authority (CCMA), Victorian Fisheries Authority (VFA), Agriculture Victoria and the Bellarine Catchment Network (BCN).

2 Priority native (locally indigenous) vegetation species and communities as indicated the *Barwon Coast Vegetation Management Plan (2013)* includes Coastal Moonah, Austral Lotus, Coast Wirilda, orchids and associated dune and woodland vegetation communities locations include Ocean Grove Dunes, Ocean Grove Spit, Barwon River Estuary, The Barwon Bluff and Thirteenth Beach.

3 Priority weed species as indicated in the *Barwon Coast Vegetation Management Plan (2013)* locations include Ocean Grove Dunes, Ocean Grove Spit, Barwon River Estuary, The Barwon Bluff and Thirteenth Beach.

4 This outcome will be reviewed as part of action N&C 2.7 to review the regional Hooded Plover Management Program.

5 Priority areas located adjacent rear dune access tracks.

Table 4. Strategic actions to protect and restore native vegetation along the coast

Ref.	Action	Deliverable	Lead	Partner	Timeframe
N&C 1.1	Implement the Barwon Coast Vegetation Management Plan <i>Priority areas: Ocean Grove Spit, Ocean Grove Dunes, Barwon Bluff, Thirteenth Beach</i> <i>Works in other precincts as required.</i>	Deliver annual works program including: <ul style="list-style-type: none"> ■ Control priority pest plants to reduce cover. ■ Revegetate / rehabilitate Moonah Woodland, Coast Wirilda, Austral Lotus and associated dune, headland and woodland species ■ Monitor damage by rabbits ■ Install brush matting in intrusion areas 	Barwon Coast	Volunteer groups	Annual program
		Mid-term review of Barwon Coast Vegetation Management Plan	Barwon Coast		2019-20
N&C 1.2	Develop and implement a long-term plan for tree replacement <i>Priority areas: Caravan parks and camp ground</i>	Barwon Coast Mature Tree Strategy	Barwon Coast		2019-20
		Arborist inspection and follow up hazard reduction works (lopping, trimming, removal and replacement)	Barwon Coast		Annual program

Table 5. Strategic actions to protect native species and biodiversity

Ref.	Action	Deliverable	Lead	Partner	Timeframe
N&C 2.1	Undertake a comprehensive fauna survey <i>Priority areas: Thirteenth Beach, Ocean Grove Dunes and Ocean Grove Spit</i>	Baseline survey complete in priority areas and additional survey needs identified	Barwon Coast		2020-21
N&C 2.2	Develop a long-term plan to address habitat management, pest animals and human disturbance	Barwon Coast Biodiversity Strategy	Barwon Coast	Ocean Grove Coast Care, DELWP and Geelong Field Naturalists Club	2020-21 2021-22
N&C 2.3	Develop a cross-boundary approach for pest plant and pest animal control <i>Priority areas: Barwon Bluff and Thirteenth Beach</i>	Operational Plan for integrated pest plant and animal control	Barwon Coast	CoGG, Barwon Water, Parks Victoria	2020-21 and annual review
N&C 2.4	Deliver pest plant and pest animal control programs <i>Priority areas: Ocean Grove Dunes, Thirteenth Beach, Barwon Bluff</i>	Deliver annual works program including: <ul style="list-style-type: none"> ■ Control of priority weeds ■ Fox, cat and rabbit trapping/baiting ■ Ripping of burrows and harbour removal ■ Monitoring of pest animal and predator populations 	Barwon Coast	CoGG, Barwon Water	Annual program
N&C 2.5	Support management of marine wildlife on beaches	Report wildlife sightings to responsible authorities Provide first responder services including signage, temporary fencing and exclusion zones	DELWP MRU at Melbourne Zoo Dolphin Research Institute CoGG	Barwon Coast	As required

SECTION 3

Natural and cultural values

| 18

Ref.	Action	Deliverable	Lead	Partner	Timeframe
N&C 2.6	Deliver the Hooded Plover protection program <i>Priority areas: Thirteenth Beach, Ocean Grove Spit, Ocean Gove Dunes</i>	Deliver annual works program including: <ul style="list-style-type: none"> ■ Breeding season monitoring. ■ Temporary exclusion zones at nest sites (fencing and signage) ■ Communications and engagement activities 	Barwon Coast	BirdLife Friends of the Hooded Plover (Bellarine) DELWP CoGG	Annual program
N&C 2.7	Identify additional options to protect Hooded Plover during nesting season	Review and update regional Hooded Plover Program Management Plan	Barwon Coast	DELWP CoGG GORCC BirdLife as a partner Friends of groups	2019-20

Table 6. Strategic actions to safeguard the dune system

Ref.	Action	Deliverable	Lead	Partner	Timeframe
N&C 3.1	Deliver sand dune protection activities including erosion protection and managing human impacts <i>Priority areas: Ocean Grove Dunes, Ocean Grove Spit, Ocean Grove Main Beach, Barwon Bluff, Thirteenth Beach</i>	Deliver annual works program including: <ul style="list-style-type: none"> ■ Brush matting ■ Fencing and signage ■ Revegetation ■ Education and awareness activities 	Barwon Coast	Ocean Grove Coast Care CVA Schools	Annual program

3.2 CULTURAL HERITAGE

TEN-YEAR OBJECTIVES	5-YEAR OUTCOMES
<ul style="list-style-type: none"> Protect cultural heritage values of the coast 	<ul style="list-style-type: none"> Aboriginal and post settlement cultural heritage sites are protected.

Aboriginal and post-settlement cultural heritage values help to define the identity of the Barwon coastline. The coastal and near shore marine environments are rich in Aboriginal cultural heritage reflecting a long history of use and an abundance of natural resources. The most visible examples of this history are shell middens that contain the remains of shellfish eaten by Aboriginal people. Artefact scatters and other significant cultural heritage sites are also present in the landscape.

The Wadawurrung people are the original custodians of the Barwon coastline. For thousands of years they have lived on Country and their past and present values, customs and traditions are embedded in the land and water. The *Aboriginal Heritage Act 2006* recognises the importance of cultural values to Traditional Owners and provides for the protection of cultural heritage.

The Wathaurung Aboriginal Corporation (WAC), trading as Wadawurrung, is the Registered Aboriginal Party (RAP). Wadawurrung takes up its responsibilities for Aboriginal culture and heritage and provides support for agencies and the community on cultural heritage matters⁶.

Barwon Coast has committed to developing voluntary Cultural Heritage Management Plans for the entire Reserve, with four precincts to be completed as the priority. Barwon Coast and Wadawurrung will also explore the potential to develop a voluntary Aboriginal Cultural Heritage Land Management

Agreement to facilitate a longer-term and more proactive approach to the protection and management of cultural heritage on land managed by Barwon Coast.

The Barwon coastline also has important post-European settlement heritage values. In early European history, the Barwon Bluff was used as a landmark for ships entering the Port Phillip Heads. An immigrant ship, the Earl of Charlemont, foundered off the Barwon Bluff in 1853 during the gold rush period; descendants of survivors still live locally. The first minutes of this Committee in 1889 reflect the interest to manage the jetty. The Barwon Heads Park with its ongoing visitor activity and the jetty area have local heritage significance.

Barwon Coast fosters awareness of the values of Aboriginal and post-settlement cultural heritage. Recognising the past and present connections of Aboriginal people with the land, Barwon Coast will work to ensure that important cultural sites are protected whilst also working to raise awareness of cultural heritage values.

Shipwrecks and early settlement sites are recognised and protected, particularly through the Barwon Estuary Heritage Centre. The Barwon Estuary Heritage Centre and Friends of the Lobster Pot provide interpretation of the natural and cultural history of the Barwon coastline and will continue to be supported by Barwon Coast.

Table 7. Strategic actions to protect cultural heritage values of the coast

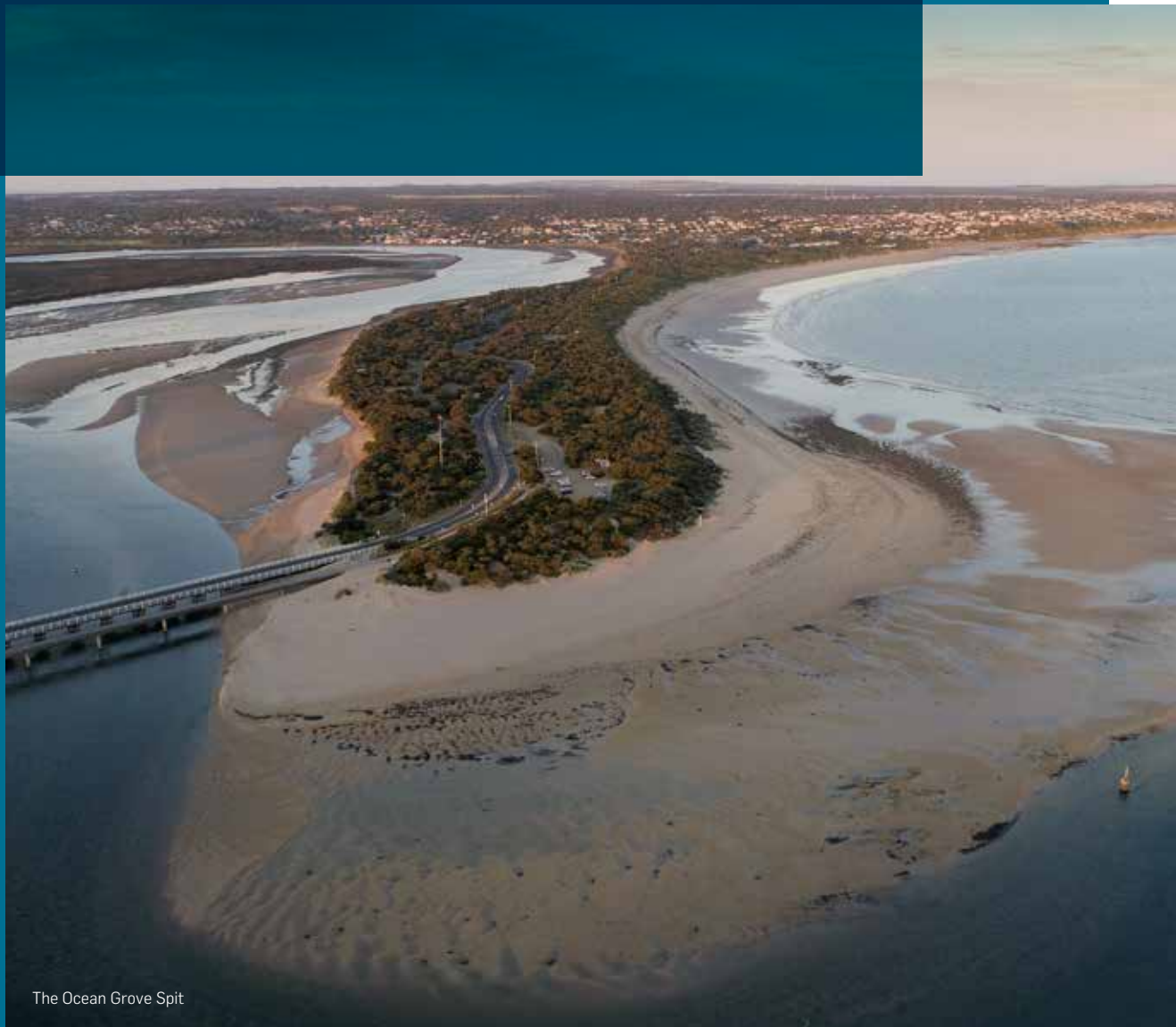
Ref.	Action	Deliverable	Lead	Partner	Timeframe
N&C 4.1	Develop voluntary Cultural Heritage Management Plans <i>Priority areas: Priority areas: Barwon River Estuary, Ocean Grove Spit, The Barwon Bluff and Thirteenth Beach</i>	Cultural Heritage Management Plans	Barwon Coast	WAC	2020-21
N&C 4.2	Investigate the feasibility of developing an Aboriginal Cultural Heritage Land Management Agreement	Discussions held with Wathaurung Aboriginal Corporation A decision on next steps identified and agreed to	Barwon Coast	WAC	2021-22
N&C 4.3	<i>Upgrade the facilities at the Barwon Estuary Heritage Centre</i>	Review Barwon Estuary Heritage Centre Master Plan Redesign and upgrade centre displays (natural, social, cultural)	Barwon Coast	WAC Friends of the Lobster Pot	Unfunded

⁶ Content sourced from www.wadawurrung.org.au and via personal communication with Wadawurrung.

A busy day at No 1 car park Thirteenth Beach



PLANNING AND INTEGRATION



The Ocean Grove Spit

4.1	Planning, risk and adaptation	22
4.2	Integration and partnerships	27
4.3	Good governance and financial management	29

4.1 PLANNING, RISK AND ADAPTATION

TEN-YEAR OBJECTIVES	5-YEAR OUTCOMES
<ul style="list-style-type: none"> Strengthen planning, risk and adaptive management processes 	<ul style="list-style-type: none"> Adaptation and mitigation options are developed for coastal hazard and climate change risks

During this CMMP, Barwon Coast will apply a range of planning tools to support sustainable use and development of the coast including Precinct Master Plans (PMP), climate change adaptation planning, risk and asset planning and corporate policies and frameworks.

Precinct Master Plans (PMPs) will provide the detailed blueprint for activity and use of each precinct area and will map the extent of activity and recreation nodes. The initial priorities for PMPs are the Ocean Grove Spit, Ocean Grove Main Beach, Barwon River Estuary and accommodation services followed by the remaining precincts. PMPs will be developed through consultation with the community, Traditional Owners, agency partners, license and leaseholders. PMPs will be informed by Cultural Heritage Management Plans and information on the condition and values of the natural environment.

ACTIVITY AND RECREATION NODES⁷ (DELWP, 2019)

In coastal communities, recreation and tourist development are focused around recreation and activities nodes identified in CMMPs.

Activity node: Provides for community recreation facilities and tourism activities. These are within settlements and are adjacent to activities centres in planning schemes. They include public and private land.

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

Barwon Coast is moving to a more structured approach to risk and asset management across its business operations. To date, Barwon Coast has developed a strategic risk framework and associated policies and procedures.

Further work is underway to improve our asset management approach in response to the 2018 Victorian Auditor General's report *Protecting Victoria's coastal assets*. Barwon Coast has an asset register and inspection regime for access, elevated timber stairs, pathways, essential services, trees-risk, jetties and navigation aids, and is working to further develop this register. During this CMMP a comprehensive asset management plan will be developed that defines maintenance and renewal schedules, provides standards for asset upgrades and considers risks from coastal hazards and climate change.

CLIMATE CHANGE AND COASTAL PROCESSES

Barwon Coast will take an adaptive approach to effectively manage the open coastline and respond to coastal changes. Decisions will consider the costs, benefits and risks of action and 'do-nothing' over the long term and any likely residual financial and environmental impacts.

Consistent with the *Marine and Coastal Act 2018*, Barwon Coast recognises that collaboration across agencies and communities is critical for adapting to the impacts of a changing climate. The planning approach requires a sound evidence base and a better understanding of physical coastal processes and the options for adaptation.

⁷ DELWP, 2019. Draft Marine and Coastal Policy



Ocean Grove Dunes Precinct Beach

Barwon Coast is part of a partnership including the City of Greater Geelong, Borough of Queenscliffe, Bellarine Bayside Foreshore Committee of Management, DELWP and the Corangamite Catchment Management Authority. This partnership has delivered an initial Local Coastal Hazard Assessment (LCHA) and consulted with the community about its findings, the details of the project can be found at www.ourcoast.org.au. The LCHA is focused on the threat of coastal inundation as a result of sea level rise and storm surge. The LCHA identifies the key areas of inundation risk for Barwon Coast as the Riverview Family Caravan Park and Barwon River Estuary (see Figure 4 and 5).

Mapping and the identification of risks from coastal erosion and sand movement remain a knowledge gap and further additional technical assessments are required. A priority for this CMMP is to complete geomorphic investigations and a detailed risk assessment for the Barwon coastline. This will inform the identification of feasible adaptation options to avoid, manage and mitigate the risks of coastal hazards and inform a Climate Change and Coastal Hazard Adaptation Plan.

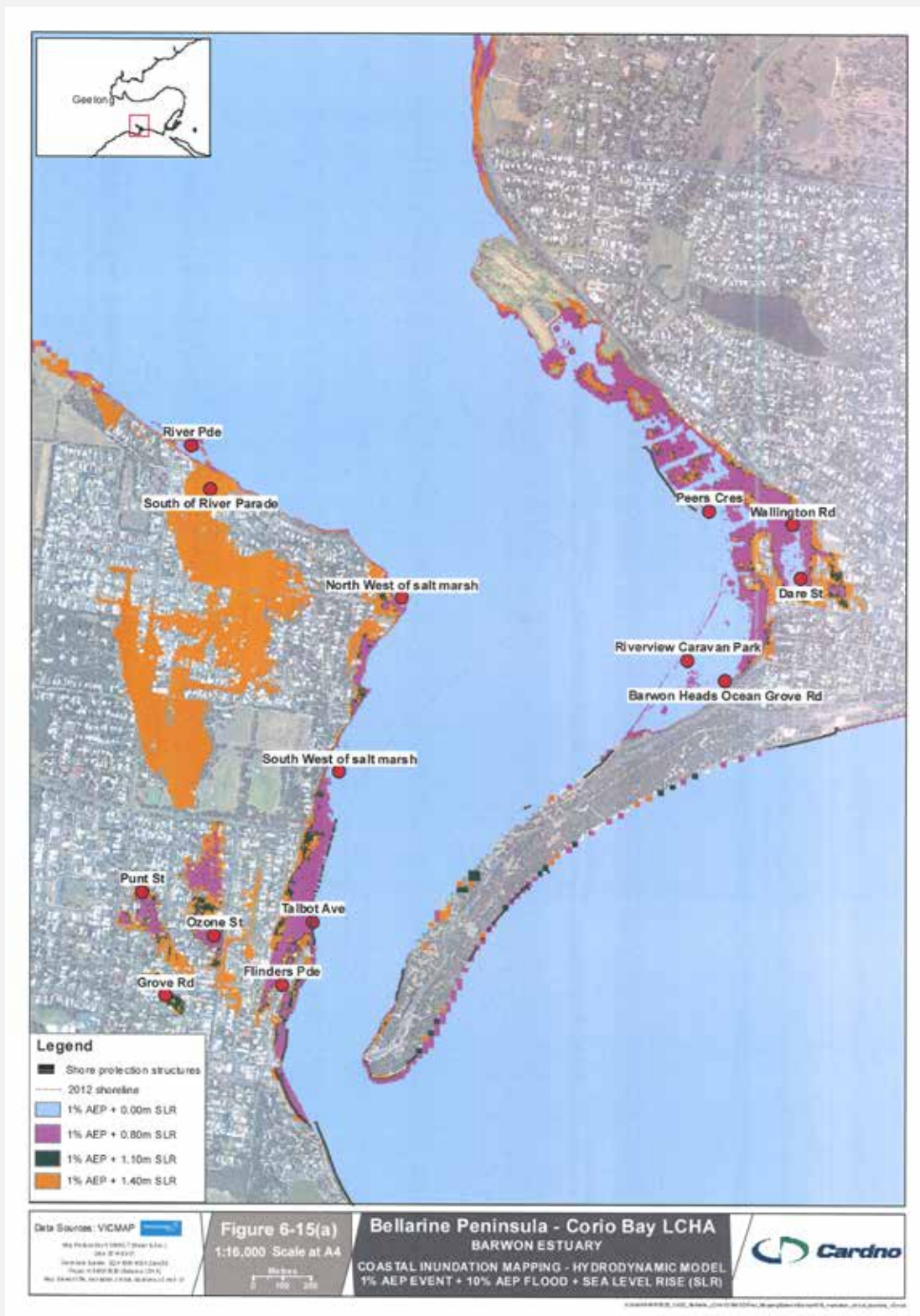
WORK TO DATE AND ADAPTATION ACTIONS

Whilst further work is required to develop a comprehensive adaptation plan Barwon Coast recognises adaptation as a core part of our responsibilities for managing the Reserve. Barwon Coast policies ensure that the use and development of the coast considers the impacts of climate change and coastal hazards. All asset replacements and upgrades are now required to consider inundation and sea level rise projections and during this CMMP we will update design guidelines to reflect these requirements. The City of Greater Geelong is currently establishing a Land Subject to Inundation Overlay based on the LCHA results and this will provide additional guidance when planning for the impacts of sea-level rise and inundation.

In addition, Barwon Coast actively responds to erosion, cliff instability and sand movement in key locations to protect public assets, address safety issues and maintain amenity. Priority areas include the beaches of Ocean Grove and Thirteenth Beach, in and around the estuary mouth and the Barwon Bluff. Works and measures include maintenance of rock and sea walls, managing sand build up, hard and soft-engineering and sand nourishment. Barwon Coast and members of the local community also participate in the Victorian Coastal Monitoring Program which involves a regular aerial survey of a 2.1km section of the Ocean Grove beach.

The precinct actions for this CMMP identify an interim set of adaptation priorities that address the findings from the LCHA for inundation and storm tides and respond to known hazards and risks from erosion and coastal processes.

Figure 4. Barwon Estuary extent of future inundation⁸ (reproduced from Cardno, 2015)



8 Cardno. 2015. Our Coast Bellarine Peninsula – Corio Local Coastal Hazard Assessment. Inundation Summary Report

Figure 5. Barwon estuary timing of future inundation⁹ (reproduced from Cardno, 2015)

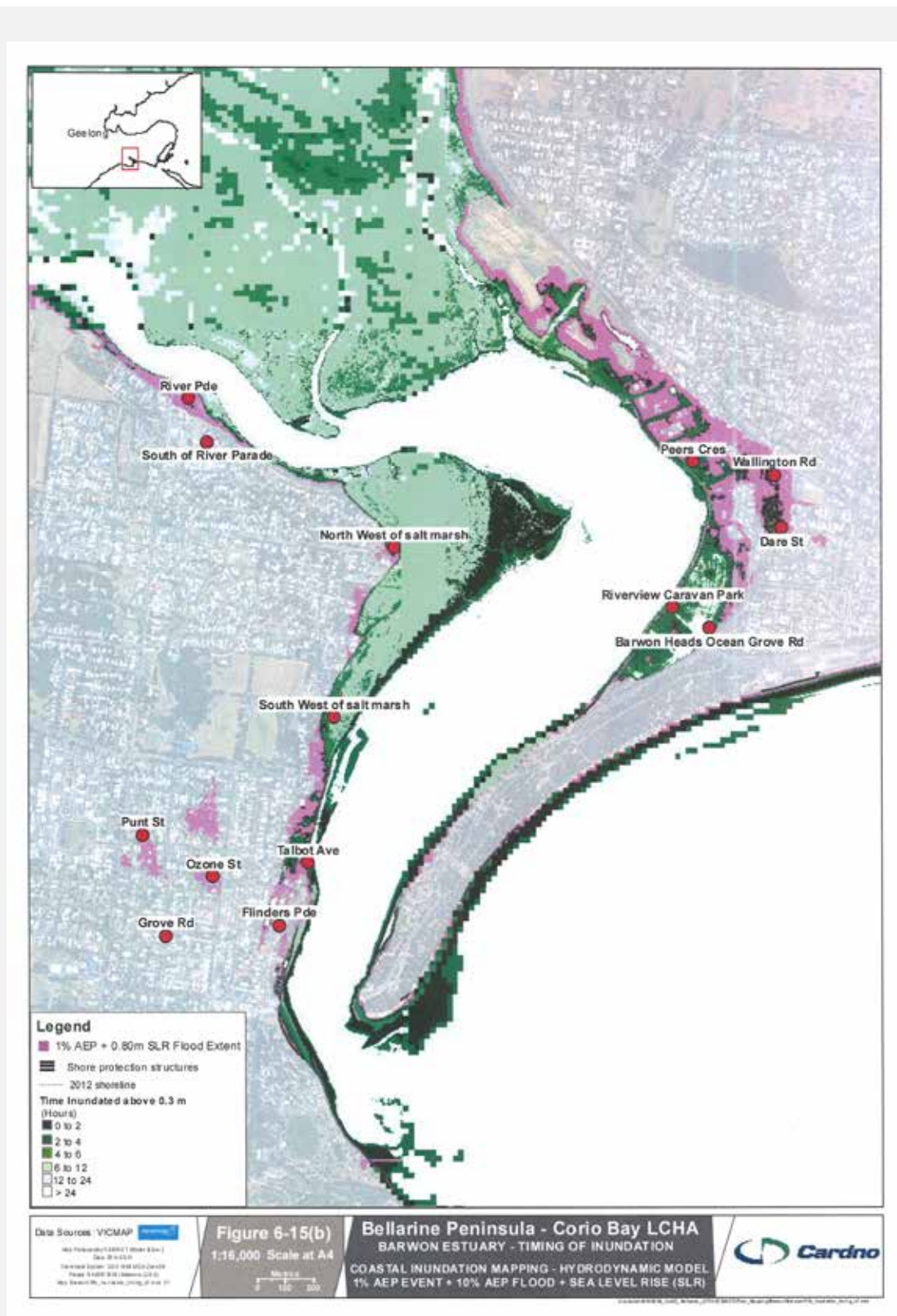


Table 8. Strategic actions to strengthen planning risk and adaptive management processes

Ref.	Action	Deliverable	Lead	Partner	Timeframe
P&I 1.1	Develop detailed plans (Precinct Master Plans) for each precinct informed by the priorities of this CMMP <i>Priority 1. Caravan Parks, Ocean Grove Spit, Barwon River Estuary and Ocean Grove Main Beach</i> <i>Priority 2. Thirteenth Beach, Barwon Bluff and Ocean Grove Dunes</i>	Each PMP will have three deliverables and will involve community consultation at each stage <ul style="list-style-type: none"> ■ Design Concepts ■ Draft Precinct Master Plan ■ Final Master Plan 	Barwon Coast	DELWP, WAC, Parks Victoria	Priority 1. PMPs 2019-20 to 2020-21 Priority 2. PMPs: 2021-22 to 2022-23
P&I 1.2	Develop a whole of business strategic risk management framework	Strategic risk framework, register and policy finalised Risk appetite, maturity and risk tolerance defined and reviewed	Barwon Coast		2019-20
P&I 1.3	Develop an asset management plan	Asset register Level of service and inspection regime defined Maintenance and renewal schedule developed Infrastructure design standards updated in response to climate change projections	Barwon Coast		2020-21 2021-22
P&I 1.4	<i>Consolidate and prepare a Barwon Coast Emergency Response Plan</i>	Emergency Response Plan	Barwon Coast	Ocean Grove Fire and Rescue, Barwon Heads CFA, DELWP	2020-21
P&I 1.5	Continue to participate in the Our Coast partnership and complete erosion mapping	Participate in working group Erosion mapping complete	Barwon Coast	Borough of Queenscliffe, CoGG, BB, CCMA, DELWP	Annual Unfunded
P&I 1.6	Develop an adaptation plan with feasible and practical options to address climate change and coastal hazards	Climate change and coastal hazard adaptation plan	Barwon Coast	DELWP	2021-22

4.2 INTEGRATION AND PARTNERSHIPS

TEN-YEAR OBJECTIVES	5-YEAR OUTCOMES
<ul style="list-style-type: none"> Strengthen our partnerships and integration with agencies, Traditional Owners and the community 	<ul style="list-style-type: none"> Coordination and partnerships with Traditional Owners and agencies have improved

TRADITIONAL OWNER INCLUSION

Barwon Coast recognises the importance of Traditional Owner participation in the planning and management of the coastal and marine environment. Barwon Coast has resolved to actively promote employment opportunities for Aboriginal people, build its organisational cultural competency and take a more inclusive approach to Traditional Owner participation in coastal management.

Through the CMMP process, Wadawurrung and Barwon Coast have identified a range of opportunities for greater involvement of Traditional Owners. The initial priorities include formal participation in the PMP process, improving interpretive signage, planning for the Barwon Estuary Heritage Centre (BEHC) upgrades and the delivery of education and interpretive activities (see also Section 3.2 for priorities related to cultural heritage protection).

PARTNERSHIPS AND INTEGRATION

Barwon Coast takes an integrated approach to coastal zone management, working closely with adjacent land and water managers to align programs across management boundaries as indicated throughout this CMMP.

Day to day partnership activities include coordination of environmental programs, compliance and water safety activities, use and development consents and education and awareness programs. During this CMMP Barwon Coast will develop an organisational communication and engagement plan to establish a consistent approach, procedures and priorities for engagement.

Additional priority matters for this CMMP include water quality and stormwater, the investigation of reserve boundaries and consideration of the marine environment.

Stormwater discharge and incidents of poor water quality can impact on the fragile ecosystems of the Barwon River estuary and the experience of coastal users. Whilst use and development in the catchment and stormwater infrastructure are managed by CoGG and the Corangamite CMA, Barwon Coast has a role in advocating for improved water quality outcomes through floodplain and statutory planning processes. In the case of pollution incidents and algal blooms Barwon Coast works with and responds to directions from appropriate agencies including the EPA and DELWP. Monitoring the health of the Barwon River estuary is conducted on a regular basis by Estuary Watch volunteers who are overseen by the CCMA. CCMA Estuary Watch facilitators analyse the data, which supports estuarine managers in their decision making.

In addition to land-based programs, Barwon Coast works with Parks Victoria to support the management of the marine environment including biodiversity and on-water activity. A priority for this CMMP is improved interpretive signage at the Barwon Bluff to raise awareness of the environmental and cultural values of the coastal and marine environment and highlight safety issues to visitors.

Barwon Coast has identified a need to better understand roles, responsibilities and expectations for all agencies involved in managing the local coastline, especially where operating boundaries overlap. During this CMMP Barwon Coast will participate in investigations into the consolidation of coastal reserves held by CoGG and Barwon Water.

LOCAL PORT OF BARWON HEADS

Barwon Coast is responsible for the safe operation and management of the Local Port of Barwon Heads under the *Port Management Act 1995* and has an ongoing management agreement with the Department of Transport. Recreational boating is the main activity in the Local Port with a limited number of commercial, tour and activity operators using the facilities on a regular basis. Management of the Local Port is guided by a Safety Environment Management Plan. This plan sets annual targets for management related to maintenance, inspections and communications. Management of the Local Port includes consultation with licensees, coordination and liaison with Parks Victoria and CoGG who provide boat ramp facilities as well as emergency response providers including Ocean Grove Coast Watch, the Water Police and Emergency Management Victoria. The main risks associated with Local Port operations are vessel interactions with swimmers, maintenance of navigation aids and managing sailing access.

Safe boating facilities are an important aspect of on-water activity. Barwon Coast has recently completed upgrades of the main public jetty and supports the upgrade of boating facilities by other land managers in areas adjacent to the Local Port and the Reserve. In addition, Barwon Coast partners with other agencies to deliver an annual boating safety day as part of the Portarlington Mussel Festival.

Table 9. Strategic actions to strengthen agency, Traditional Owner and community partnerships

Ref.	Action	Deliverable	Lead	Partner	Timeframe
P&I 2.1	Participate in working groups and projects and coordinate with other agencies	Barwon River Parklands Project Barwon Heads Association (parking and water quality) Interpretive Signage Working group	CCMA Barwon Heads Association CoGG Parks Victoria	Barwon Coast Barwon Water	Annual
P&I 2.2	Develop a communication and engagement plan for community and agency involvement in coastal management	Communications and engagement policy and processes defined. Issue based working groups established. Public consultation procedures established.	Barwon Coast		2019-20
P&I 2.3	Participate in investigations into the consolidation of coastal reserves on the Bellarine Peninsula	Advice and input provided	DELWP, CoGG, Barwon Water	Barwon Coast	2020-21
P&I 2.4	Develop and deliver a cultural competency program for Barwon Coast staff and Committee	Cultural heritage training Traditional Owner inclusion policy	Barwon Coast	WAC	2021-22
P&I 2.5	Hold an annual meeting with WAC to identify priorities for collaboration (education, works, interpretive activities)	Priority projects and initiatives identified Advice and input on program design	Barwon Coast	WAC	Annual
P&I 2.6	Review boating compliance and safety management of the Barwon Estuary	Local Port Safety Environmental Management Plan review.	Barwon Coast	MSV, Vic Police, Water Police, Parks Victoria	Annual program

4.3 GOOD GOVERNANCE AND FINANCIAL MANAGEMENT

TEN-YEAR OBJECTIVES	5-YEAR OUTCOMES
<ul style="list-style-type: none"> ■ Provide a high level of governance and sound organisational structure ■ Broaden Barwon Coast's revenue base and service offerings 	<ul style="list-style-type: none"> ■ >50% increase in off-peak caravan park occupancy over the life of the plan

Barwon Coast has sound and effective governance arrangements through the Barwon Coast Committee of Management and a modern organisational structure. Barwon Coast's policies and procedures are implemented by the Chief Executive Officer and a senior management team. In addition to business as usual practices, there are two priorities for this CMMP to ensure continued strong governance. The first priority is to ensure that Barwon Coast takes a proactive approach to meeting its corporate and regulatory obligations and adapt to changes in legislation. The second relates to the retention of corporate knowledge, which was identified as a risk during the development of this CMMP. In response to these risks, Barwon Coast will improve its knowledge and business systems to track regulatory compliance and ensure corporate information and knowledge is accessible across the organisation.

Barwon Coast also recognises that financial sustainability is critical to meet its responsibilities for managing the Reserve in the face of increasing demand for use and access. Accommodation services are the primary source of income, and optimal financial returns from Barwon Coast's commercial operations are vital to the management of the Reserve.

Whilst income has remained stable in recent years, maintenance requirements and demand for higher-quality facilities continue to grow. Expenditure on infrastructure maintenance and renewal must be balanced with environmental programs, erosion protection and climate change preparedness.

Challenges include new competition e.g. from Air BnB, ageing infrastructure, and potential inundation of Riverview Family Caravan Park. The opportunities to diversify Barwon Coast's offering and revenue stream include increasing off-peak accommodation bookings through marketing promotional packages, adopting an online booking system, and the establishment of facilities for groups and conferences.

Barwon Coast will also explore options to apply the 'beneficiary pays' principle to other areas of our commercial operations where it aligns with government policy and commercial drivers.

Barwon Coast has an important role in the administration of leases and licences on coastal Crown land. Commercial leases and licenses are allocated through a public advertising process and consideration of community perspectives, risks to public safety as well as the outcomes for commercial operations. The licensing of 'surf-schools' has recently been completed, with three-year activity provider licensing the next priority. Barwon Coast has also committed to undertake a review to improve the licensing process.

Barwon Coast acknowledges the Victorian Government's policy commitment to improve the equity of access to camping and ensure camping on Crown land remains affordable. Barwon Coast offers a mix of roofed accommodation, short-term camping and 12 month permits. Bookings have historically been managed through a preferential booking system. A priority for this CMMP is to review the allocation and mix of camping sites. Further work is required to establish the turnover and demand for short-term sites in order to inform options and consultation with campers about potential changes to the booking system.

Table 10. Strategic actions for good governance financial management

Ref.	Action	Deliverable	Lead	Partner	Timeframe
P&I 3.1	Develop a regulatory register, regularly monitor changes and review compliance	Regulatory register established and reviewed annually	Barwon Coast		2021-22 Annual
P&I 3.2	Implement strategies to retain corporate knowledge	Further development of land information system Document management system established	Barwon Coast		2019-20 2020-21
P&I 3.2	Review the process for three-year activity provider licensing	Review of activity license process complete and procedure developed Advertising and selection of activity provider licenses	Barwon Coast	DELWP	2019-20
P&I 3.3	Review mix of sites, accommodation types and preferential booking system	Review of accommodation mix site turnover and demand Options to transition the preferential booking system Options for additional cabin accommodation Consultation and system changes implemented	Barwon Coast	DELWP	2020-21 2021-22
P&I 3.4	Complete the implementation of the online booking system	Online booking system roll out Review of booking system performance	Barwon Coast		2019-20 2020-21
P&A 5.2	Undertake a feasibility study to establish group and conference facilities	Preferred option and location for group stay facilities	Barwon Coast		2019-20
P&A 5.3	Identify options to improve service offerings, including package deals with education programs, nature tours or major events on the Bellarine	Accommodation/tour packages and marketing plan developed	Barwon Coast		2019-20 and then an annual plan

USE AND ENJOY SUSTAINABLY



Coast Wirilda, *Acacia uncifolia*

5.1	Community awareness and participation	32
5.2	Population growth, access and infrastructure	33
5.3	Competing uses and improved compliance	35
5.4	Sustainable practices	36

5.1 COMMUNITY AWARENESS AND PARTICIPATION

TEN-YEAR OBJECTIVES	5-YEAR OUTCOMES
■ Build community knowledge, skills and participation	■ Maintain participation in volunteer and education programs.

The Barwon Coast community consists of residents from both Ocean Grove and Barwon Heads towns, volunteer organisations and the thousands of visitors to our shores each year. Barwon Coast supports community participation in citizen science, planning and on-ground activities as a way of increasing community awareness and stewardship of the area.

Education and awareness programs are a part of core business and support all aspects of Barwon Coast operations from accommodation services, assets and infrastructure, compliance and regulation and environmental programs.

Barwon Coast's environmental education programs are delivered to school groups, organisations and the general public at the Barwon Estuary Heritage Centre, in the Barwon Coast 'ed room', at schools and in the field. The engagement team also participates in community events, field-based programs and develops content for the Barwon Coast website and social media pages.

Barwon Coast actively supports the activities of volunteers including the Friends of the Bluff; Festival of the Sea; Barwon Heads Sailing Association, Ocean Grove Paddlers, Friends of the Lobster Pot, Estuary Watch, Friends of the Hooded Plover Bellarine, Ocean Grove Coastcare, Ocean Grove Surf Lifesaving Club, Barwon Heads Football Netball Club and the Barwon Heads-13th Beach Surf Life Saving Club.

During this CMMP Barwon Coast will continue to deliver its core schools and community awareness programs and explore the potential for additional education, culture and arts activities to encourage people to care for the coast. A priority is to work with WAC to develop and improve the interpretation of Aboriginal cultural values and practices (see Section 3.2).

Table 11. Strategic actions to build community knowledge, skills and participation

Ref.	Action	Deliverable	Lead	Partner	Timeframe
U&E 1.1	Develop new programs to engage and support coastal volunteers	Produce a coastal ecology video (Saltmarsh, Mangroves and Moonah Woodland)	Barwon Coast		2019-20 2020-21
U&E 1.2	Expand the portfolio of education programs	Community coastal ecology course	Barwon Coast	GORCC, Bellarine Bayside, WAC	2021-22 2022-23
U&E 1.3	Deliver Responsible Pet Ownership awareness and education activities. <i>Priorities: Schools program, Share our Shores</i>	Schools program (domestic cat and dogs) Share Our Shores workshops Attendance at community events	Barwon Coast	Vic Police, DELWP, CoGG, Ocean Grove Coast Care, Cherished Pets, Australian Veterinary Assn, Parks Victoria	Annual program
U&E 1.4	Deliver awareness and education activities with a focus on dune protection. <i>Priorities: Share our Shores and How Deep are your pockets campaigns</i>		Barwon Coast	Vic Police, DELWP, CoGG, Surf life saving clubs, CFA Boardriders Assn 13th Beach Boardriders Club	Annual program
U&E 1.5	Continue the Summer holidays education program and investigate its extension beyond the caravan parks		Barwon Coast	DELWP	2023-24

5.2 POPULATION GROWTH, ACCESS AND INFRASTRUCTURE

TEN-YEAR OBJECTIVES	5-YEAR OUTCOMES
<ul style="list-style-type: none"> ■ Maintain and improve facilities and public infrastructure ■ Strengthen consistency and clarity of signage 	<ul style="list-style-type: none"> ■ >70% of users are satisfied with the amenity, facilities and accessibility of the Barwon Coast.

By 2050, Melbourne's population is projected to grow by 2 million inhabitants. Geelong, in the same time frame, will add approximately 85,000 residents to the area and, by 2031 Ocean Grove is expected to grow by an additional 5000 residents¹⁰.

Given the short distance from Geelong and Melbourne to the Bellarine Peninsula, the number of holiday makers and day visitors is expected to increase, particularly to patrolled beaches at Ocean Grove Main Beach, Ocean Grove Spit and Thirteenth Beach. The primary impact of this projected additional influx of visitors to the beaches along the Barwon coastline will be increases in traffic volume, pressures on available car parking and visitor amenities, and impacts on the natural environment due to the increase in numbers of people and domestic animals.

ACCESSIBILITY

Barwon Coast acknowledges that there are major challenges in managing the demand for community access to the coast. Barwon Coast will continue to support access to the coast for recreation where it is consistent with the objectives for protecting the natural environment and managing risks to public safety.

Barwon Coast considers the principle of providing all-abilities access in planning for use and development across the Reserve. All abilities access is currently provided primarily in developed precincts and activity nodes via accessible toilets, car parks and the grading/surfacing of access tracks and ramps.

In 2018, Barwon Coast partnered with the Australian Federation of Disability Organisations to complete a review of the accessibility of Barwon Coast across all business areas. The review identified areas for improvements to physical accessibility, communications, workplace culture, retention practices, recruitment and customer service.

When complete, PMPs will provide the detailed management directions for access and use in each precinct. Initial priorities for the provision of all abilities access and facilities include: Flinders playground, Barwon Heads River Foreshore, Ocean Grove Main Beach, Surf Beach Complex and the Caravan Parks and Camp Ground, and supported access at Collendina (7W), Hodgson St (13W) and the Barwon Bluff (Charlemont car park).

A review of the *Barwon Coast Trails Strategy* and planning for the Thirteenth Beach Shared Trail are also a priority for this CMMP. In addition, Barwon Coast will investigate and implement alternative modes of transport to connect areas across the reserve, building

on the Summer Beach Bus initiative in Ocean Grove and Barwon Heads. Options may include increased public transport, 'park and ride' alternatives, and improved connections and infrastructure for active transport.

INFRASTRUCTURE AND SIGNAGE

Barwon Coast recognises that regular maintenance and replacement of assets and infrastructure is critical to maintaining the community values of the coast. Asset upgrades and renewals, as well as regular recyclables and waste collection, need to be carefully planned and managed in order to minimise impacts on the natural environment.

Barwon Coast has resolved to manage and accommodate increased demand within the footprint of existing Activity and Recreation Nodes and developed areas and be informed by DELWP's *Siting and Design Guidelines for structures on the Coast*.

Options to accommodate and manage demand will include:

- improving the design and efficiency of carparks, open space and associated facilities,
- consolidating and upgrade existing infrastructure, and
- measures to disperse visitors during peak periods such as park and ride and shuttle buses

Priority infrastructure projects are identified in the precinct priorities (see Section 6) with a focus on the main activity nodes associated with the Ocean Grove Main Beach, Caravan Parks and Camp Ground and the Barwon Heads River Foreshore.

Signage is provided across the Reserve for safety, awareness and informed use of the coast. Community feedback has identified the need to improve the number and location of signs, messaging and standardising the format. Barwon Coast will work with partners and adjoining land managers to review signage across the reserve and develop a consistent approach to signage, applying the Australian Standards where applicable.

¹⁰ Ocean Grove Structure Plan Review Community Consultation May 2015

SECTION 5

Use and enjoy sustainably

| 34

Table 12. Strategic actions to improve access, facilities and carparking

Ref.	Action	Deliverable	Lead	Partner	Timeframe
U&E 2.1	Undertake a feasibility study for alternative modes of the transport to access the coast including increased public transport and 'park and ride' options	Feasibility study Pilot alternative transport options during peak period	Barwon Coast	CoGG, RRV, GORCC, Bellarine Bayside	2020-21 2021-22
U&E 2.2	Plan for improved cycle and pedestrian access	Review and update Barwon Coast Trails Strategy	Barwon Coast	CoGG, BikeSafe Geelong	2020-21
U&E 2.5	Investigate options and implement appropriate parking restrictions for high-use areas through an MoU with CoGG	Parking options identified Consultation and introduction of restrictions	Barwon Coast	CoGG, Barwon Heads Assn, Ocean Grove Business Assn	2019-20 2020-21
U&E 2.3	Undertake an audit of signage across the Reserve (messaging, compliance with standards, style, location, condition)	Signage audit	Barwon Coast		2019-20
U&E 2.4	Develop and implement a signage plan in collaboration with agency partners	Signage style guide Signage upgrade plan	Barwon Coast	CoGG, Parks Victoria, LSV, MSV, Barwon Water, RRV	2020-21

5.3 COMPETING USES AND IMPROVED COMPLIANCE

TEN-YEAR OBJECTIVES	5-YEAR OUTCOMES
<ul style="list-style-type: none"> Enable enforcement of Barwon Coast regulations. 	<ul style="list-style-type: none"> There is Improved compliance with priority regulations (dog, horse, dune intrusion, wildlife protection & boating).

Some activities along the foreshore are incompatible with the community's aspirations to protect and enhance the natural environment. Community consultation highlighted four main areas of concern:

- Potential increase in hang-gliding and para-gliding activities and associated vegetation trampling and safety issues
- Horse access and use of the riding zone along Thirteenth Beach
- The extent of commercial service providers at Ocean Grove Main Beach impacting on other beach users.
- The extent and control of dogs in open areas

Barwon Coast manages competing uses through controls such as regulations or tenure agreements to ensure coastal values are maintained.

Barwon Coast and CoGG have recently established a local Environment Ranger position to enable local enforcement of matters relating to domestic animals and wildlife protection.

Coordination of compliance activity remains a focus of our relationship with CoGG as well as DELWP and Parks Victoria.

Barwon Coast also partners with COGG on managing Dog Control Zones to ensure wildlife protection and enjoyment by all at the beach. However, current dog control regulations are complex and compliance activity is limited by available resources. A broad range of options has been suggested by the community including simplifying the rules and regulations, implementing no-dog zones all year round, reviewing signage, and enabling local enforcement of regulations. Barwon Coast and CoGG have commenced a review of local dog access controls. The review will consider the issues raised during community consultation for the CMMP and will complete a strategic assessment of protected areas.

Barwon Coast will also progress the development of a policy and permit system to control horse access on the Barwon Coast beaches and manage informal hang-gliding and paragliding activity.

Table 13. Strategic actions to enable enforcement of Barwon Coast regulations

Ref.	Action	Deliverable	Lead	Partner	Timeframe
U&E 3.1	Review and simplify dog controls and improve communication of dog control regulations	Options identified and evaluated Regulations updated Signage installed and communications program implemented	Barwon Coast	CoGG	2019-20 Annual
U&E 3.2	Improve enforcement capacity within the reserve (hooded plover, dune intrusion, dogs, parking, litter, horses and hang-gliding)	Compliance data collection requirements established Compliance enforcement and monitoring options identified Additional compliance resources and enforcement capacity established	Barwon Coast	CoGG, DELWP, Vic Police	2021-22
U&E 3.3	Develop a policy and permit system to control horse access to beaches (recreational and thoroughbred) <i>Priority area: Thirteenth Beach</i>	Horse access policy established Permit system established and implemented	Barwon Coast	DELWP, Geelong Racing Club Thoroughbred Horse Trainers, Pony Club Assn	2019-20 2021-22
U&E 3.4	Develop a policy and permit process to formalise hang-gliding and paragliding activity <i>Priority area: Ocean Grove Main Beach, Thirteenth Beach</i>	Hang-gliding and paragliding Permit system established and implemented	Barwon Coast	DELWP, Hang-gliding Assn	2021-22 2022-23

5.4 SUSTAINABLE PRACTICES

TEN-YEAR OBJECTIVES	5-YEAR OUTCOMES
■ Improve Barwon Coast's resource use efficiency	■ Barwon Coast has reduced its energy consumption from 2018 levels ¹¹

Barwon Coast is committed to minimising the environmental impact of its operations. A sustainable resource demand strategy will be developed to guide decision making when replacing obsolete facilities and infrastructure that will consider improvements for operations and maintenance. The PMP process will also consider sustainability in the planning of use and development.

An immediate priority for Barwon Coast is establishing options to comply with new regulations for the disposal of e-waste, raising staff awareness and identify options that can easily be implemented in day-to-day business.

Table 14. Strategic actions for sustainable practices

Ref.	Action	Deliverable	Lead	Partner	Timeframe
U&E 4.1	Monitor and refine the sustainable practices used in the organisation	Staff awareness training Alternative options to chemical weed control identified and trialled Sustainable purchasing policy developed	Barwon Coast	Geelong Sustainability Barwon South West Waste & Resource Recovery Group	2019-20 2019-20 2020-21
U&E 4.2	Undertake a comprehensive review of waste management facilities with consideration to coastal hazards and OH&S issues	E-waste review complete Waste management policy and procedure developed Additional recycling capability established	Barwon Coast		2019-20 2020-21

¹¹ This outcome will be reviewed and additional sustainability outcomes identified following the development of the Sustainable Purchasing Policy.

PRECINCT PRIORITIES



6.1	Precinct 1 – Ocean Grove Dunes (7W To 13W)	39
6.2	Precinct 2 – Ocean Grove Main Beach (13W To 16W)	40
6.3	Precinct 3 – Ocean Grove Spit (16W To 20W)	42
6.4	Precinct 4 – Barwon River Estuary (22W To 27W)	43
6.5	Precinct 5 – The Barwon Bluff (27W To 30W)	45
6.6	Precinct 6 – Thirteenth Beach (30W To 42W)	47
6.7	Accommodation Services	49



Barwon Coast has divided the area into six distinct precincts, and a plan for accommodation services incorporating the two caravan parks and camp ground.

The formation of the precincts was guided by their landscape characteristics, specifically their:

- Visual character
- Landform/ geomorphology
- Land use/ level of development
- Vegetation, wildlife, habitat and diversity.

Each precinct has a distinct role in the region and is valued for different attributes and assets, facing different challenges and future prospects. Managing the Reserve by precincts allows for a more in-depth understanding of the values, threats, management challenges and opportunities. This information, unique to each precinct, then informs the prioritisation and targeting of management actions and activities.

The precincts comprise:

- Precinct 1: Ocean Grove Dunes (7W to 13W)
- Precinct 2: Ocean Grove Main Beach (13W to 16W)
- Precinct 3: The Ocean Grove Spit (16W to 20W)
- Precinct 4: Barwon River Estuary (22W to 27W)
- Precinct 5: The Barwon Bluff (27W to 30W)
- Precinct 6: Thirteenth Beach (30W to 42W)

Accommodation services:

- Barwon Heads Caravan Park (located in Barwon River Estuary precinct)
- Riverview Family Caravan Park (located in the Barwon River Estuary precinct)
- Riverside Camp Ground (located in the Ocean Grove Spit precinct)

A priority for Barwon Coast is to develop individual Precinct Master Plans (PMPs). The precinct priorities described in this section of the CMMP are the basis for the development of the PMPs. PMPs are expected to provide detailed planning for use and development for a ten-year horizon. The PMP process will involve extensive consultation with the community, Traditional Owner and agencies.

An overview of each precinct with associated actions is outlined in sections 6.1 -6.7.

6.1 PRECINCT 1 – OCEAN GROVE DUNES (7W TO 13W)

Priority values

- Vegetation and habitat for wildlife
- Natural, quieter and uncrowded beach
- Passive recreation including dog walking
- Threatened Coastal Moonah Woodland Community and orchids

This precinct is backed by a wide dune formation with extensive tracts of locally native vegetation that provides important habitat for wildlife. The precinct covers 27.5 hectares and adjoins Buckley Park foreshore managed by CoGG. The beach allows for passive recreation, providing a feeling of remoteness from nearby residential development. An increase in beach swimming in this precinct has been observed in recent years and the need for further water safety provisions will be monitored during this CMMP.

The role of the precinct is primarily protection and enhancement of natural values. An active group of volunteers from Ocean Grove Coastcare and Friends of Hooded Plover Bellarine support Barwon Coast's environment programs. Improving accessibility and managing dune intrusion will be considered during the master planning process for this precinct.

This beach zone provides for walking with dogs off leash all year (dogs to be under effective control). Responsible dog ownership and monitoring of dogs on the beach and their potential impact on conservation values are important in this precinct because of its high conservation values. A strategic review of dog controls will aim to simplify regulations.

Table 15. Precinct actions Ocean Grove Dunes (7W to 13W)

Ref.	Link to strategic action	Precinct action	Deliverable	Lead	Partner	Timeframe
P1.1	N&C 1.1/ 2.1	Protect and enhance locally native vegetation and fauna and address pest plant encroachment into dunes from neighbouring properties	Contain and reduce cover of Polygala (Bellarine Pea) non- local Wattles and Bridal Creeper Revegetate Austral lotus and Moonah Woodland Monitor and bait rabbits Install brush matting and fencing of intrusion damage	Barwon Coast	Landholders	Annual program
P1.2	N&C 2.2/ 2.3	Control pest animals including feral cats and foxes	Pilot trapping program implemented	Barwon Coast		2020-21 Annual program
P1.3		Assess seasonal beach use and implement public safety measures if required	Aquatic safety signage Life Saving Victoria patrols	Barwon Coast	LSV Ocean Grove Surf Life saving Club	Annual program

Precinct Master Plan Priorities

- Manage informal pedestrian access, dune intrusion and trampling of vegetation associated with the carpark at 7W.
- Provide for passive recreation where it does not impact upon natural values.
- Manage informal dune intrusion at the front of the dunes by beach users and dogs

6.2 PRECINCT 2 – OCEAN GROVE MAIN BEACH (13W TO 16W)

Priority values

- Broad, easy access surf beach for a variety of recreational purposes
- All-ability amenities and beach access
- Extensive car parking, catering for large numbers of visitors
- Visitor infrastructure, facilities and services

The main surf beach is a well-developed activity node and is a clear point of focus for community and commercial uses. Barwon Coast maintains the wide, well-arranged foreshore reserve between the town of Ocean Grove and the beach. The convenient, extensive parking and easy access, together with paid life guard and surf life saving club patrols, make this a popular summer beach. The precinct includes the main surf beach, but also provides for other types of beach recreation and tourism use, as well as opportunities to enjoy coastal views.

The area has a high level of visitor infrastructure with the focal point being the Dunes Cafe, next to the Surf Life Saving Club, both of which form part of the Ocean Grove Surf Beach Complex. Other key infrastructure includes an all abilities beach access ramp and amenity block. The beach provides access for all abilities community events hosted by the Ocean Grove Disabled Surfing Association. Toilet facilities located at Hodgson Street are serviced and maintained by CoGG.

This precinct is a priority area to protect public assets from coastal hazards. Further works are planned during this CMMP to extend asset protection measures and improve all ability access and complete upgrades to the facilities of the Surf Beach Complex.

The surf attracts a high number of visitors and is supported by surf life saving patrols consisting of volunteer lifesavers and paid lifeguards¹². A strategic review of dog controls will aim to simplify regulations.



Ocean Grove Main Beach looking west

¹² CoGG funds paid life guard services in this precinct.

Table 16. Precinct actions (Ocean Grove Main Beach 13W to 16W)

Ref.	Link to strategic action	Precinct action	Deliverable	Lead	Partner	Timeframe
P2.1		Construct an open grassed terrace area adjacent to the beach. Located at the west end of the sea wall to the next timber elevated stairs, 15W (Micks Steps)	Open grassed terrace constructed Shade structures installed	Barwon Coast		2022-24 (after PMP)
P2.2		Upgrade visitor facilities associated with the surf beach complex	Upgrades to shade, kiosk and public toilets	Barwon Coast	Tenants	2020-21
P2.3		Liaise with tenants to enable community access and use of Surf Beach Complex for events and functions	Working group established Surf Beach Complex functions and event policy established	Barwon Coast	Tenants	ongoing
P2.4	P&I 1.6	Extend the coastal protection features of the current seawall and access ramp for long term protection of assets at Ocean Grove Main Beach	Beach access ramp, seawall extension and associated sand nourishment	Barwon Coast	CoGG	2019-20
P2.5		Review and implement traffic management measures for Surf Beach Road	Traffic management plan Works to include traffic calming, improved cycle and pedestrian access, sealing and drainage upgrades	Barwon Coast	CoGG	2020-21
P2.9	N&C 1.2	Replace ageing Cypress (Cypresses macrocarpa) with locally appropriate species	Works to place coastal tree species	Barwon Coast		2022-25

Precinct Master Plan Priorities

- Review outstanding actions from car park upgrade: Grants Lookout to Presidents Avenue
- Upgrade Grants Lookout stairs and improve beach access (*in partnership with CoGG*)
- Investigate options to install bike rack/shelter near main beach centre toilet
- Improve grassed areas for recreation; identify potential areas for expansion of, or creation of additional grassed areas adjacent to the beach with shade provision
- Improve all abilities access including access to the beach, new path linkage at the west end of the promenade and an option to provide graded path at east end Terraces

6.3 PRECINCT 3 – OCEAN GROVE SPIT (16W TO 20W)

Priority values

- Extensive dune vegetation and migratory wader and local bird habitat in the estuary
- Nature recreation and open space opportunities
- Access to both surf beach and safe river beach
- Visitor facilities suited to both day visitors and seasonal camping
- Trails and paths on both sides of the Spit

The Ocean Grove Spit (the Spit) is a unique precinct, offering access to both a surf beach and a river beach. Covering an area of approximately 36 hectares (including the seasonal Riverside Camp Ground), the Spit is characterised by extensive, modified dune vegetation, creating a landscape that is appealing for eco-based recreation and tourism, including walking, fishing, swimming and cycling. The area is easily accessible due to the extensive informal parking, and trails and paths which provide direct access to both river and surf beaches. There are safety hazards associated with

the interaction between cars, pedestrian and cyclists. These are a priority issue to be addressed in the PMP process.

During the summer months, the river side of the Spit is home to the seasonal Riverside Camp Ground, of which expanded use for camp activity is being considered in response to state government policy. A number of permits are also issued for service providers over the peak period. A strategic review of dog controls will aim to simplify regulations.

When the Ocean Grove Main Beach reaches capacity, an opportunity exists at 18W to provide a patrolled beach service from paid life guards in the summer (funded by Barwon Coast). The Spit also acts as a zone for beach recreation and surfing. In addition, RAAF's beach (19W) is also a very popular destination where at times there are good surf breaks.

A number of toilet facilities, three on the ocean side and one on the river side, are maintained all year for community use.

Table 17. Precinct actions Ocean Grove Spit (16W to 20W)

Ref.	Link to strategic action	Precinct action	Deliverable	Lead	Partner	Timeframe
P3.3	P&I 1.6	Manage sand on Barwon River Bridges through the consent process and transfer of sand	Use and development consent Removal, transfer and placement of sand	Regional Roads Victoria	Barwon Coast	As required
P3.4	N&C 1.1	Protect and enhance locally native vegetation and fauna	Contain and reduce cover of Polygala, Dolichos and Bridal Creeper. Revegetate and rehabilitate former camping areas Monitor rabbits Install brush matting and fencing of intrusion damage	Barwon Coast		Annual program
P3.5	P&I 1.6	Continue maintenance program for informal rock wall	Regular inspection for rock displacement and litter hazards. Rock replacement as required	Barwon Coast		Annual program
P3.6		Maintain lifesaving services at EBAN 18W over the summer period	Paid life guard patrols	LSV	Barwon Coast	Seasonal

Precinct Master Plan Priorities

- Consider and address safety hazards associated with shared trails and intersections with car parks, on the ocean side of the Spit
- Consolidate Riverside trail on the river side of the Spit, and remove camping conflicts
- Identify options to improve pedestrian/bike safety associated with main road crossings to/from Riverside Camp Ground
- Identify options to improve the efficiency of carparking and provide additional picnic facilities within the Ocean Grove Spit riverside area

6.4 PRECINCT 4 – BARWON RIVER ESTUARY (22W TO 27W)

Priority values

- Ecological and habitat values of the river estuary
- Access to safe beaches with family-focussed facilities
- On-water activities
- Strong landscape character
- Cultural heritage, and its presentation at the Barwon Estuary Heritage Centre
- Lake Connewarre State Game Reserve Ramsar site.

The estuary area has a distinctive landscape with high ecological and habitat values. It offers views of the Barwon River, the Spit and the Barwon Bluff alongside the high-intensity land use of the two caravan parks and camp ground and covers a total of 30 hectares. It provides visitors with safe access to river beaches offering on-water activities and provision for vessels to navigate along the river through the estuary. Barwon Coast's Crown land boundary ends north of Riverview Family Caravan Park, however, the Local Port management area (waters) extends to 22W.

A range of infrastructure assets and facilities are provided for community use and enjoyment, including those in the caravan parks and all year activity node off Flinders Parade Barwon Heads. A range of upgrades to consolidate use and make improvements to all abilities access are planned for this precinct during the life of this CMMP. A number of permits are issued for water-based activity licenced service providers over the year who hire out small craft like kayaks and Stand Up Paddleboards.

On the Barwon Heads side, south of the bridges, the precinct houses the Barwon Coast and Barwon Heads Caravan Parks offices. The open lawn area is a commonly used space for picnics, events and activities like yoga and fitness classes. A promenade links the bridges to the At the Heads restaurant, main jetty and onto the Barwon Bluff.

Barwon Coast is responsible for the operation of the Local Port of Barwon Heads where the main activities include the operation navigation of aids for waterway safety and provision of two jetty structures that are popular for walking and recreational fishing. A strategic review of dog controls will aim to simplify regulations.

The Barwon River Estuary maintains strong cultural heritage values; including aboriginal heritage and post-settlement heritage linked to the township's settlement. The estuary precinct is well connected to the Barwon Bluff Marine Sanctuary, and Lake Connewarre State Game Reserve (a Ramsar site), both managed by Parks Victoria. The strong environmental and cultural heritage values are promoted, interpreted and presented at the Barwon Estuary Heritage Centre on Jetty Road.

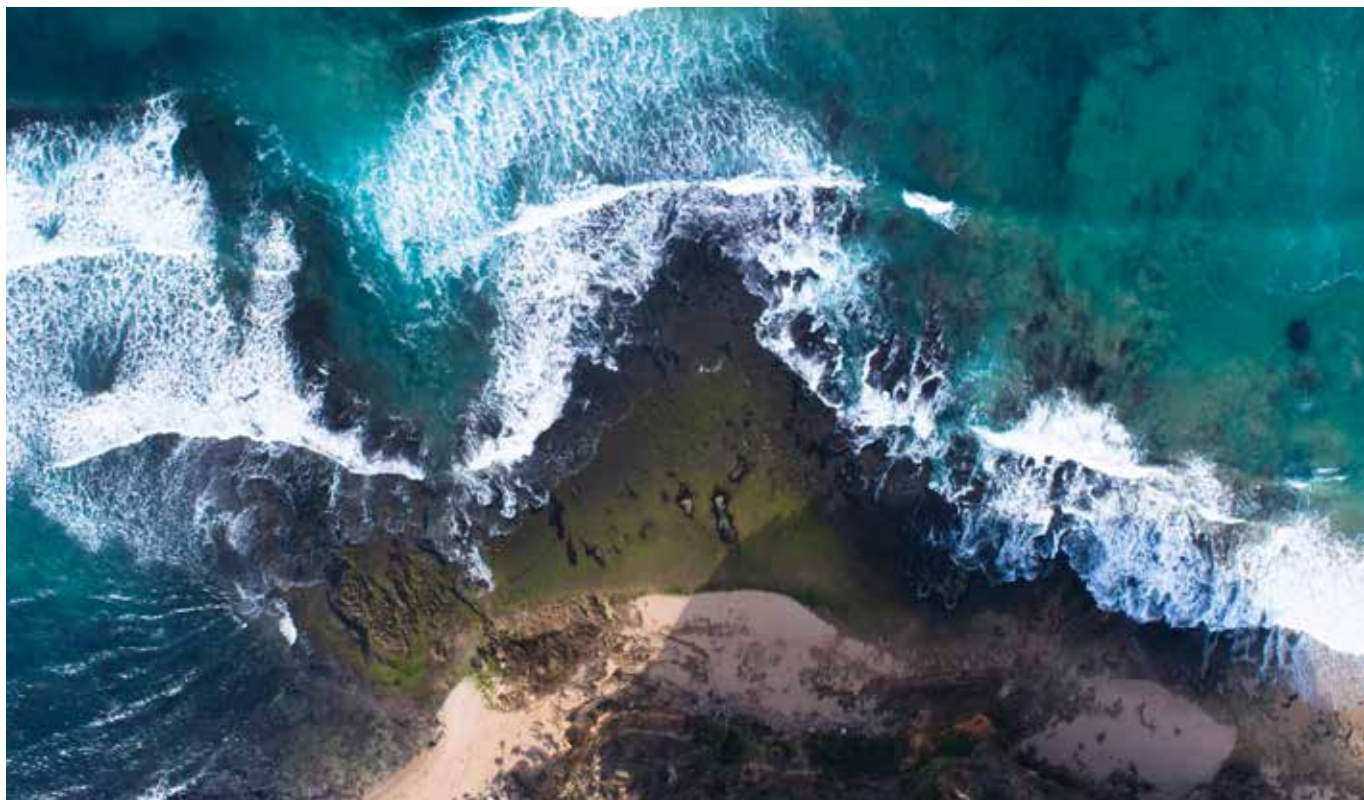


Table 18. Precinct actions Barwon River Estuary (22W to 27W)

Ref.	Link to strategic action	Precinct action	Deliverable	Lead	Partner	Time-frame
P 4.1		Upgrade public toilets at Flinders playground and BCCM Office	Public toilets upgraded to provide additional cubicles and all abilities access	Barwon Coast		2019-20 2020-21
P 4.2		Upgrade facilities and infrastructure at Jetty Road to address public safety, drainage, access and parking	Landscape plan developed Upgrades complete	Barwon Coast	CoGG	2021-22 Unfunded
P 4.3		Upgrade the BCCM and Barwon Heads Caravan Park office complex	Additional storage and administration facilities provided	Barwon Coast		2020-21 2021-22
P 4.4	N&C 4.3	Continue Barwon Estuary Heritage Centre infrastructure upgrades	Refurbishments to increase the capacity of the education room and installation of a kitchenette and DDA compliant toilet.	Barwon Coast		Unfunded
P 4.5		Review and complete public tender process for the lease agreement for 'At the Heads', including an extension of the lease area.	Review of lease complete Public tender process and new lease established	Barwon Coast		2019-20 2020-21
P 4.6	N&C 1.1	Enhance locally native vegetation.	Contain and reduce cover of Polygala and Bridal Creeper	Barwon Coast		Annual program
P 4.7		Deliver compliance and safety management of the Barwon Estuary	Coordination of compliance servicing and infrastructure maintenance within Barwon River.	Barwon Coast	MSV, Victoria Police, Transport Victoria Parks Victoria	
P 4.8		Assess traffic, parking and pedestrian management in Lahey Square / Jetty Road precinct.	Participate in Barwon Heads parking study	BHA CoGG	Barwon Coast	2019-20
P 4.9	P&I 1.6	Identify adaptation options for the inland side of BH promenade to protect assets from flooding and coastal inundation	Levee modifications and drainage infrastructure investigated	Barwon Coast	CCMA	2020-21 2022-23

Precinct Master Plan Priorities

- Investigate the feasibility to connect the toilet block at the Ozone Road to the sewer and install a playground / picnic area
- Address shared trail congestion issues for pedestrian and cyclists in the vicinity of At the Heads
- Review the pedestrian facilities and landscaping around Fishermen's Jetty area, noting Trails Strategy & Mountain to Mouth Event.
- Investigate options to prevent litter and rubbish from Ozone Road stormwater drain outfall and other discharge points from residential areas entering the Barwon Estuary. (in partnership with CoGG)
- Investigate options to improve all abilities access to the Barwon River estuary and more equitable use of available carparking.



6.5 PRECINCT 5 – THE BARWON BLUFF (27W TO 30W)

Priority values

- The landscape character of the Barwon Bluff landform
- Aboriginal cultural heritage
- Local native vegetation and fauna
- Walking trail network
- Participation by Friends of the Bluff in environmental management and education services

At the Barwon Bluff (The Bluff), the Barwon River enters the waters of Bass Strait and the Southern Ocean. The Bluff landform offers a distinctive visual character providing extensive coastal views. The precinct covers an area of approximately 17.5 hectares.

The Bluff is rich with Aboriginal cultural and post-settlement heritage. Interpretive signage and the Earl of Charlemont Memorial Cairn inform people of these values. Adjoining the precinct is the Barwon Bluff Marine Sanctuary which is managed by Parks Victoria. The Marine Sanctuary is a popular area for rock

pooling and educational activities. The precinct also provides an extensive network of walking trails. Visitors can enjoy the scenery with a range of viewing opportunities and the trail network connections to both Thirteenth Beach and Barwon Heads. The beach area around the Bluff and the marine sanctuary remains a dog-free zone year-round.

The Bluff visitor facilities, provided by Barwon Coast, support access to popular areas rich in locally native vegetation and wildlife. Improvements to access and public safety are a priority for this CMMP.

Friends of the Bluff volunteers (FoB) provide support for rehabilitation of vegetation and habitat of the Bluff area and the development of educational material used by Barwon Coast. The precinct also houses the Barwon Coast operations depot, numerous car parks and the entrance to the Barwon Heads Football and Netball Club.

Table 19. Precinct actions The Barwon Bluff (27W to 30W)

Ref.	Link to strategic action	Precinct action	Deliverable	Lead	Partner	Timeframe
P 5.1		Complete Road upgrades at Bluff road to improve safety for pedestrians and cyclists.	Provision made for future park and ride service (south side carpark) Sealing of road shoulders	Barwon Coast		2021-22 2022-23
P 5.2	N&C 1.1	Protect and enhance locally native vegetation and fauna	Control <i>Acacia cyclops</i> , Buckthorn and Bridal creeper Revegetate Coast Wirilda, Moonah Woodland and associated dune and headland species. Monitor and bait rabbits Install brush matting and fencing of intrusion damage	Barwon Coast	FoB	Annual program
P 5.3	N&C 2.2/2.3	Control pest animals including feral cats and foxes	Fox baiting Cat and fox trapping	Barwon Coast		Annual program
P 5.4	P&I 1.6	Undertake research and monitoring of cliff stability to inform management responses.	Research and monitoring project re-established Photopoint monitoring	Barwon Coast	Universities DELWP	Unfunded Annual
P 5.5	N&C 2.7	Deliver Hooded Plover protection activities	Temporary exclusion zones and beach closure	Barwon Coast	DELWP, CoGG, BirdLife, Friends of Hooded Plover Bellarine	As required

Precinct Master Plan Priorities

- Identify upgrades to 28W carpark to address surface, drainage and access to the boardwalk and ensure upgrades consistent with natural landscape values
- Address uncontrolled access through fencing, bollards and vegetation works to protect natural and cultural values
- Investigate options to delineate walking and bicycle tracks around the Bluff, including identification of public safety hazard
- Renew and consolidate interpretive signage (Parks Victoria, Friends of the Bluff)

Thirteenth Beach, looking west



6.6 PRECINCT 6 – THIRTEENTH BEACH (30W TO 42W)

Priority values

- Biodiversity values, particularly important Hooded Plover breeding areas
- Extensive remnant dune vegetation
- Wild-beach character
- Significant surf destination
- Passive recreation including dog walking

The Thirteenth Beach stretches along 4.5 kilometres of the coast from the Bluff to the western end of Thirteenth Beach, 42W access, covering an area of 113.5 hectares. The precinct is rich in Aboriginal cultural heritage as recognised by ten registered sites to date. There is extensive remnant dune vegetation in the area and the primary role of the precinct is the protection of natural and cultural values.

Thirteenth Beach is popular with surfers due to the diverse wave and shore-break patterns that stretch along the beach. This area is home to both Thirteenth Beach Boardriders Club and the Barwon Heads-Thirteenth Beach Surf Lifesaving Club. Thirteenth Main Beach (34W – 35W) is patrolled by both paid¹³ and volunteer life savers.

Facilities include a network of car parks and associated beach access points as well as amenities blocks at Beacon (32W) and at Crater car park (34W). To provide for alternative modes of transport to the beach, a shared trail is provided from Stephens Parade, Barwon Heads to both the First car park (30W) and to Signpost Car Park (33W). Through this CMMP the development of an off-road shared trail to Thirteenth Main Beach (34W) will be completed.

Thirteenth Beach Road is part of a popular cycling route for road cyclists. Safety on the road and was a popular topic during community consultation. Roadway and roadside vegetation management is the responsibility of the City of Greater Geelong.

With a wild-beach character, Thirteenth Beach has high biodiversity values and is a breeding site for the endangered Hooded Plovers. Volunteers from Friends of the Hooded Plover Bellarine support hooded plover breeding through on site wardening service. Barwon Coast actively control access during the breeding season through temporary exclusion zones, compliance activity and signage. Erosion and seasonal impacts of coastal processes can affect the beach access stairs and this is typically managed through soft-engineering options.

In addition to surfing and beach recreation, horse access to the beach is provided at 40W. A revised policy and permit system and will be introduced during this CMMP to control both recreational and thoroughbred horse activity.

¹³ CoGG funds the Paid Life Guard service in this precinct.

SECTION 6

Precinct Priorities

| 48

Table 20. Precinct actions Thirteenth Beach

Ref.	Link to strategic action	Precinct action	Deliverable	Lead	Partner	Time-frame
P 6.1	N&C 2.7	Deliver Hooded Plover protection activities	Breeding site monitoring and wardening activity. Temporary exclusion zones and beach closure	Barwon Coast	DELWP, CoGG, BirdLife, Friends of Hooded Plover Bellarine	As required
P 6.2	N&C 1.1	Protect and enhance locally native vegetation and fauna	Control Marram, Sea spurge and Bridal creeper Revegetate Austral lotus. Monitor and bait rabbits Install brush matting and fencing of intrusion damage	Barwon Coast	FoB CVA	Annual program
P 6.3		Support expansion of club house and training facility at Barwon Heads Thirteenth Beach SLSC	Review and input to detailed design Approvals and permits	BH-13th Beach SLSC	Barwon Coast DELWP CoGG	
P 6.4		Investigate the provision of a public toilet in vicinity of the club's building	Preferred option identified independent toilet facility adjoining club's building Construction of toilets	Barwon Coast		2020-21
P 6.5	U&E 2.2	Finalise design and construct 13th Beach Shared Trail between Stephens Parade and Surf Life Saving Club	Finalise design and consultation. Approvals and permits Construction of trail and associated landscape works	Barwon Coast	CoGG	2020-21
P 6.6	N&C 2.2/2.3	Control pest animals including feral cats and foxes	Fox baiting Cat and fox trapping	Barwon Coast		Annual program
P 6.7	U&E 3.3	Control horse activities to designated beach at 40W	Signage established Permit system implemented	Barwon Coast	DELWP, Trainers Assn	2020-21
P 6.8	U&E 3.4	Control hang-gliding and para-gliding	Signage established	Barwon Coast	DELWP Hang Gliding Assn Victoria	2021-22

Precinct Master Plan Priorities

- Investigate the installation of a lookout point to reduce trampling by walkers, surfers and hang gliders/para-gliders at access points, 32W, 40W and-42W
- Establish formal arrangements for hang gliding and paragliding activities
- Identify options to address safety issues for cyclists and pedestrians along Thirteenth Beach Road (Barwon Coast, BikeSafe Geelong and CoGG)

6.7 ACCOMMODATION SERVICES

Priority values

- Natural character
- High quality facilities and services
- Range of opportunity of accommodation
- Responsive to market
- Sustainability focus
- Effective financial resource

Barwon Coast manages two high-quality, all-year caravan parks within the Reserve – Barwon Heads Caravan Park and the Riverview Family Caravan Park in Ocean Grove. In addition, the Riverside Camp Ground operates during the summer and peak long weekends in autumn.

Both caravan parks provide a range of accommodation styles and lengths of stay. The options range from cabins of various sizes and standard, including all-ability access, to powered and unpowered caravan sites and unpowered bush camping sites.

The caravan parks are a part of the local and seasonal community; some families visiting the area annually for decades. Both parks are located within walking distance of town centres, the ocean and estuarine beaches

The caravan parks are developed to meet broad community expectations for service availability and quality of facilities through strategic business planning. An additional service to campers is the summer activities education program provided free by Barwon Coast.

BARWON HEADS CARAVAN PARK

The Barwon Heads Caravan Park offers 'river meets the sea' views for holiday makers. There is a wide variety of accommodation options including beach houses, boat houses, deluxe and budget cabins, and powered and unpowered sites. Every site is within a

short walk of the water's edge. It is conveniently located within easy walking distance of the Barwon Heads Township.

The park houses the Howard Harmer Oval, home to the Barwon Heads Football and Netball Club. This large club is a significant component of the local community. The oval and the netball courts were re-developed in 2017.

RIVERVIEW FAMILY CARAVAN PARK

The Riverview Family Caravan Park is situated within Ocean Grove, just north of the sand spit between the ocean and Barwon River, with calming river views. The park offers well grassed, flat, sheltered sites within walking distance of the Ocean Grove township and surf beach.

The park is well appointed for all-ability access and has a wide range of accommodation options including, seven cabins and duplexes, and powered and unpowered sites.

RIVERSIDE CAMP GROUND

Riverside Camp Ground provides a natural bush camping experience, operating from late December until the end of January then peak long weekends or other demands. Barwon Coast has resolved to maintain the camp ground to provide for a bush camping experience.

The camp ground offers 220 unpowered camp sites, many of which are located near the edge of the Barwon River. Most sites are shaded by natural vegetation and are only minutes to the ocean beach, the overall site strategy being to create a vegetative barrier between the road and river to the camp site areas. Toilet and laundry facilities and a shared trail network along with licenced food vendors are provided within the camp grounds.

The camp ground community has recognised the potential of this unique site forming a Friends of Barwon Riverside Camp Ground (FBRCG) to assist in camp ground vegetation enhancement.



Barwon Heads Caravan Park

SECTION 6

Precinct Master Plans

Table 21. Precinct actions Accommodation services

Ref.	Link to strategic action	Precinct action	Deliverable	Lead	Partner	Timeframe
Barwon Heads Caravan Park (CP2)						
CP 2.1		Improve traffic management for entry and movement within the Barwon Heads Caravan Park	Traffic management options identified including: <ul style="list-style-type: none"> ■ Traffic calming ■ Directional signage ■ Drop off points ■ Entry and egress points 	Barwon Coast		2020-21
CP 2.2		Implement Howard Hamer Oval Master Plan.	Sealing and widening of the road Provision of additional car parking Line marking around the netball court	Barwon Coast		2020-21
CP 2.3	P&I 5.2	Construct a group stay facility in the preferred location.	Detailed design and consultation Approvals and permits Construction	Barwon Coast		2021-22 Unfunded
CP 2.4		Improve the facilities at the Multipurpose Facility to increase suitability and use by BHFNC, community and agencies	Detailed design Approvals and permits Construction	Barwon Coast	BHFNC	2019-20 Unfunded
Riverview Family Caravan Park (CP3)						
CP 3.1	P&I 1.6	Identify adaptation options to protect assets from flooding and coastal inundation	Investigate and plan levee modifications and drainage infrastructure requirements	Barwon Coast	CCMA	2019-20
CP 3.2		Identify options and upgrade and consolidate toilet blocks.	Preferred option identified Upgrades completed	Barwon Coast		2019-20 2022-23
CP 3.3		Install signage and establish a pathway to improve safe pedestrian movement from the arrival bowl.	Signage installed Pedestrian path established	Barwon Coast		2019-20
CP 3.4		Improve signage and directions for vehicle turn off from BH-OG Rd to the visitor car park.	Signage and road marking installed Pedestrian path established	Barwon Coast		2020-21 2022-23
CP 3.5		Improve the accessibility of car parking at Riverview Family Car Park.	Carpark surface upgrades Access points improved	Barwon Coast		2020-21
Riverside Camp Ground (CP4)						
CP 4.1		Review and improve campsite layout and identification of sites	Site marking system installed	Barwon Coast		2019-20
CP 4.2		Investigate the provision of sewer connections and consolidation of amenity blocks and new waste management system.	Feasibility study and assessment of risks complete	Barwon Coast		
CP 4.3		Enable further camping opportunity with a focus on groups	School group camping use increased	Barwon Coast		2021-22
CP 4.4		Rename Riverside Camp Ground respecting Aboriginal Heritage	New name that reflects the Value of the area	Wada-wurrung Barwon Coast		2020-21

IMPLEMENTATION ARRANGEMENTS





The CMMP sets the strategic direction and actions for managing the Reserve over the period 2020–2025. Supporting the CMMP is a five-year business plan designed to cost and prioritise the completion of CMMP actions, bearing in mind that precinct actions will be further developed through the PMP process.

At this point in the planning process, 65% of the action items from the CMMP can be completed using operating expenditure and 35% of action items are deemed capital in nature. Where possible funding from external sources will be sought to implement unfunded priorities in this CMMP. The informed 5 year business plan will be the basis for the yearly budget program consolidated into the the annual corporate plan.

Barwon Coast's experienced senior management team is well equipped to successfully implement the strategic direction and actions engaging and managing internal and external resources where required.

Successful implementation of the CMMP will also require a co-operative approach with DELWP, Traditional Owners, CoGG, Barwon Water, Parks Victoria, CCMA, Regional Roads Victoria, other agencies and local communities. Actions to be undertaken in the plan may also require specific approval or consent where relevant.

7.1 MONITORING, EVALUATION, REPORTING AND IMPROVEMENT

A monitoring, evaluation, reporting and improvement (MERI) Plan has been developed to improve confidence in the effectiveness of Barwon Coast's management of the Reserve. It provides the structured evaluation, reporting and improvement processes to support the CMMP's implementation. It also sets out the program logic (see Figure 6 for a summary) and identifies monitoring and data collection to track implementation.

MERI activities will be supported by the CMMP subcommittee and senior management team. The senior management team will have a coordination role and lead monitoring, research and evaluation activities. The group will be accountable to the CMMP subcommittee, who are responsible for reviewing evaluation reports and making recommendations to the Committee. Formal reporting to the Minister and DELWP will occur through existing processes defined in the Statement of Expectations.

The senior management team will engage with stakeholder groups including volunteers, Traditional Owners and agencies as required to participate in MERI activities and inform management decisions.

An annual MERI work plan will be integrated into the annual Corporate Plan and developed to support the MERI activities.

Program Logic

The program logic (Figure 4) and its assumptions describe the relationships between activities, outcomes and the objectives of the CMMP and help to identify where knowledge gaps and uncertainties exist in the Program Logic.

Elements of the program logic include:

Vision: an overarching long-term aspiration for the Reserve

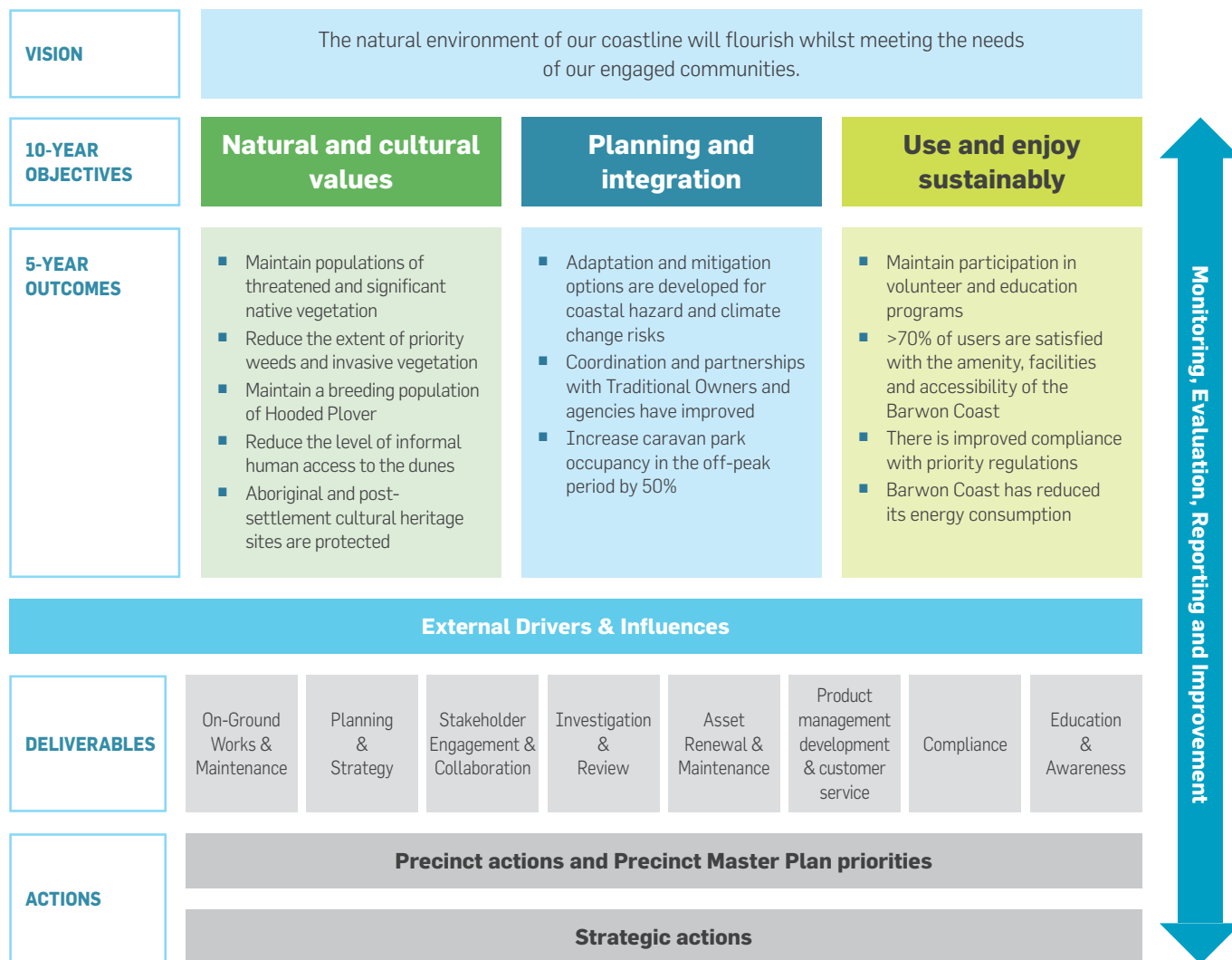
10-year objectives: statements that provide describe the detail of the vision for the Reserve

5-year outcomes: describe the expected results and achievements from the implementation of the CMMP

Actions and priorities: specific management activities and deliverables that drive implementation of the CMMP

External drivers and influences: factors that may influence the delivery of management activities and the achievement of outcomes

Figure 6. Barwon Coast CMMP simplified program logic



The main assumptions supporting the program logic are:

- The natural environment is fundamental to the cultural practices of Traditional Owners.
- The natural environment supports the health and wellbeing of all users of the coast.
- Threats to native vegetation, cultural heritage sites and dune systems (pest plants and pest animals, human access, competition) can be effectively mitigated.
- Threats to Hooded Plover and other fauna populations (disturbance, predation, loss of habitat) can be effectively mitigated.
- Barwon Coast's governance systems and processes are effective and will ensure the organisation is accountable, ethical and meets its legislative responsibilities.
- Increased visitation and demand for coastal access can be accommodated within existing activity and recreation nodes and through alternative transport options.
- Feasible and cost-effective adaptation and mitigation options can be identified for assets and infrastructure at high risk from coastal hazards and climate change.
- Partnerships and coordination with Traditional Owners and agencies will contribute to the effective and efficient delivery of coastal management.
- There will be a sustained increase in revenue (from accommodation services, leases and licensing and external funding) to support coastal management activities.
- Occupancy rates can be substantially increased despite seasonal conditions in the off-peak period.
- Community education, awareness and compliance programs will lead to coastal users valuing and acting to protect natural and cultural values.
- The condition and availability of coastal infrastructure, access and signage contribute to the satisfaction and experience of coastal users.
- Energy consumption can be reduced even with increased demand for access and increased occupancy.

EVALUATION QUESTIONS

Evaluation questions drive the evaluation and reporting process and provide the basis for assessing the success of the CMMP. The questions are also used to frame monitoring requirements and identify existing and potential sources of data (see Table 22).

Six categories are used to frame the evaluation questions:

Impact: the measurable effect of implementation in achieving the objectives of the CMMP.

Effectiveness: the success of implementation in producing the intended results.

Appropriateness: the suitability and alignment of actions to achieve the desired results.

Governance and management: the appropriateness of organisational structures and processes to support implementation.

Efficiency: the extent to which implementation has made the best use of available resources.

Legacy: the extent to which the impacts of the CMMP will continue after funding ceases.

Table 22. CMMP Key evaluation questions

Category	Key Evaluation Questions
Impact	1. To what extent have the CMMP outcomes been achieved? ¹
	2. To what extent were there other unanticipated outcomes from the CMMP?
Effectiveness	3. To what extent have planned actions been successfully delivered? (time, quality, budget)
Appropriateness	4. To what extent was the delivery of management actions appropriate to achieve the intended outcomes?
Governance / management	5. How well have organisational structures, systems and processes supported implementation?
	6. To what extent has Barwon Coast implemented adaptive management processes
Efficiency	7. To what extent has the delivery of actions ensured the efficient use of resources?
Legacy	8. How well have legacy issues been identified and planned for?

MONITORING AND DATA COLLECTION

Monitoring and the collection of data and evidence will be undertaken to inform progress towards the five-year outcomes and assess the effectiveness of management activities. The main types of routine monitoring are described below and a list of potential measures, indicators and evidence to support evaluation is provided in Appendix 3. Monitoring effort will be prioritised based on available funds and resources.

Monitoring of five-year outcomes (KEQ 1)

Barwon Coast has developed an initial monitoring and data collection plan for five-year outcomes. The data collected through existing monitoring programs will be used where possible, however, for some outcomes, there is a need to establish a baseline status in Year 1 of the CMMP.

Monitoring of CMMP action delivery (KEQ 3)

Implementation will be monitored by tracking the status of actions and deliverables, documenting the lessons learned from delivery and identifying improvement measures for future programs. This will be collected on a six-monthly basis and linked to more frequent project and financial reporting. During this CMMP Barwon Coast will investigate and establish data management and reporting systems to support improved monitoring of CMMP actions and deliverables.

Monitoring of management effectiveness (KEQ 4)

Management effectiveness monitoring aims to understand if coastal management activities are having the desired effect. This type of monitoring helps to address knowledge gaps and uncertainties in the program logic and is used to inform programs and actions. Management effectiveness monitoring is usually undertaken on a project scale. Current monitoring programs under this category include vegetation monitoring through the *Barwon Coast Vegetation Management Plan 2013* and beach monitoring through the Victorian Coastal Monitoring Program. Priorities for future monitoring include pest animal control programs, dune intrusion, cliff stability and compliance programs.

LEARNING AND IMPROVEMENT

Learning and improvement are an important part of the MERI cycle. Through this CMMP, Barwon Coast will move to a more accountable and formalised approach to 'learning by doing'. The process of documenting and communicating the lessons learned and improvements resulting from implementation, research and investigations is a critical part of this approach. This will primarily occur through Barwon Coast's review and reporting processes.

Table 23 provides direction for identifying improvement opportunities in response to the analysis and findings from evaluation.

Table 23. Learning and improvement opportunities for the Barwon Coast CMMP

Evaluation Process	Improvement opportunity
Progress (6 monthly)	Adjust delivery method within a given project. Reallocate funds / reprioritise effort in response to adverse conditions or unexpected results.
Annual review (12 monthly)	Incorporate new knowledge from research, monitoring and implementation into forward business plan priorities, including reprioritising effort where required. Adjust procedures, processes and contracting arrangements in response to lessons learned. Identify business plan/external funding requirements for new activities. Identify CMMP actions requiring review/adjustment at mid-term review based on lessons learned and new knowledge.
Mid-term (and final) review	Adjust CMMP actions and develop outcomes where knowledge gaps from program logic/assumptions have been addressed. Update the program logic and assumptions. Identify adaptation pathways and strategic responses to address or mitigate climate change impacts. Adjust delivery methods for program/projects based on review results. Adjust business plan priorities and where required seek external funding to align implementation with CMMP priorities. Refine organisational structures, procedures and processes to ensure obligations are met and there is alignment with CMMP priorities.

KNOWLEDGE GAPS

This CMMP has been developed using the available knowledge and expertise of staff, community members and agency partners. Five-year outcomes were developed through the MERI planning process to link the CMMP objectives and actions and provide measures of success that can be tracked over the life of the CMP.

The five-year outcomes represent a first attempt to describe the results and expected changes from implementing the CMMP. The process of developing the outcomes and Program logic has identified a number of critical knowledge gaps which limited the number of meaningful outcomes that could be developed.

Research and investigation activities have been identified to address critical knowledge gaps and are outlined in Appendix 3. Further prioritisation of knowledge gaps and investigations will be required through the MERI workplan process.



APPENDICES

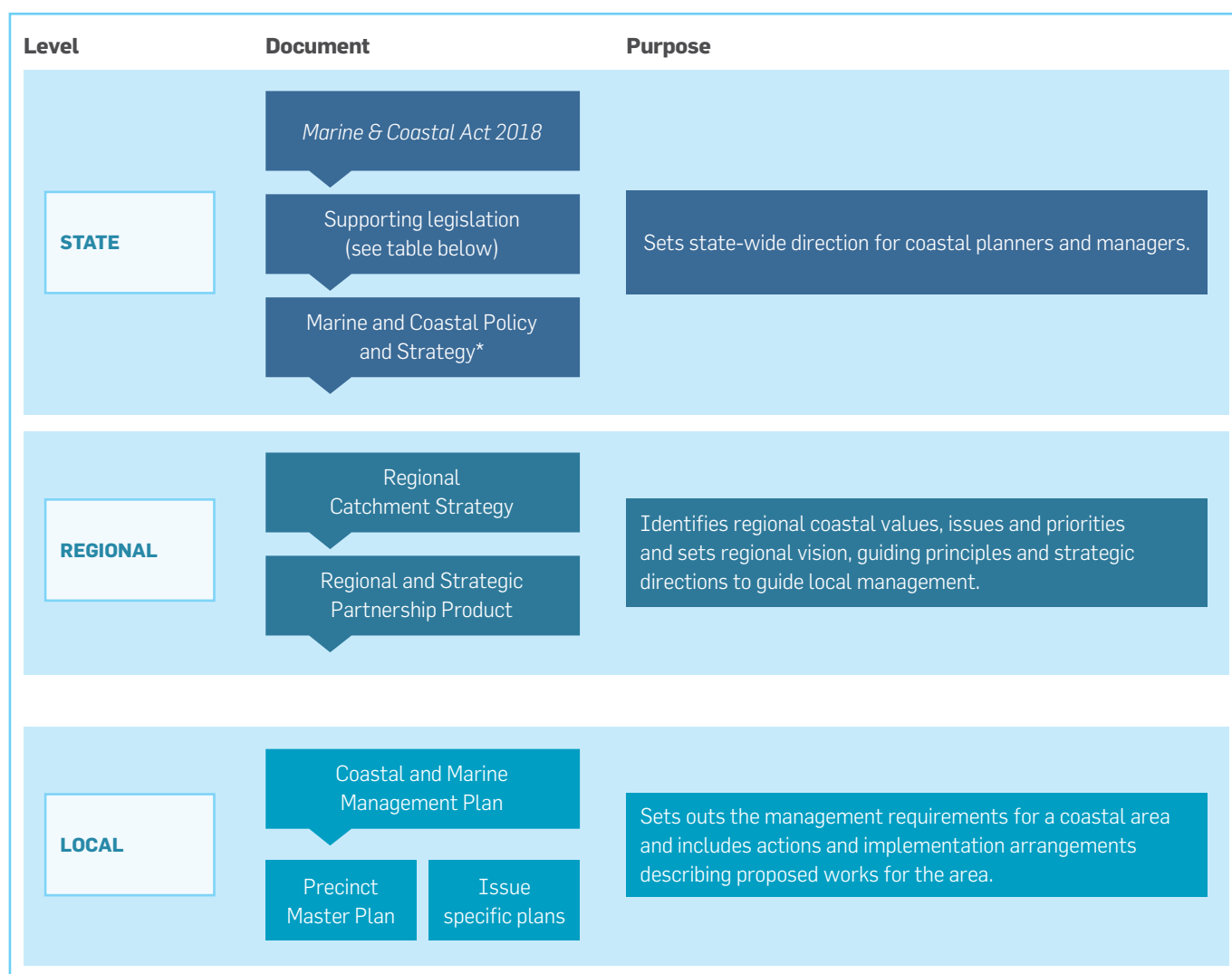


Appendix 1. Legislation and policy framework	58
Appendix 2: Details of reserve status and gazetted purpose	60
Appendix 3. Monitoring overview and knowledge gaps	61
Appendix 4. Precinct maps	64

APPENDIX 1. LEGISLATION AND POLICY FRAMEWORK

The *Crown Land (Reserves) Act 1978* enables Committees of Management to be established for the purpose of management of coastal Crown land on behalf of state government. Current coastal management arrangements are also derived from the *Marine and Coastal Act 2018*. There are three key levels of institutional arrangements and associated strategic policy documents that are critical to Barwon Coast, and the strategic and operational management of the coast. These are detailed in Figure 7.

Figure 7. Coastal and marine planning hierarchy



These three levels of institutional arrangements relate to the core of the coastal and marine management arrangements in Victoria. Taking into account all relevant institutional arrangements around coastal and marine management, management becomes more complex as more than 60 entities are involved. As a consequence, there is a large range of relevant legislation, government policies, plans, reports and other documents that Barwon Coast needs to observe when managing the coast. Key documents are briefly outlined below, with a focus on the implications for Barwon Coast.

Table 24. Government policy and strategic documents of relevance for Barwon Coast

Level	Document
State	<ul style="list-style-type: none"> ■ Marine and Coastal Act 2018 (Victorian Government, 2018) ■ Crown Land (Reserves) Act 1978 ■ Catchment and Land Protection Act 1994 ■ Climate Change Act 2017 ■ Port Management Act 1995 ■ Wildlife Act 1975 ■ Marine and Coastal Policy (Draft – DELWP 2018) ■ Flora and Fauna Guarantee Act 1988 ■ Guidelines for development of Coastal Management Plans (DELWP, 2017) ■ Siting and Design Guidelines for the Victorian Coast (Victorian Coastal Council, 1995 – under review) ■ Coastal Spaces Recommendations (Victorian Coastal Council, 2006) ■ Future Coasts Program Reports (DELWP, 2010) ■ Improving Equity of Access to Crown land Caravan and Camping Parks (Department of Sustainability and Environment (now DELWP), 2011) ■ Caravan & Camping Parks on Coastal Crown land (reference Group Report 2006) ■ Best Practice Management Guidelines for Committees of Management Managing Caravan and Camping Grounds on Crown land (Department of Sustainability and Environment (now DELWP), 2010) ■ Public Participation in Government Decision-making (VAGO, 2015) ■ Protecting Victoria's Environment – Biodiversity 2037 ■ Victorian Water Safety Strategy 2016 - 2020
Regional	<ul style="list-style-type: none"> ■ Central Regional Coastal Plan 2015-2020, (Central Coastal Council, 2015) ■ Recreational Boating Facilities Framework (Central Coastal Board, 2014) ■ Corangamite Regional Catchment Strategy (RCS) 2013 – 2019, (Corangamite Catchment Management Authority, 2009) ■ Corangamite Regional Floodplain Strategy (Corangamite Catchment Management Authority, 2018) ■ Corangamite Marine and Coast Biodiversity report (Corangamite Catchment Management Authority, 2009) ■ Corangamite Waterway Strategy 2014 – 2022 (Corangamite Catchment Management Authority, 2014) ■ NRM Plan for Climate Change (Corangamite Catchment Management Authority, 2013) ■ G21 Regional Growth Plan (Geelong Regional Alliance, 2013) ■ Greater Geelong Planning Scheme (City of Greater Geelong, 2017) ■ Climate Adaptation Strategy (City of Greater Geelong, 2011) ■ Environment Management Strategy 2014 - 2017 (City of Greater Geelong, 2014) ■ Biodiversity Strategy (City of Greater Geelong, 2003) ■ Great Ocean Road Coast Committee, various planning strategies ■ Bellarine Bayside Foreshore Committee, various planning strategies
Local	<ul style="list-style-type: none"> ■ Bellarine Peninsula Strategic Plan 2006-2016 (City of Greater Geelong, 2006) ■ Ocean Grove Township Structure Plan and supporting reports (City of Greater Geelong, 2015) ■ Barwon Heads Township Structure Plan and supporting reports (City of Greater Geelong, 2010) ■ Bellarine Peninsula & Corio Bay Local Coastal Hazards, Inundation Report and associated snapshots (Cardno, 2015) ■ Queenscliff to Point Impossible Geomorphology and Coastal Process ((N J Rosengren (2016)) ■ Barwon Bluff Marine Sanctuary Management Plan (Parks Victoria, 2007) ■ Port Phillip Bay (Western Shoreline) & Bellarine Peninsula Ramsar Site Strategic Management Plan (Department of Sustainability and Environment (now DELWP), 2003) ■ COGG Open Space Strategy ■ Bellarine Catchment Network Action Plan 2016-2019 (Bellarine Catchment Network, 2016) ■ Surf Coast and Inland Plains Network Strategic Plan 2014-2019 (Surf Coast and Inland Plains Network, 2014)

APPENDIX 2: DETAILS OF RESERVE STATUS AND GAZETTED PURPOSE

A complete list of all Crown allotments managed by Barwon Coast that form the 'Reserve'.

Table 25. XXXXX

Barwon Heads foreshore comprises the following parcels and the total area is 201ha		
Parish/township	Parcel identification	Land status
TOWNSHIP OF BARWON HEADS PARISH OF CONEWARRE	C.A. 17. SECTION B	Permanently reserved for public purposes. Gaz. 1880 Page 2661
	C.A. 2002	Permanently reserved for public park purposes. Gaz. 1889 Page 2838
	C.A. 2003	Part of permanently reserved for public purposes. Gaz. 1880 Page 2661 Part of permanently reserved for public park purposes. Gaz. 1904 Page 2891 part of government road
	C.A. 2004	Part of permanently reserved for public purposes. Gaz. 1880 Page 2661 Part of permanently reserved for public park purposes. Gaz. 1904 Page 2891
	C.A. 2007	Part of permanently reserved for public purposes. Gaz. 1880 Page 2661 Part of permanently reserved for public park purposes. Gaz. 1904 Page 2891 Part of temporarily reserved for public purposes. Gaz. 1995 Page 1618
	L.A. 2009	Part of permanently reserved for public purposes. Gaz. 1880 Page 2661 part of temporarily reserved for public purposes. Gaz. 1995 Page 1618
	L.A. 2011	Part of permanently reserved for public purposes. Gaz. 1880 Page 2661 Part of permanently reserved for public park purposes. Gaz. 1904 Page 2891
PARISH OF CONEWARRE	C.A. 17	Temporarily reserved for public purposes. Gaz. 1995 Page 1618
	C.A. 18	Part of permanently reserved for public purposes. Gaz. 1880 Page 2661 part of temporarily reserved for public purposes. Gaz. 1995 Page 1618
	C.A. 19	Temporarily reserved for public purposes. Gaz. 1995 Page 2378
	C.A. 2010	Permanently reserved for public purposes. Gaz. 1880 Page 2661
	C.A. 2011	Part of permanently reserved for public purposes. Gaz. 1880 Page 2661 part of government road
	C.A. 2012	Permanently reserved for public purposes. Gaz. 1880 Page 2661
	C.A. 2022	Temporarily reserved for public purposes. Gaz. 1995 Page 1618
	C.A. 204 2	Temporarily reserved for public purposes. Gaz. 2012 Page 2200
OCEAN GROVE FORESHORE COMPRISES THE FOLLOWING PARCELS AND THE TOTAL AREA IS 92ha		
PARISH OF BELLARINE	C.A. 23 SECTION 4	Temporarily reserved for public park purposes. Gaz. 1972 Page 2993
	C.A. 24A. SECTION 4	Permanently reserved for public purposes. Gaz. 1880 Page 2661 & op114772
	C.A. 24B SECTION 4	Permanently reserved for public purposes. Gaz. 1880 Page 2661 & op114773
	C.A. 26. SECTION 4	Permanently reserved for public purposes. Gaz. 1880 Page 2661
	C.A. 2040	Permanently reserved for public purposes. Gaz. 1880 Page 2661
	C.A. 2041	Part of permanently reserved for public purposes. Gaz. 1880 Page 2661 part of government road
	C.A. 2042	Permanently reserved for public purposes. Gaz. 1880 Page 2661
	C.A. 2050	Temporarily reserved for public recreation purposes. Gaz. 1982 Page 4189
	C.A. 2052	Temporarily reserved for public recreation purposes. Gaz. 1982 Page 4199
	C.A. 2053	Temporarily reserved for public purposes. Gaz. 2012 Page 2200 & legl./12- 007

APPENDIX 3. MONITORING OVERVIEW AND KNOWLEDGE GAPS

INITIAL MONITORING PLAN – 5 YEAR OUTCOMES

Table 26. Initial monitoring plan – 5-year outcomes

Five-Year Outcome	Potential measures, indicators and evidence to support evaluation	Monitoring frequency	Resourcing considerations
Maintain populations of threatened and significant (locally indigenous) native vegetation ¹⁴ Reduce the extent of priority weeds and invasive vegetation ¹⁵	Vegetation quality and diversity (habitat hectares measures) Cover / abundance (indigenous / exotic species) Species list (presence / absence)	Every 2 -3 years (spring)	Existing monitoring program
Maintain a breeding population of Hooded Plover ¹⁶	Number of breeding pairs Number of breeding attempts Number of eggs laid/hatched <i>Supporting evidence</i> Incidence of human disturbance Abundance of foxes and feral cats	Annual (during breeding season)	BirdLife monitoring (existing program) New program supporting evidence
Reduce the level of informal human access to the dunes	Incidence and extent of new/re-opened tracks and party sites Extent of dune impacted by intrusion. (aerial / drone image interpretation)	Annual To be confirmed	New program
Aboriginal and post-settlement cultural heritage sites are protected	Number of sites protected (Aboriginal and post settlement) Number of protected sites maintained (Aboriginal and post settlement). Incidence and extent of damage (erosion, human, rabbits)	Annual Annual 6 monthly	Possible partnership with Wadawurrung
Coordination and partnerships with Traditional Owners and agencies has improved	Effectiveness and satisfaction with partnership and coordination arrangements Partnership arrangements established and maintained	Year 3 and 5 Annual	New program

¹⁴ Priority native (locally indigenous) vegetation species and communities as indicated the Barwon Coast Vegetation Management Plan includes Coastal Moonah, Austral Lotus, Coast Wirilda, orchids and associated dune and woodland vegetation communities locations include Ocean Grove Dunes, Ocean Grove Spit, Barwon River Estuary, The Barwon Bluff and Thirteenth Beach.

¹⁵ Priority weed species as indicated in the *Barwon Coast Vegetation Management Plan (2013)* locations include Ocean Grove Dunes, Ocean Grove Spit, Barwon River Estuary, The Barwon Bluff and Thirteenth Beach.

¹⁶ This outcome will be reviewed as part of action N&C 2.7 to review the regional Hooded Plover Management Program.

Five-Year Outcome	Potential measures, indicators and evidence to support evaluation	Monitoring frequency	Resourcing considerations
Increase caravan park occupancy in the off-peak period by 50%	Occupancy rates April – November	Annual	Existing program
Maintain participation in volunteer and education programs	No. of participants in school programs Community group report on volunteer contributions to foreshore management ¹⁷ (hours, satisfaction, highlights) Effectiveness and satisfaction with schools programs.	Collected after each activity Annual Collected after each activity	Existing programs
>70% of coastal users are satisfied with the amenity, facilities and accessibility of the Barwon Coast	Satisfaction as reported by users in surveys.	Year 1, 3, 5	Current research project will inform this program.
Improve compliance with priority regulations	Number of infringements issued / patrol day. Number of reports received. Attitudes and behaviours related to regulations (survey)	Ongoing	New program
Barwon Coast has reduced its energy consumption	Total Kilowatts energy consumption Total Kilowatts of energy purchased Kilowatts of green energy generated or purchased Recycling volume	Quarterly	New program (indicators to be informed by sustainability audit).



¹⁷ Coastal management indicator from DELWP, 2017 Coastal Management Plan Guidelines.

INITIAL PRIORITIES – KNOWLEDGE GAPS

Table 27. Initial priorities – knowledge gaps

Priority knowledge gap	Strategic response	Available supporting information
Establish the current stock of healthy mature trees in Barwon Heads Caravan Park and Riverview Family Camp Ground.	Extend existing inventory using aerial imagery interpretation to establish baseline.	BHCP and RFCP inventory of large trees.
Quantify extent and location of dune intrusion.	Undertake assessment using aerial imagery interpretation, existing data sources and knowledge of Barwon Coast staff and contractors. Establish baseline for monitoring.	Known party sites have been mapped
Improve knowledge of the status of native vegetation communities across the coastal reserve.	Undertake mapping and extend existing monitoring program.	Native vegetation plan and associated monitoring program.
Improve knowledge of the status of native fauna populations and threatened species.	Undertake targeted fauna surveys and establish baseline assessment to inform outcomes and actions. The scope includes native and visiting fauna and threatened flora including orchid species.	Threatened species records Fauna observations Birdlife monitoring records Knowledge of staff, contractors and volunteers.
Improve knowledge on the effectiveness of pest animal control program/s.	Develop intervention monitoring program to enable activity measures to be tracked and inform development of an outcome for future CMMPs. Program to consider location and design of wildlife cameras, bait uptake, hair traps, rabbit warren locations, fox den locations.	Existing works data collected through contractors (baits laid and uptake). Mapping of rabbit warrens. Existing wildlife camera monitoring program. Monitoring design implemented by Phillip Island Nature Parks.
Location of cultural heritage sites (Aboriginal and post settlement).	Work with Traditional Owners and Heritage Victoria to complete Cultural Heritage Management Plans to identify cultural heritage sites so they can be protected from human impacts.	Existing datasets on known cultural heritage sites (Heritage register, VAHR databases)
Improve knowledge on coastal erosion hazards and climate change impacts.	Complete erosion mapping and investigations. Review available investigations to identify further studies and undertake adaptation pathways planning to develop strategic responses to mitigate/address impacts.	Barwon Coast actively participating in Our Coast program (range of investigations and outputs)
Improve knowledge of behaviours and attitudes of users in relation to dog /wildlife interactions and dune intrusion.	Undertake social research to inform mix of programs and activities and to inform outcome monitoring.	Federation University longitudinal study.
Effectiveness of communications and engagement programs in improving knowledge and awareness of participants.	Design a targeted monitoring program to simply and easily assess and track the contribution of engagement programs in changing knowledge and behaviour.	Share Our Shores program Federation University longitudinal study.
Improve knowledge about the impacts of projected population growth (greater Geelong area) on visitation and demand for services.	<i>To be defined during implementation</i>	
Improve knowledge on accessibility constraints and car parking occupancy rates.	<i>To be defined during implementation</i>	
Determine systems, databases and processes required to support MERI processes.	<i>To be defined during implementation</i>	

APPENDIX 4. PRECINCT MAPS

- Overall Precinct Plan
- 2012 Coastal Management Plan Outcomes
- Precinct 1: Ocean Grove Dunes Precinct (7W to 13W)
- Precinct 2: Ocean Grove Main Beach (13W to 16W)
- Precinct 3: Ocean Grove Spit (16W to 20W)
- Precinct 4: Barwon River Estuary (22W to 27W)
- Precinct 5: Barwon Bluff (27W to 30W)
- Precinct 6: Thirteenth Beach (30W to 42W)
- Accommodations Services



Overall Precinct Plan

Scale 1:30,000 (all scales are at A3)

General Actions Across the reserve:

- Continue to implement a structured program to protect and restore the native vegetation along the coast.
- Further develop and provide support for community/group involvement in natural resource management.
- Regularly undertake and continually improve pest plant and pest animal management programs.
- Continue with sand dune protection activities.
- Develop and implement an educational in-school program with local schools on dune intrusion impacts.
- Manage protection activities for Hooded Plovers and other wildlife together with relevant partners.
- Investigate options and take measures to further present local indigenous connections, including via installations along pathways.
- Develop detailed plans (Precinct Master Plans) for each precinct informed by the priorities of this CMMP.
- Review processes and policies for activity provider licences.
- Review dog control orders in partnership with City of Greater Geelong (CoGG) to improve understanding and adherence in the community.
- Consider options for and implement appropriate parking restrictions for high use areas together with CoGG.
- Review and update the Barwon Coast Trails Strategy, and continue to plan for improved cycle access across the reserve.
- Review existing beach access points and ensure they are maintained, and close any inappropriate informal access points through fencing and revegetation.
- Continuously review the need for additional public amenities across the reserve, while being cognisant of the potential environmental impacts.
- Review signage across the coastal reserve, including considerations around inconsistency of messaging across all issues.
- Conduct regular monitoring of the beach environment, including potential impacts of dogs on conservation values.



legend

Emergency markers 

Sealed road 

B.C.C.M. 

2012 Coastal Management Plan Outcomes

Scale 1:15000 @A3 ⓘ

Completed 2012 CMP Actions

Actions not mapped (2012 CMP reference)

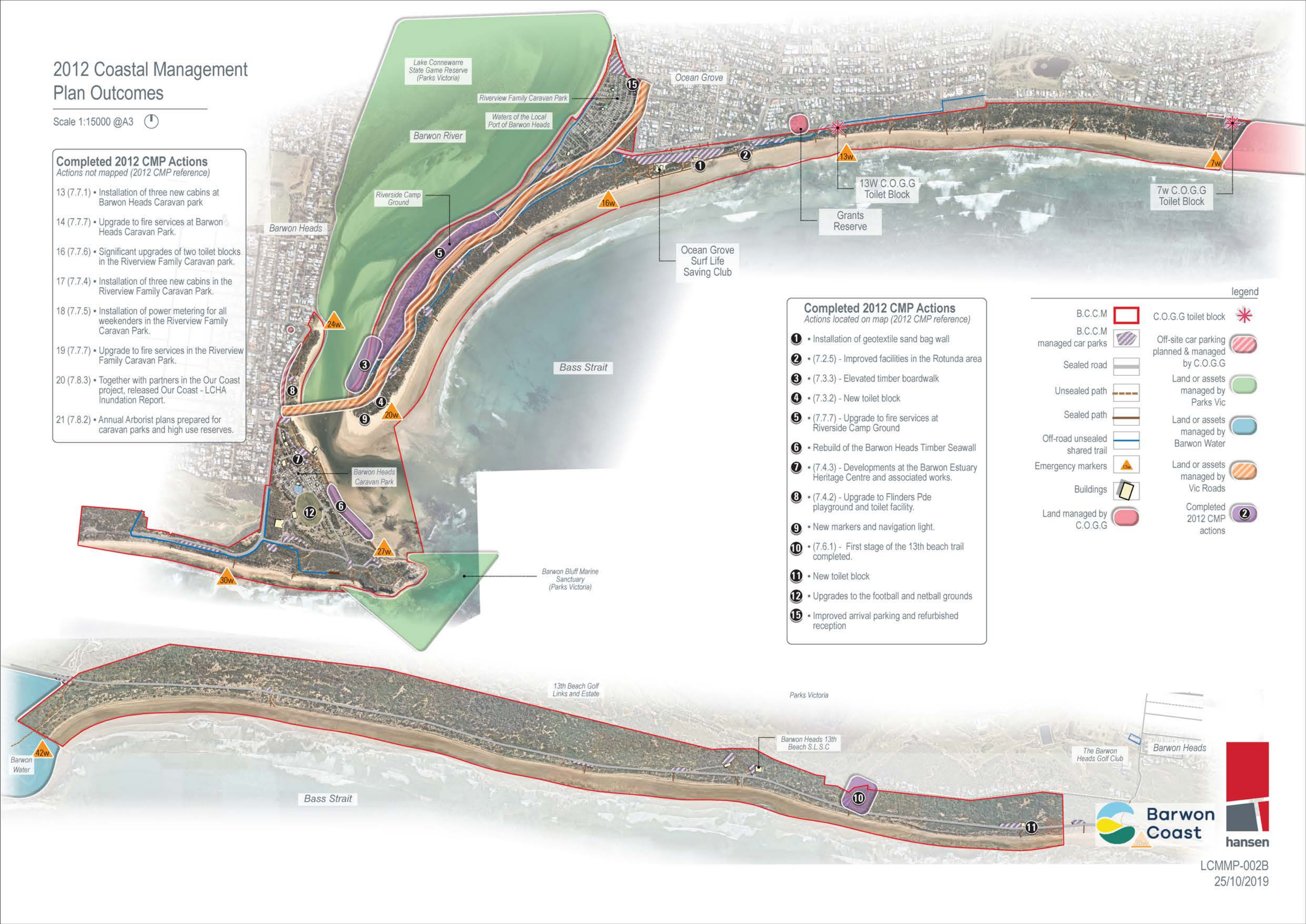
- 13 (7.7.1) ▪ Installation of three new cabins at Barwon Heads Caravan park
- 14 (7.7.7) ▪ Upgrade to fire services at Barwon Heads Caravan Park.
- 16 (7.7.6) ▪ Significant upgrades of two toilet blocks in the Riverview Family Caravan park.
- 17 (7.7.4) ▪ Installation of three new cabins in the Riverview Family Caravan Park.
- 18 (7.7.5) ▪ Installation of power metering for all weekends in the Riverview Family Caravan Park.
- 19 (7.7.7) ▪ Upgrade to fire services in the Riverview Family Caravan Park.
- 20 (7.8.3) ▪ Together with partners in the Our Coast project, released Our Coast - LCHA Inundation Report.
- 21 (7.8.2) ▪ Annual Arborist plans prepared for caravan parks and high use reserves.

Completed 2012 CMP Actions

Actions located on map (2012 CMP reference)

- 1 ▪ Installation of geotextile sand bag wall
- 2 ▪ (7.2.5) - Improved facilities in the Rotunda area
- 3 ▪ (7.3.3) - Elevated timber boardwalk
- 4 ▪ (7.3.2) - New toilet block
- 5 ▪ (7.7.7) - Upgrade to fire services at Riverside Camp Ground
- 6 ▪ Rebuild of the Barwon Heads Timber Seawall
- 7 ▪ (7.4.3) - Developments at the Barwon Estuary Heritage Centre and associated works.
- 8 ▪ (7.4.2) - Upgrade to Flinders Pde playground and toilet facility.
- 9 ▪ New markers and navigation light.
- 10 ▪ (7.6.1) - First stage of the 13th beach trail completed.
- 11 ▪ New toilet block
- 12 ▪ Upgrades to the football and netball grounds
- 15 ▪ Improved arrival parking and refurbished reception

legend	
B.C.C.M	C.O.G.G toilet block
B.C.C.M managed car parks	Off-site car parking planned & managed by C.O.G.G
Sealed road	Land or assets managed by Parks Vic
Unsealed path	Land or assets managed by Barwon Water
Sealed path	Land or assets managed by Vic Roads
Off-road unsealed shared trail	Completed 2012 CMP actions
Emergency markers	
Buildings	
Land managed by C.O.G.G	



Precinct 1: Ocean Grove Dunes Precinct (7W to 13W)

Scale 1:7500 @A3

Precinct Assets

- Area of zone 27.5 ha vegetated dune (18ha Alkaline dune scrub EVC 858) - (not include beach area)
- 7 access tracks with elevated timber stairs to beach,
- 1 graded access track to beach (7W)
- 1 car park, ~50 vehicles, (1 accessible)
- 800 mts of shared path
- 1 picnic table
- 1 public toilet (7W) with unisex accessible cubicle, maintained by City of Greater Geelong, open all hours
- 7 aquatic safety signs and 6 sets EBAN signs (EBAN emergency beach access number – pyramid)
- 8 beach litter bins, 1 car park bin, 1 bin on shared trail
- 6 'scoop the poop' dispensers
- 3 bench seats at crest of tracks for views

Priority values

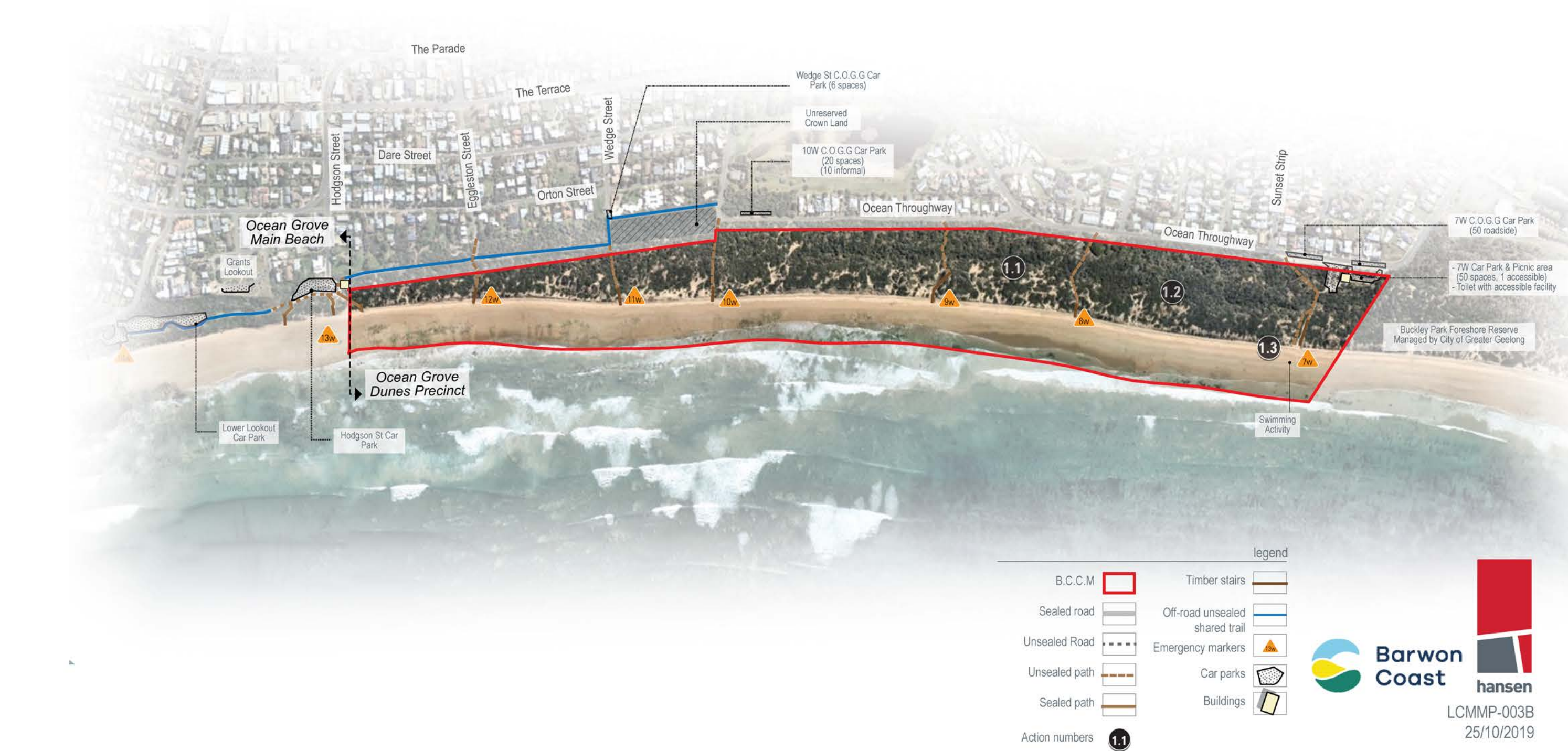
- Vegetation and habitat for wildlife
- Natural, quieter and uncrowded beach
- Passive recreation including dog walking
- Threatened Coastal Moonah Woodland Community and orchids

Precinct Masterplan Priorities

- Manage for ongoing habitat and biodiversity enhancement
- Provide for passive recreation where it does not impact upon natural values
- Manage all informal dune intrusion that tramples and damages vegetation particularly by beach users and dogs

Precinct Actions:

- P1.1** Protect and enhance local native vegetation and fauna and address pest plant encroachment into dunes from neighbouring properties
- P1.2** Control pest animals including feral cats and foxes
- P1.3** Assess seasonal beach use and implement public safety measures if required



Precinct 2: Ocean Grove Main Beach (13W to 16W)

Scale 1:7500 @A3

Precinct Assets

- Area of zone 12.4 ha vegetated dune
- 7 access tracks with elevated timber stairs
- 1 200m length sea wall with 4m wide promenade, 1 all abilities access ramp and 3 stairs from promenade to beach
- 1 vehicle ramp to beach
- 3 public toilets, all with unisex disable cubicles (1 maintained by City of Greater Geelong, 13W) 3 open all hours
- 4 external showers
- 1 large rotunda with 4 tables and 2 electric bbq
- 2 BBQ shelters each 2 electric bbq
- 18 picnic tables
- 7 bench seats (memorial)
- 4 drinking fountains (1 with dog water bowl)
- 10 aquatic safety signs and 4 sets EBAN signs
- 6 bin enclosure sets, (a pair of recycling and waste)
- 4 bins on trails and grass areas
- 26 bins on the beach
- 5 'scoop the poop' dispensers
- 3 car park zones, 615 spaces, 10 accessible
- Shared trail, 1100mts
- 1 access road - Surf Beach rd
- 1 surf life saving club - leased
- 1 food and beverage premises - leased

Priority Values

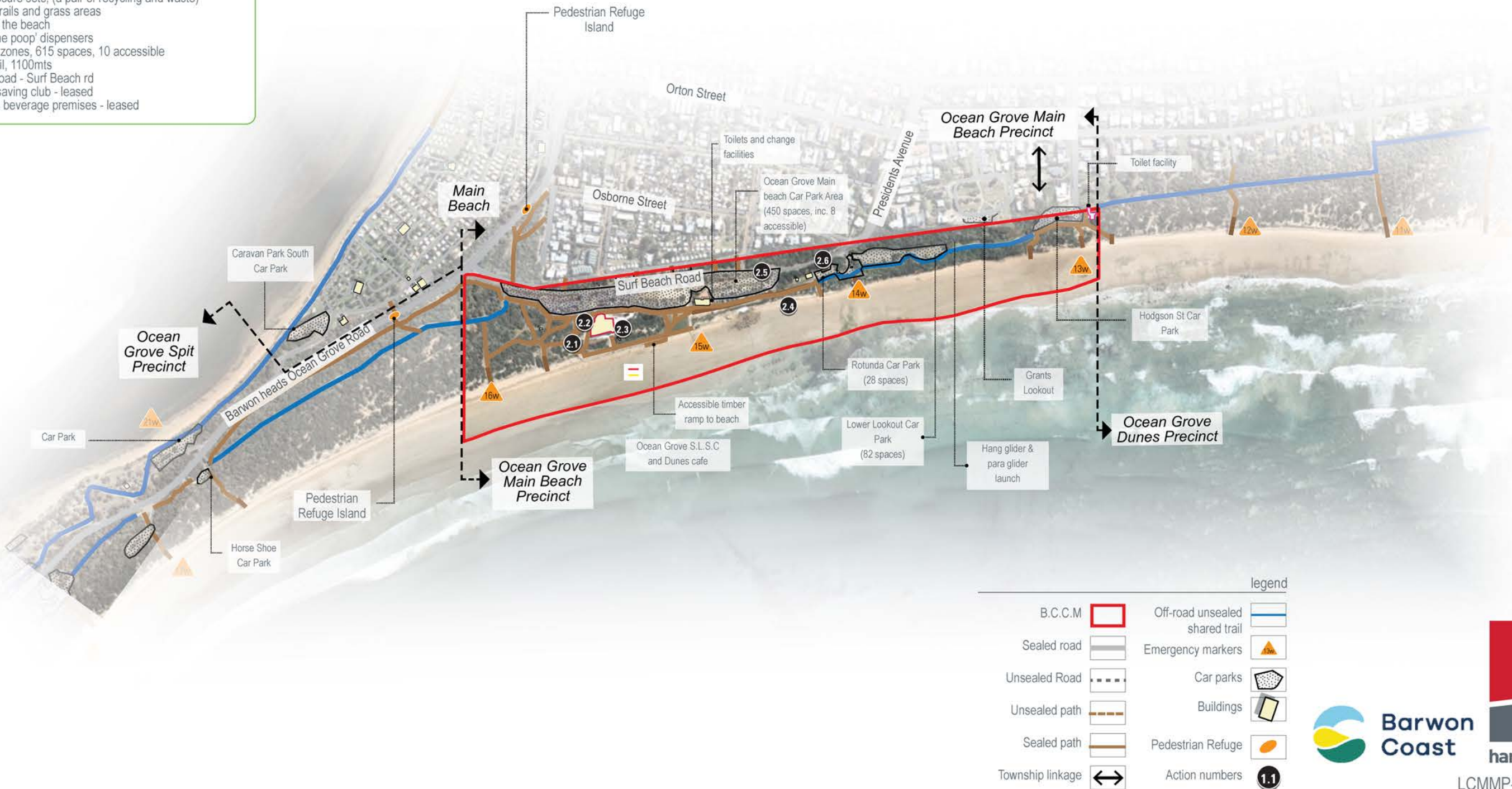
- Broad, easy access surf beach for a variety of recreational purposes
- All-ability amenities and beach access
- Sympathetic coast car park, catering for large numbers of visitors
- Visitor infrastructure, facilities and services

Precinct Master Plan Priorities

- Review outstanding actions from car park upgrade: Grants to Presidents Avenue
- Upgrade Grants Lookout stairs and improve beach access (in partnership with CoGG)
- Investigate options to install bike rack/shelter near centre toilet
- Improve grassed areas for recreation; identify potential areas for expansion of, or creation of additional grassed areas adjacent to the beach with shade provision
- Improve all abilities access including access to the beach, new path linkage at the east and west end of the promenade

Precinct Actions

- P2.1 Construct an open grassed terrace area adjacent to the beach. Located at the west end of the sea wall to the next timber elevated stairs, 15W (Micks Steps)
- P2.2 Upgrade visitor facilities associated with the Surf Beach Complex
- P2.3 Liaise with tenants to enable community access and use of Surf Beach Complex for events and functions
- P2.4 Extend the coastal protection features of the current seawall and access ramp for long term protection of assets at Ocean Grove Main Beach
- P2.5 Review and implement traffic management measures for Surf Beach Road
- P2.6 Replace ageing Cypress (Cypresses macrocarpa) with locally appropriate species



Precinct 3: Ocean Grove Spit (16W - 20W)

Scale 1:7500 @A3

Precinct Assets:

- Area of zone 35.8 ha vegetated dune
- 16 access points, 7 to Bass Strait beaches, 6 elevated timber sets other concrete
- Length of elevated boardwalk, 75m
- 8 toilet blocks (3 oceanside, 5 riverside) 4 open all year, 4 open seasonally for camp use only
- 3 external showers
- 2 bench seats (memorial)
- 1 bin enclosure (pair recycling and waste carts)
- 16 beach bins, (7 oceanside, 9 riverside)
- 9 aquatic safety signs and 7 sets EBAN signs
- 8 picnic tables
- 4 'scoop the poop' dispensers
- 9 car park zones, 360 total informal spaces, 1 accessible
- Shared trail - 3,350mts

Priority values

- Extensive dune vegetation and migratory wader and local bird habitat along river
- Nature recreation and open space opportunities
- Access to both surf beach and safe river beach
- Visitor facilities suited to both day visitors and seasonal camping
- Trails and paths on both sides of the Spit

Precinct Master Plan Priorities

- Consider and address safety hazards associated with shared trails and intersections with car parks, on the ocean side of the Spit
- Consolidate Riverside Trail on the river side of the Spit, and remove camping conflicts
- Identify options to improve pedestrian/bike safety associated with main road crossings to/from Riverside Camp Ground
- Identify options to improve the efficiency of carparking and provide additional picnic facilities within the Ocean Grove Spit riverside area

Precinct Actions:

- P3.1** Support management of sand on Barwon River bridges through the consent process and transfer of sand
- P3.2** Protect and enhance locally native vegetation and fauna
- P3.3** Continue maintenance program for informal rock wall
- P3.4** Maintain Patrolled Beach at EBAN 18W over the summer period



legend	
B.C.C.M	Off-road unsealed shared trail
Sealed road	Emergency markers
Unsealed Road	Car parks
Unsealed path	Buildings
Sealed path	Pedestrian Refuge
Timber stairs	Action numbers



Precinct 4: Barwon River Estuary (22W to 27W)

Scale 1:11250 @A3

Features

Barwon Heads Caravan Park
Barwon Heads River Foreshore
Riverview Family Caravan Park
Local Port of Barwon Heads

Precinct Assets

- Not including facilities in the major caravan parks
- Area of zone 30 ha, (BHCP 13ha and RFCP 12 ha)
- 1 large adventure playground area, Barwon Heads
- 3 toilet blocks, 2 with accessible cubicles
- 7 bin enclosure sets, (pair recycling and waste carts)
- 4 bins on beach
- 4 bins grass area and trail
- 14 picnic tables and 1 table shelter
- 6 electric bbqs (4 sites)
- 800m length concrete promenade along Barwon river foreshore fronted by bluestone and timber sea walls
- 8 stairs from promenade, 4 timber, 4 masonry
- 4 ramp accesses to beach, one at 25W used for small craft access
- 12 bench seats (a number memorial)
- 4 'scoop the poop' dispensers
- 2 jetty structures managed for Department of Transport
- 9 aquatic safety signs and 6 sets EBAN
- 4 car park zones, 404 spaces, including 4 accessible.
- 2 risk management signs (promenade)
- 1 access road - Jetty rd
- Shared path - 1,950mts
- Lease site - 'At The Heads'

Local Port Assets

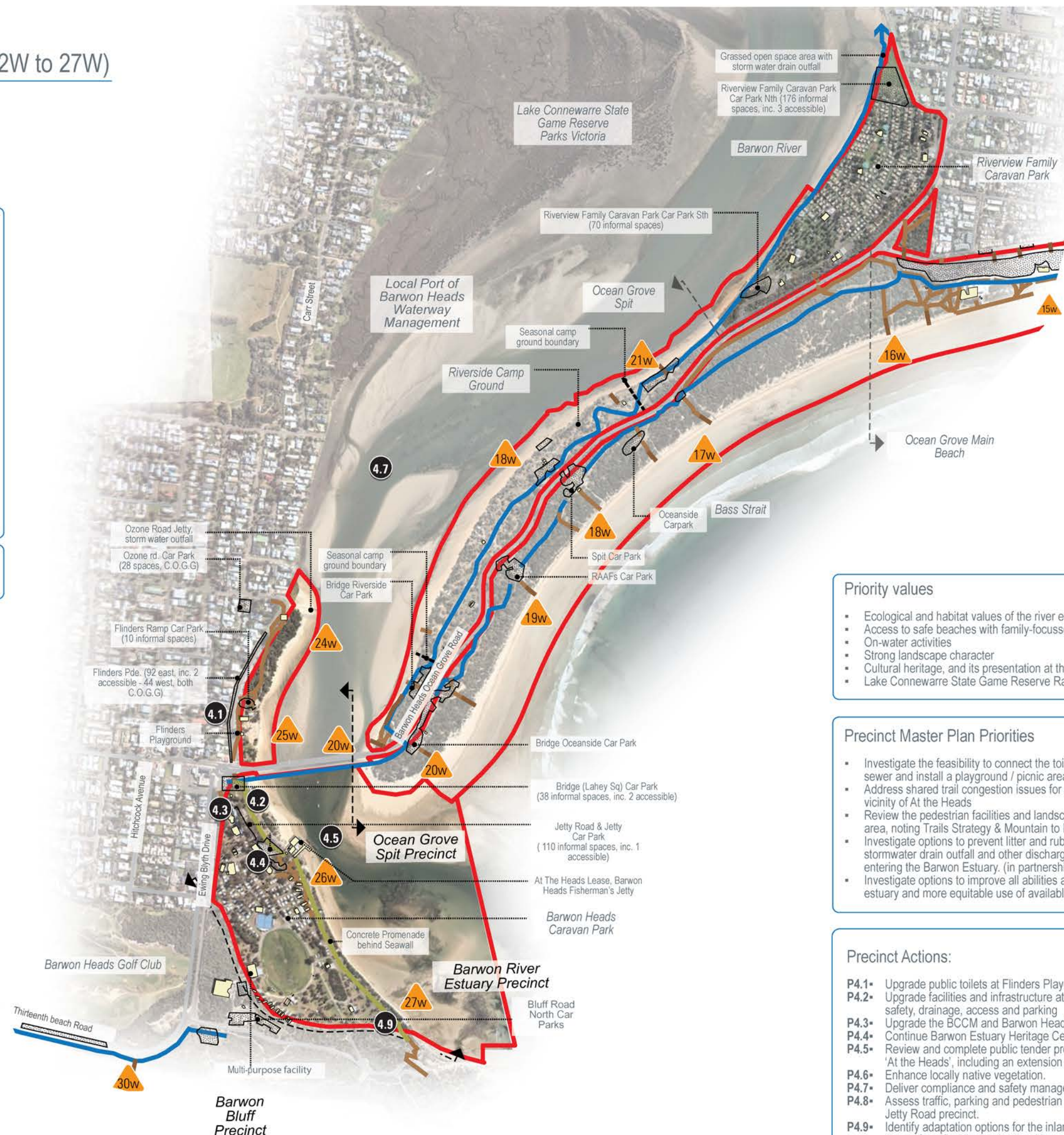
- Main Jetty + Ozone Road Jetty
- Aids to Navigation with light

Legend

- | | |
|--|--|
| | |
| | |
| | |
| | |
| | |
| | |



LCMMP-006B
25/10/2019



Priority values

- Ecological and habitat values of the river estuary
- Access to safe beaches with family-focussed facilities
- On-water activities
- Strong landscape character
- Cultural heritage, and its presentation at the Barwon Estuary Heritage Centre
- Lake Connewarre State Game Reserve Ramsar site.

Precinct Master Plan Priorities

- Investigate the feasibility to connect the toilet block at the Ozone Road to the sewer and install a playground / picnic area
- Address shared trail congestion issues for pedestrian and cyclists in the vicinity of At the Heads
- Review the pedestrian facilities and landscaping around Fishermen's Jetty area, noting Trails Strategy & Mountain to Mouth Event.
- Investigate options to prevent litter and rubbish from Ozone Road stormwater drain outfall and other discharge points from residential areas entering the Barwon Estuary. (in partnership with CoGG)
- Investigate options to improve all abilities access to the Barwon River estuary and more equitable use of available carparking.

Precinct Actions:

- P4.1** Upgrade public toilets at Flinders Playground and BCCM Office
- P4.2** Upgrade facilities and infrastructure at Jetty Road to address public safety, drainage, access and parking
- P4.3** Upgrade the BCCM and Barwon Heads Caravan Park office complex
- P4.4** Continue Barwon Estuary Heritage Centre infrastructure upgrades
- P4.5** Review and complete public tender process for the lease agreement for 'At the Heads', including an extension of the lease area.
- P4.6** Enhance locally native vegetation.
- P4.7** Deliver compliance and safety management of the Barwon Estuary
- P4.8** Assess traffic, parking and pedestrian management in Lahey Square / Jetty Road precinct.
- P4.9** Identify adaptation options for the inland side of BH promenade to protect assets from flooding and coastal inundation

Precinct 5: Barwon Bluff (27W to 30W)

Scale 1:3750 @A3

Precinct Assets

- Area of zone 17.3 ha vegetated dune
- 4 elevated timber stairs
- 3 timber lookout structures
- 1 70m length timber boardwalk
- 8 aquatic safety signs and 3 sets EBAN
- 6 bench seats (memorial)
- 4 car park zones, 210 car spaces, 1 accessible
- Shared path - 1,540mts
- 3 Depot areas
- 2 'scoop the poop' dispensers
- 4 bins
- 4 bluff interpretive signs

Priority Values

- The landscape character of the Barwon Bluff landform
- Aboriginal cultural heritage
- Local native vegetation and fauna
- Walking trail network
- Participation by Friends of the Bluff in environmental management and education services
- Barwon Bluff Marine Sanctuary

Precinct Master Plan Priorities

- Identify upgrades to 28W carpark to address surface, drainage and access to the boardwalk and ensure upgrades consistent with natural landscape values
- Address uncontrolled access through fencing, bollards and vegetation works to protect natural and cultural values
- Investigate options to delineate walking and bicycle tracks around the Bluff, including identification of public safety hazard
- Renew and consolidate interpretive signage (Parks Victoria, Friends of the Bluff)

Precinct Actions:

- P5.1•** Complete road upgrades at Bluff road to improve safety for pedestrians and cyclists.
- P5.2•** Protect and enhance locally native vegetation and fauna
- P5.3•** Control pest animals including feral cats and foxes
- P5.4•** Undertake research and monitoring of cliff stability to inform management responses.
- P5.5•** Deliver Hooded Plover protection activities

legend	
B.C.C.M	
Sealed road	
Unsealed path	
Sealed path	
Timber stairs	
Action area	
Hooded Plover nesting zone	
Emergency markers	
Car parks	
Buildings	
Off-road unsealed shared trail	
Lookouts	



Precinct 6: Thirteenth Beach (30W to 42W)

Scale 1:15000 @A1

Precinct Assets

- Area of zone 85 ha vegetated dune
- 2 toilet blocks, open all hours, 2 unisex accessible cubicles
- 9 timber elevated timber stairs, 5 with viewing areas
- 2 timber viewing platforms
- 9 car park zones, 400 spaces including 2 accessible
- 8 timber change platforms in car park zones
- 1 ramp access for vehicle to beach
- 1 surf life saving club - leased (incs. observation tower)
- 11 beach bins
- 2 bins trail, car park
- Shared trail - 700mts
- 3 bench seats (memorial)
- 1 drinking fountain

Priority values

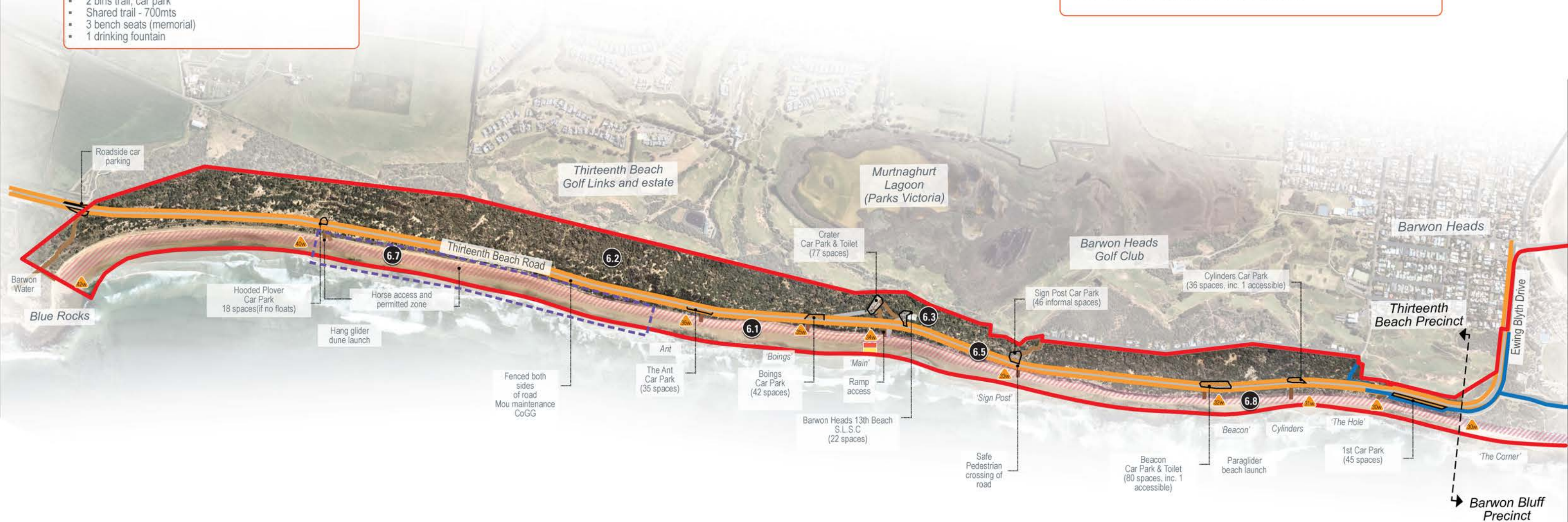
- Biodiversity values, particularly important Hooded Plover breeding areas
- Extensive remnant dune vegetation
- Wild-beach character
- Significant surf destination
- Passive recreation including dog walking

Precinct Master Plan Priorities

- Investigate the installation of a lookout point to reduce trampling by walkers, surfers and hang gliders/para-gliders at access points, 32W, 40W and 42W
- Establish formal arrangements for hang gliding and paragliding activities
- Identify options to address safety issues for cyclists and pedestrians along Thirteenth Beach Road (Barwon Coast, Bike Safe Geelong and CoGG)

Precinct actions

- P6.1** Deliver Hooded Plover protection activities
- P6.2** Protect and enhance locally native vegetation and fauna
- P6.3** Support expansion of club house and training facility at Barwon Heads 13th Beach SLSC
- P6.4** Investigate the provision of a public toilet in vicinity of the club's building
- P6.5** Finalise design and construct 13th Beach Shared Trail between Stephens Parade and Surf Life Saving Club
- P6.6** Control pest animals including feral cats and foxes
- P6.7** Control horse activities to designated beach at 40W
- P6.8** Control hang-gliding and para-gliding at 32W



legend

B.C.C.M		Hooded Plover nesting zone	
Sealed road		Emergency markers	
Unsealed Road		Car parks	
Unsealed path		Buildings	
Sealed path		Off-road unsealed shared trail	
Timber stairs		Action number	
Horse access and permitted zone			

Accommodations Services

Scale 1:7500 @A3

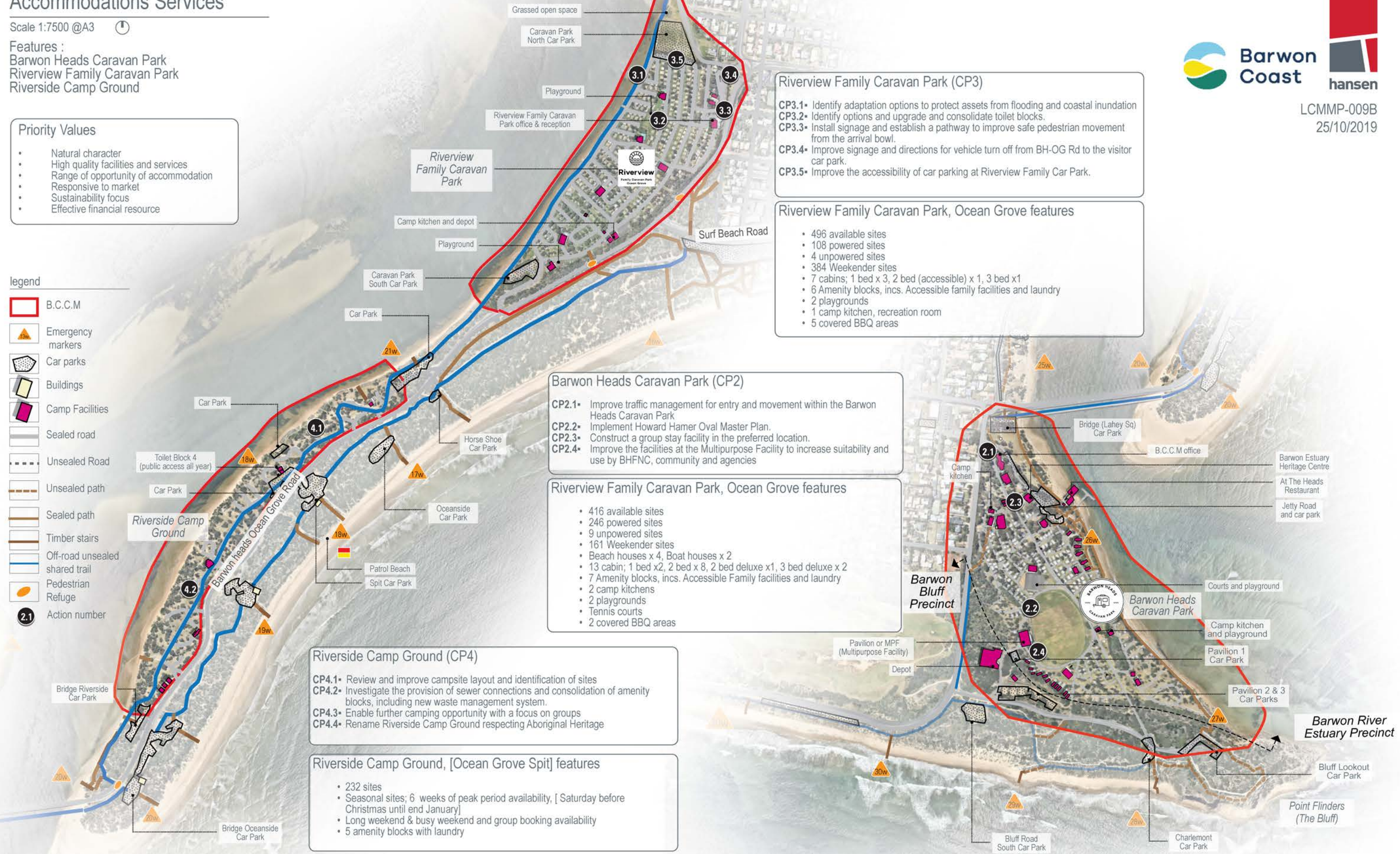
Features :
Barwon Heads Caravan Park
Riverview Family Caravan Park
Riverside Camp Ground

Priority Values

- Natural character
- High quality facilities and services
- Range of opportunity of accommodation
- Responsive to market
- Sustainability focus
- Effective financial resource

legend

- B.C.C.M
- Emergency markers
- Car parks
- Buildings
- Camp Facilities
- Sealed road
- Unsealed Road
- Unsealed path
- Sealed path
- Timber stairs
- Off-road unsealed shared trail
- Pedestrian Refuge
- Action number





Contact Barwon Coast
Committee of Management Inc.

7 Ewing Blyth Drive, Barwon Heads Vic 3227
T: 03 5254 1118 E: office@barwoncoast.com.au



BarwonCoastVIC

BarwonCoast

We care for the coast

www.barwoncoast.com.au