BARWON COAST COASTAL AND MARINE MANAGEMENT PLAN (CMMP)





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FOREWORD

FROM THE MINISTER

The Marine and coastal Crown land under the management responsibility of the Barwon Coast Committee of Management (BCCOM), is Wadawurrung Country. The Wadawurrung Traditional Owners Aboriginal Corporation (WTOAC), are the Traditional Owners of the land and water that encompass the area from the Great Dividing range in the north to the Coast in the south, from Werribee river in the east, and to Aireys Inlet in the west, which includes the BCCOM area of management.

The Barwon coastline is an area of great Cultural significance, boasting an array of diverse coastal ecosystems that range from a broad estuary system, unique and well vegetated dune systems to long and sandy surf beaches. The area provides for a range of recreation and tourism opportunities, with revenue from the various leases, licences and permit fees being directed back into management and improvement of the reserve. The BCCOM was established in 1995 and manages 15 kilometres of the Barwon Coastline at Collendina through to Connewarre, including the lower Barwon River. BCCOM also manages the Riverview Family Caravan Park, Riverside Camp Ground, Barwon Heads Caravan Park and the port water of Barwon Heads.

As part of developing the 2020-2025 CMMP, the previous Coastal Management Plan (CMP), which was in place from 2012-2015 was revisited. The vision, actions and objectives of the previous CMP were reviewed as an integral part of the planning process. The vision statement of the previous CMP was 'as the custodian of the Barwon Coast environs, we will ensure its ecological diversity for present and future generations'. In addition to this, the Committee's high level of commitment to providing access and amenities under this plan was reflected in the feedback they have received as part of the consultation in developing the new CMMP. Many responses received expressed appreciation of the upkeep of facilities and the value of access to the coast. I commend the Committee for their ongoing work to improve the public's enjoyment of the marine and coastal environment and it is heartening to hear of the positive feedback from users.

The Committee's vision under the 2020 plan is a commitment to 'the natural environment of our coastline will flourish whilst meeting the needs of our engaged communities'. The CMMP identifies key values of the marine and coastal environment, management challenges and threats to these values, Wadawurrung Cultural heritage, outcomes for the next five years and objectives for the next ten years.

The community views and priorities for the CMMP were central to the development of the plan, and I acknowledge the work the Committee has done to involve the community and stakeholders throughout the development of the plan. The BCCOM has developed a plan that meets the requirements of the *Marine and Coastal Act 2018* and the recently published *Marine and Coastal Policy 2020*

I would like to congratulate the Committee for reaching this point and their hard work in creating a plan that balances the needs of a growing community and their desire to access and enjoy the marine and coastal environment. I know they will embrace the responsibility to protect and enhance the marine and coastal ecosystems for generations to come. I would also like to acknowledge our key partners, the Wadawurrung Traditional Owners Aboriginal Corporation, and the community for their input and shaping of the plan.

Yours sincerely,

Hon Lily D'Ambrosio MP

Minister for Energy, Environment and Climate Change Minister for Solar Homes



²⁰²⁰**2025**

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. Other objectives such as responding to coastal erosion, relate to longer term projects.

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.

This new CMMP is based on responsibilities identified in 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:

- The Marine and Coastal Act 2018 and Marine and Coastal Policy 2020 setting out requirements of marine and coastal Crown land managers
- Victorian Coastal Strategy (2014)
- 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 two 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 five years and beyond directing our management and service provision for this high-value marine and coastal Crown Land we all cherish.

Phil Emery, Chair Barwan

Chair, Barwon Coast Committee of Management Inc



TRADITIONAL OWNER ACKNOWLEDGMENT

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

Barwon Coast acknowledges Aboriginal people as Australia's first people, and the Wadawurrung 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 Traditional Owners to the management of land, water, the natural landscape and our built environment.

Barwon Coast also recognises the legislative obligations to Traditional Owners and the Registered Aboriginal Party, the Wadawurrung Traditional Owners Aboriginal Corporation 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 Partnership (engagement, draft inputs and mapping) and Blue Sense Consulting (production of final CMMP and development of MERI plan).

Barwon Coast CMMP sub-committee members

- Elisa Zavadil (Chairman)
- Phil Emery
- Shelly Fanning
- Mark Rodrigue (Past Chairman/Member)
- Ross Middleton (Past Member)

Barwon Coast staff

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



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 as a marine and coastal Crown land manager by the Minister for Energy, Environment and Climate Change under the *Crown Land (Reserves) Act 1978.*

Barwon Coast has the charter to protect and enhance the reserve's natural environment and provide opportunities for residents and visitors to enjoy the area. 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) and guidance in forming and observing 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. Supporting the CMMP are day-to-day management activities to maintain facilities, access and coastal and marine values.

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
- Recognising the rights, aspirations and knowledge of Traditional Owners
- Increasing community, Traditional Owner and stakeholder participation in coastal and marine management.
- Ensuring an integrated approach to coastal and marine management in partnership with adjacent land and water management
- 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.

Barwon Coast divides the Reserves into six distinct landscape precincts to guide management and accommodation services; the caravan parks and camp ground are recognised as principal commercial activity areas.

Barwon Coast's operating model will continue to be underpinned by viable accommodation services with revenues contributing to the achievement of the CMMP objectives. 2020 presented a significant challenge for revenue generation as a result of government-mandated closures due to the COVID-19 pandemic. The situation reinforced the importance of having a long-term sustainable financial operating model as outlined in this CMMP. In addition to revenue generated through Barwon Coast operations, grant funding will be sought for financially significant projects.

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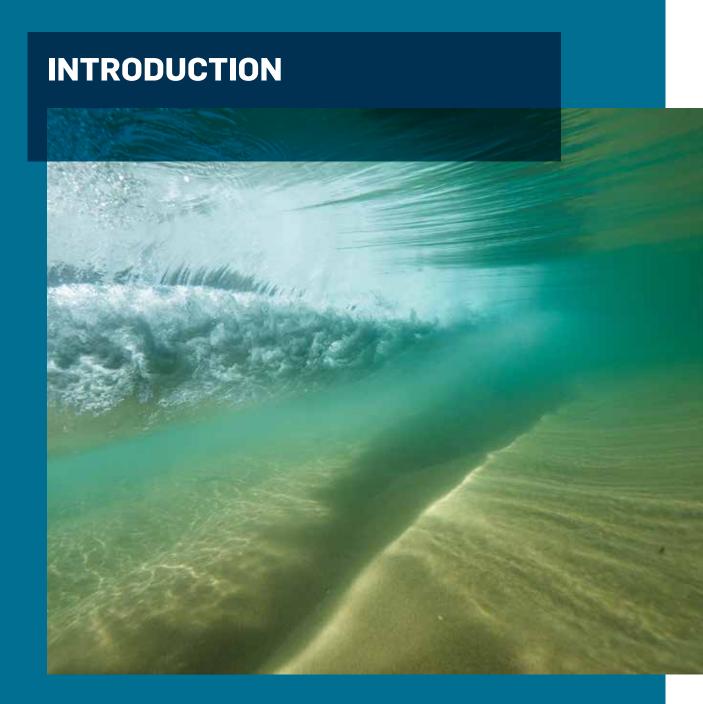
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ABBREVIATIONS

AFDO	Australian Federation of Disability Organisations	LCHA	Local Coastal Hazard Assessment
Assn	Association	LSV	Life Saving Victoria
BB	Bellarine Bayside Foreshore Committee	MERI	Monitoring, Evaluation, Reporting and
BHFNC	Barwon Heads Football Netball Club		Improvement
CCMA	Corangamite Catchment Management Authority	MSV	Marine Safety Victoria
CFA	Country Fire Authority	RRV	Regional Roads Victoria
СММР	Coastal and Marine Management Plan	PMP	Precinct Master Plan
COGG	City of Greater Geelong	VFA	Victorian Fisheries Authority
CVA	Conservation Volunteers Australia	Vic Pol	Victorian Police
DELWP	Department of Environment, Land,	VRC	Victorian Racing Club
	Water and Planning	WTOAC	Wadawurrung Traditional Owners
FoB	Friends of the Bluff		Aboriginal Corporation
GORCC	Great Ocean Road Coast Committee	7W	Emergency Beach Access Number
ICZM	Integrated Coastal Zone Management	TMP	Twelve Month Permit Holders

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1.2 Community and stakeholder views

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SECTION 1

1.1 PURPOSE

This Coastal and Marine Management Plan (CMMP) provides the strategic direction for marine and 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 and the Marine and Coastal Policy (2020)
- Wadawurrung Cultural Heritage
- Actions and outcomes for the next five years, to protect and enhance values whilst providing for the sustainable use and enjoyment of the coastal and marine environment
- A framework for implementation of the CMMP 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.

WADAWURRUNG TRADITIONAL OWNERS

Wadawurrung people are the Traditional Owners of the land and water that encompass the area from the Great Dividing range in the north to the Coast in the south, from Werribee river in the east, and to Aireys Inlet in the west. Which includes our area of management. Wadawurrung Traditional Owners Aboriginal Corporation (WTOAC) are recognised as the Registered Aboriginal Party under the Victorian Aboriginal Heritage Act 2006.

Figure 1. Barwon Coast Reserve



- Barwon Heads Caravan Park
- Riverside Camp Ground
- Riverview Family Caravan Park

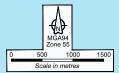




Table 1. Reserve status and gazetted purpose¹

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 cultural significance and natural beauty with unique landscapes and diversity of coastal ecosystems. It is highly valued for its aesthetic values and wellbeing benefits to the community. It comprises a wellvegetated barrier dune system and low coastal cliffs that define a low-lying hinterland. Stand-out features include the long Ocean Grove dune system and wide sandy beach, the Barwon River estuary and Ocean Grove spit and the limestone bluff at Barwon Heads with unique basalt platforms at its base. Further west, is the Thirteenth Beach, its dune system and the intertidal areas, exposed rocky foreshore and subtidal marine environments.

The coastal and marine environment offers a mix of developed areas with high recreational value such as Ocean Grove Main Beach, Barwon Heads estuary 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 management, Barwon Coast divides the area into six distinct landscape precincts and accommodation services. Barwon Coast is also responsible for the Local Port operation under a management agreement with the Department of Transport. The CMMP sets out objectives and strategic actions 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 dunes, open spaces, native vegetation and fauna, land-based influences of estuarine and marine ecosystems, cultural heritage sites.)
- Public access, use and provision of facilities
- Community education and engagement
- Partnerships with Wadawurrung Traditional Owners Aboriginal Corporation, Registered Aboriginal Party, community groups and agencies
- 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
- Day-to-day management to ensure an appropriate level of service is provided across Barwon Coast's facilities and services.

Management of the Reserve is funded primarily from 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 skills-based 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 sets the strategic directions for Barwon Coast and ensures that its operations align with its guiding principles, legislation, government policy and guidelines. It acts to fulfill community and State Government expectations while observing principles and directions.

^{1.} See Appendix 2 for details on the Crown Allotments that make up the Reserve.



DEVELOPING THE PLAN

The Coastal and Marine Management Plan (CMMP) has been developed using an evidence-based approach informed by policy and legislation, drawing on science and technical information and underpinned by local knowledge. Engagement and communication have been central to the planning process which has included participation and input from Traditional Owners, the community, industry and government agencies.

The planning process 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 before the release of the Draft CMMP.

Further consultation was undertaken for the Draft Coastal and Marine Management Plan. Feedback received on the Draft CMMP was considered by Barwon Coast and resulted in clarifications and revision to strategic and precinct actions.

For more information visit www.barwoncoast.com.au

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

Figure 2. Steps in the CMMP process

Policy framework	Review of the 2012 Coastal Management Plan	Issues and opportunities	Strategic directions and guiding principles	Objectives and priority outcomes	Monitoring, evaluation and reporting	Draft and Final Coastal & Marine Management Plan 2020-2025
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1.2 COMMUNITY AND STAKEHOLDER VIEWS

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

Community and stakeholder perspectives directly informed the vision, quiding principles and objectives of the Plan as well as the management responses and actions. Community consultation for the Draft CMMP was conducted in early 2020 and involved community listening posts and online submissions. A summary of the outcomes from community consultation across all stages of the planning process is outlined below.

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



Environment:

Protection and enhancement of natural environments, vegetation and fauna, landscape, water quality.

Social and cultural:

- Wadawurrung Cultural Heritage, and post European settlement cultural heritage.
- Land and water-based recreation, aesthetic values, safety, isolation and a sense of place.

Public amenities and facilities:

Safe and accessible public shelters, toilets, picnic settings, life-saving buildings, pathways and trails.



- Climate change impacts including storm surge, erosion and flooding
- Population growth and increased visitation
- Poor signage
- Cycling infrastructure
- Traffic management and car parking
- Balancing recreation and access with protecting the natural environment
- Dog regulations
- Public and beach safety.



- Protection of the environment including the marine environment and landscape features
- Transport, traffic and parking
- The inclusion and/or upgrade of facilities and infrastructure
- Collaboration with adjacent landholders and managers
- Participation by community volunteers and Traditional Owners in coastal and marine management.

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. Native vegetation communities, the endangered Hooded Plover, the fragile dune, estuarine and marine environments were also identified as being valued by the community.

Community members 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, and the general upkeep of the area.

The Reserve was noted as providing 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 identified water-based recreation and marine life, surfing, camping, fishing, sailing and running and cycling paths as being important to them.

The infrastructure and beach facilities were identified as providing easy access to the foreshore area. Feedback from community consultation also highlighted 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 diligent upkeep. The beach accesses were highlighted, with the community noting the value of ramp access and stairs, especially upgraded stairs.

CHALLENGES FOR THE FUTURE

The need to protect biodiversity and the dune system, and control pollution, and improve management of the Reserve were identified by the community as priorities for the CMMP. The community also recognised the challenges of a growing population and increased visitation and the pressures this will place on marine and coastal values.

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.

The lack of good-quality signage and presence of 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.

Ensuring compliance and enforcement of dog regulations was also a common community concern. 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. Related issues included the lack of clear signage and the inability of Barwon Coast to enforce dog control 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. There was a general concern about boats not adhering to speed limits in the estuary.

Finally, the community 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. The risk of oil spills and marine pollution were issues raised in submissions on the draft CMMP reflecting an increased emphasis on the need for integrated coastal and marine management responses.

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 marine 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.

Of primary importance; working collaboratively with Wadawurrung Traditional Owners to explore opportunities to protect cultural heritage sites at risk from Environmental changes and erosion. EG: Coastal erosion on shell midden sites dating up to 4,000 BP

The protection and enhancement of the natural environment and landscape features will ensure the community continues to value the coastline without having to worry about its future. Expanding Barwon Coast's focus to consider the impacts of land-based activities on the estuary and marine environment was also raised as an important future directions.

Community members suggested that:

- Changes in parking restrictions and fees would allow more people access to the beach at peak times.
- Improving infrastructure and signage would provide safe access and meet the increased demand for use.
- Improved walking and cycling paths, provision of accessible access² to the beach and upgrades to toilet blocks were priority projects.

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

Barwon Coast Staff and agencies identified an opportunity to plan for and address the impacts of climate change and coastal process and for Barwon Coast to reduce its environmental footprint across its operations.

Additional suggestions included the opportunity to seek alternative revenue streams to maintain and improve financial viability and resilience, and plan for change in use and access in response to increased demand and the effects of climate change.

SECTION 2

STRATEGIC FRAMEWORK





Barwon Coast has refined its vision and drawn on the *Marine and Coastal Act (2018)* and the *Marine and Coastal Policy 2020* to provide strategic direction for this CMMP. The CMMP strategic framework aligns with the planning and decision pathway outlined in the *Marine and Coastal Policy* ensuring the CMMP is consistent with objectives and guiding principles of the Act.

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 coastal and marine environment and aims to ensure a healthy landscape for future generations through the implementation of sustainable management approaches. Accordingly, conserving and enhancing the coast in a way that ensures ecological processes and community resources are maintained now and into the future is fundamental to the vision.

The vision has been developed with consideration of:

- The unique landscape setting and ecosystems
- The significance of the coastline for the community
- 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
- The Marine and Coastal Policy vision for Victoria's marine and coastal environment.

GUIDING PRINCIPLES

The Barwon Coast guiding principles, shown in Table 3 frame the organisation's strategic planning and decision making in the future and are designed to support Integrated Coastal Zone Management (ICZM). These principles have guided management decisions about objectives, priority actions and five-year outcomes and will inform the implementation of the CMMP.

Table 3. Barwon Coast Guiding Principles

	ir coast outding i ii	
	Natural environment first	The protection and restoration of the natural environment of the marine and coast is Barwon Coast's highest priority.
Natural and cultural values	Cultural heritage protection	Barwon Coast acknowledges the long and deep connections between the coast and the Traditional Owners and will continue to work collaboratively to care for the coast for its cultural significance and to promote awareness of cultural values. Wadawurrung Cultural Heritage sites are under threat from human and environmental impacts. Securing their long term future is seen as a priority. Barwon Coast acknowledges post European settlement heritage and will continue to care for and respect sites of significance and promote awareness of these cultural values.
	Good governance	Barwon Coast observes ethical and compliant procedures at all times. It has an organisational structure with sufficient resources to maintain effective operations.
	Adaptive management	Barwon Coast applies evidence-based approaches to its operations using scientific, social, cultural and economic knowledge and information to support effective planning and decision making. Barwon Coast monitors the outcomes of programs and uses this information to improve management.
Planning and	Integration and partnerships	Barwon Coast takes an integrated approach to the management of the marine and coast in co-operation with the community and its partners. Barwon Coast is committed to Traditional Owner inclusion in coastal planning and management.
integration	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 storms.
	Financial sustainability	Barwon Coast ensures that it remains financially viable and maintains adequate revenues to meet its management needs.
	Inclusive stewardship	Barwon Coast actively promotes community and stakeholder awareness and participation in caring for our coast.
Use and enjoy sustainably	Education, culture and arts	Barwon Coast recognises, respects and supports opportunities to protect and enhance strong community, heritage and traditional values and encourages the use of creative and performing arts to involve and engage with the community.
	Access to the coast	Barwon Coast fosters 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 its environmental footprint in all its operational activities and aims to maintain what it develops. It will provide an appropriate level of service for assets and facilities to ensure continuing, thorough care, protection and management of the marine and coastal environments.

OBJECTIVES, OUTCOMES AND PRIORITY ACTIONS

The CMMP is framed around a set of ten-year objectives. These objectives guide the priority actions of the CMMP to protect and enhance the natural, cultural and social values of the Reserve. Accompanying the objectives are five-year outcomes which describe the changes and results that are expected to be achieved from implementing the CMMP.

Two types of actions are identified in the CMMP. Strategic actions outline Barwon Coast's overall response to management issues and linked to these are precinct actions which describe the short-term, place-based priorities for management action. Supporting both of these will be the development of Precinct Master Plans (see sections 4 and 6)

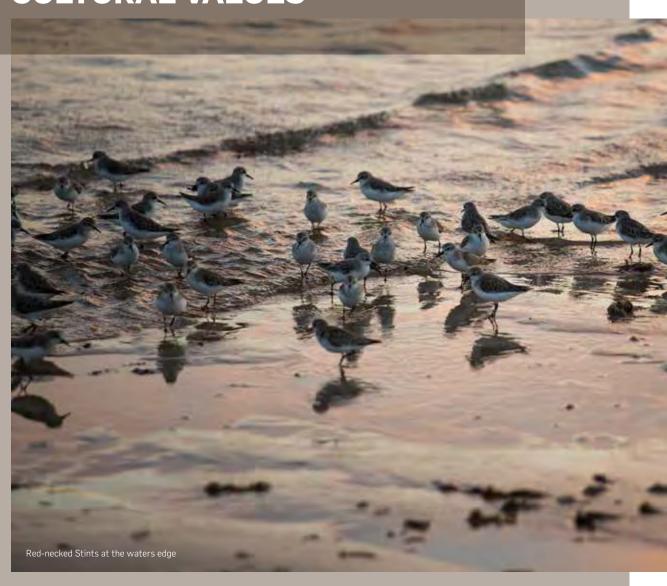
Monitoring and evaluation will form part of a structured approach to reporting and improvement for this CMMP and will help to communicate progress towards the outcomes (see section 7 for more detail).

Figure 3. Barwon Coast CMMP objectives and outcomes

TEN-YEAR OBJECTIVES								
Natura cultural		Planni integ		Sustainable use and enjoyment				
Protect and restore native vegetation along the coast	Safeguard the dune system	Provide a high level of governance and sound organisational structure	Strengthen planning risk and adaptive management processes	Build community knowledge, skills and participation	Maintain and improve facilities and public infrastructure			
Protect native species and biodiversity	Protect cultural heritage values of the coast	Strengthen our partnerships and integration with agencies, Traditional Owners and the community	Broaden Barwon Coast's revenue base and service offerings Strengthen consistency and clarity of signage		Enable enforcement of Barwon Coast regulations			
	Improve Barwon Coast's resource use efficiency FIVE-YEAR OUTCOMES							
Maintain populations of threatened and significant (locally indigenous) native vegetation Reduce the extent of priority pest plants and invasive vegetation	Reduce the level of informal human access to the dunes	Publicly-reported compliance with all governance requirements	Adaptation and mitigation options are developed for coastal hazard and climate change risks	Maintain participation in volunteer and education programs	>70% of users are satisfied with the amenity, facilities and accessibility of the Barwon Coast			
Maintain a breeding population of Hooded Plovers	Protect Aboriginal Cultural Heritage Protect post European settlement heritage	Coordination and partnerships with Traditional Owners and agencies have improved	>50% increase in off-peak caravan park occupancy over the life of the plan	Comprehensive audit and update of all signage completed	There is improved compliance with priority regulations			
Barwon Coast has reduced its energy consumption								

SECTION 3

NATURAL AND CULTURAL VALUES



3.1 Native vegetation, biodiversity, dune systems and the marine environment

3.2 Cultural haritage

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3.1 NATIVE VEGETATIONBIODIVERSITY, DUNE SYSTEMS AND THE MARINE ENVIRONMENT

TEN-YEAR OBJECTIVES	FIVE-YEAR OUTCOMES
 Protect and restore native vegetation along the coast Protect native species and biodiversity Safeguard the dune system Cultural heritage protection 	 Maintain populations of threatened and significant (locally indigenous) native vegetation³ Reduce the extent of priority pest plants and invasive vegetation⁴ Maintain a breeding population of Hooded Plover⁵ Reduce the level of informal human access to the dunes⁶ Put in place a plan to protect, preserve and research cultural heritage under threat

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, dunes and surf. 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 estuary adjoins a significant part of the Reserve and is a special place containing the most south-westerly mangroves in the state. Where the estuary joins the sea there is a diversity of intertidal, subtidal and reef habitats supporting kelp forests and seagrass beds and the sandy shore. The Barwon Bluff Marine Sanctuary managed by Parks Victoria is rich in marine life and is a favourite place for snorkelling, rockpool rambling and educational visits.

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 species that breeds at several locations within the Reserve.

In recognition of the community's aspirations for the Reserve, Barwon Coast takes a strategic approach to manage the cumulative and synergistic effects on coastal and marine ecosystems. The potential for over use and inappropriate development is managed a combination of strategic actions, precinct master plans, statutory planning, community consultation and operational processes (see Section 5 for more detail).

During this CMMP, Barwon Coast will complete a comprehensive fauna survey and continue monitoring vegetation communities and pest animals. Barwon Coast will establish a cross-boundary approach to pest plant and animal control to ensure programs 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.

Barwon Coast will continue a holistic approach to dune protection, including erosion protection, controlling informal access as well as compliance and education initiatives.

Barwon Coast will expand its management focus into the estuarine and marine environment recognising the value of intertidal habitats, sandy beaches and seagrass and the potential impacts from access and use, stormwater and physical damage.

Barwon Coast will continue to work with a range of government agencies and community groups to protect and enhance the coastal and marine environment. Including: DELWP, Wadawurrung Traditional Owners Aboriginal Corporation (WTOAC), 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).

³ Priority native (locally indigenous) vegetation species and communities as indicated in the *Barwon Coast Vegetation Management Plan (2013)* include 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 precincts.

⁴ Priority weed species as indicated in the Barwon Coast Vegetation Management Plan (2013) locations in the Ocean Grove Dunes, Ocean Grove Spit, Barwon River Estuary, The Barwon Bluff and Thirteenth Beach precincts.

⁵ This outcome will be reviewed as part of action N&C 2.7 to review the regional Hooded Plover Management Program.

⁶ Priority areas located adjacent to the 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 Priority areas: Ocean Grove Spit, Ocean Grove Dunes, Barwon Bluff, Thirteenth Beach Works in other precincts as required	Deliver annual works program including: 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		2021-22
N&C 1.2	Develop and implement a long- term plan for tree replacement	Barwon Coast Mature Tree Strategy	Barwon Coast		2021-22
	Priority areas: Caravan parks and camp ground	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 Priority areas: Thirteenth Beach, Ocean Grove Dunes and Ocean Grove Spit	Baseline survey complete in priority areas and additional survey needs identified	Barwon Coast		2022-23
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	2021-22
N&C 2.3	Develop a cross-boundary approach for pest plant and pest animal control Priority areas: Barwon Bluff and Thirteenth Beach	Operational Plan for integrated pest plant and animal control	Barwon Coast	CoGG, Barwon Water, Parks Victoria	2021-22 and annual review
N&C 2.4	Deliver pest plant and pest animal control programs Priority areas: Ocean Grove Dunes, Thirteenth Beach, Barwon Bluff	Deliver annual works program including: 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

Ref.	Action	Deliverable	Lead	Partner	Timeframe
N&C 2.6	Deliver the Hooded Plover protection program Priority areas: Thirteenth Beach, Ocean Grove Spit, Ocean Gove Dunes	Deliver annual works program including: 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 Friends of Hooded Plover groups	Continuing

Table 6. Strategic actions to safeguard the dune system

Ref.	Action	Deliverable	Lead	Partner	Timeframe
N&C 3.1	Deliver dune protection activities including erosion protection and managing human impacts Priority areas: Ocean Grove Dunes, Ocean Grove Spit, Ocean Grove Main Beach, Barwon Bluff, Thirteenth Beach	Deliver annual works program including: Brush matting Fencing and signage Revegetation Education and awareness activities	Barwon Coast	WTOAC Ocean Grove Coast Care CVA Schools	Annual program

3.2 CULTURAL HERITAGE

TEN-YEAR OBJECTIVES	FIVE-YEAR OUTCOMES
Protect cultural heritage values of the coast	Aboriginal Cultural Heritage sites are protected.Post European settlement cultural heritage sites are protected

Aboriginal and post-settlement cultural heritage values help to define the identity of the Barwon coastline.

3.2.1 Wadawurrung Cultural Heritage

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 coast and marine environment. 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 Wadawurrung Traditional Owners Aboriginal Corporation (WTOAC), trading as Wadawurrung, is the Registered Aboriginal Party (RAP). WTOAC takes up its responsibilities for Aboriginal culture and heritage and provides support for agencies and the community on cultural heritage matters⁷.

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 within the Reserve. Barwon Coast will continue to work with WTOAC to raise awareness of Traditional Owner values in the broader community.

3.2.2 Post European settlement Cultural Heritage

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 (Then known as Barwon Heads Park Committee) in 1889 reflect the interest to manage the jetty. The Barwon Heads Park with its constant visitor traffic and the jetty area have local heritage significance.

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 heritage of the Barwon coastal and marine environment and will continue to be supported by Barwon Coast.

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

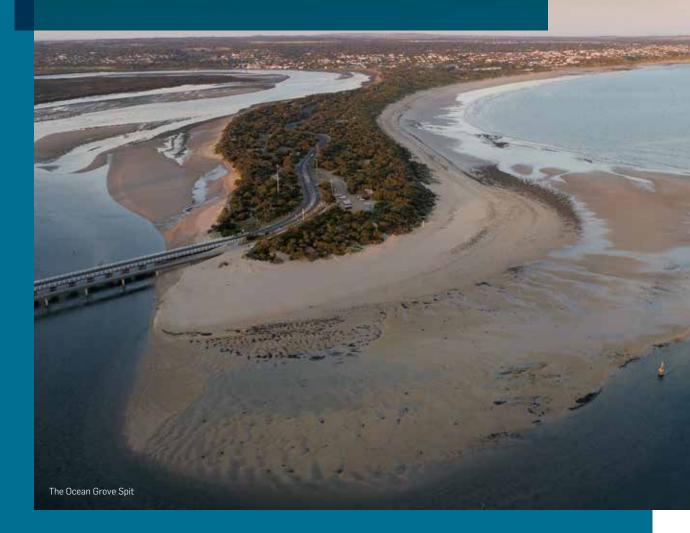
Ref.	Action	Deliverable	Lead	Partner	Timeframe
N&C 4.1	Develop voluntary Cultural Heritage Management Plans Priority areas: Barwon River Estuary, Ocean Grove Spit, The Barwon Bluff and Thirteenth Beach	Cultural Heritage Management Plans	Barwon Coast	WTOAC	2020-21
N&C 4.2	Investigate the feasibility of developing an Aboriginal Cultural Heritage Land Management Agreement	Discussions held with Wadawurrung Traditional Owners Aboriginal Corporation A decision on next steps identified and agreed to	Barwon Coast	WTOAC	2021-22
N&C 4.3	Upgrade the facilities at the Barwon Estuary Heritage Centre	Review Barwon Estuary Heritage Centre Master Plan Redesign and upgrade centre displays (natural, social, cultural)	Barwon Coast	WTOAC Friends of the Lobster Pot	Investigate external funding opportunities
N&C 4.4	Seek opportunities to protect, preserve or research significant sites as recognised by WTOAC	Barwon Coast and WTOAC develop management plans for recognised sites	WTOAC & Barwon Coast	N/A	As Identified

⁷ Content sourced from www.wadawurrung.org.au and via personal communication with Wadawurrung.



SECTION 4

PLANNING AND INTEGRATION



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4.1 PLANNING, RISK AND ADAPTATION

TEN-YEAR OBJECTIVES

Strengthen planning, risk and adaptive management processes

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 identify the extent of activity and recreation nodes and provide a detailed blueprint for activity and use of each precinct area. PMPs will be completed over the life of the CMMP using a staged approach. The initial priority is to develop the accommodation services PMP, followed by the six landscape 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, information on the condition and values of the natural environment and be consistent with the *Marine Coastal Policy* (2020) planning and decision pathway and the City of Greater Geelong planning scheme.

ACTIVITY AND RECREATION NODES⁸ (DELWP, 2020)

Activity and recreational nodes are a strategic planning tool for identifying and improving current and future activity and recreation developments in the marine and coastal environment. They are identified in coastal and marine management plans and are informed by relevant strategic documents (such as boating strategies). Identifying activity and recreation nodes creates efficient relationships between buildings and structures and minimises development impacts on the coast.

Activity nodes provide for community recreation facilities and tourism activities. They are located within settlements and are adjacent to activity centres in planning schemes. They include public and private land.

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

It should be noted that boating and fishing access points will be maintained and enhanced in line with relevant plans and strategies.

FIVE-YEAR OUTCOMES

 Adaptation and mitigation options are developed for coastal hazard and climate change risks

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.

Barwon Coast will further develop its 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, tree-risk, jetties and navigation aids. Barwon Coast is also participating in the regional Coastal Protection Structures and Coastal Built Asset program led by DELWP. This program is developing a coastal and asset register for the entire Victorian coast and will address gaps in Barwon Coast's current register. Information from this work will inform the preparation of a comprehensive asset management plan for Barwon Coast assets. The asset management plan defines maintenance and renewal schedules, provides standards for asset upgrades and considers risks from coastal hazards and climate change.

CLIMATE CHANGE AND COASTAL PROCESSES

Climate Change.

Climate change is a present and emerging pressure on the marine and coast environments, exacerbating existing threats and introducing new ones. Future climate modelling undertaken by CSIRO indicates that the Barwon South West region will continue to experience sea-level rise as well as changes to ocean temperatures and currents. Increases to the minimum and maximum temperatures are also predicted to occur, raising fire risk. Declining variable rainfall and more intense extreme rainfall events are also expected. Together these stressors are anticipated to have a marked effect on the natural environment and the communities they support.

Barwon Coast will take an adaptive approach to effectively manage the open coastline and respond to climate change and coastal processes. This long-term approach is supported by emergency response planning which is focused on hazards associated with flooding, erosion, and fire. Consistent with the *Marine and Coastal Act 2018*, Barwon Coast is committed to a collaborative approach involving communities and agencies in adaptation planning and response. Decision making about coastal adaptation options will consider the potential impacts if no action is taken as well as the costs, benefits and risks of any proposed options.



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) focused on the threat of coastal inundation as a result of sea-level rise and storm surge (see www.ourcoast.org.au). 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).

Risk from coastal erosion and sand movement are not well understood. 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 hazards where possible and manage and mitigate remaining risks. It will also assist in development of a Climate Change and Coastal Hazard Adaptation Plan.

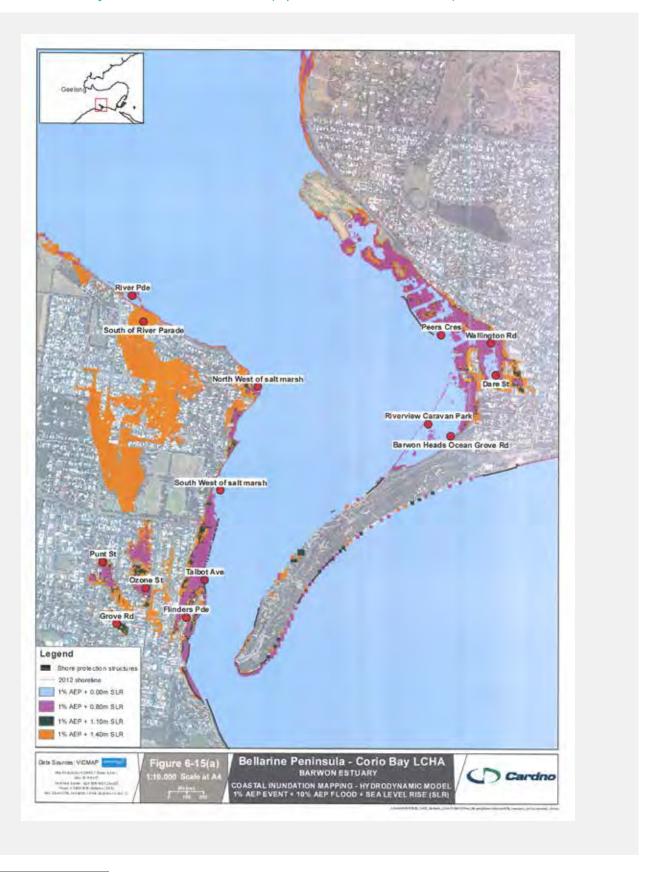
WORK TO DATE AND ADAPTATION ACTIONS

Existing Barwon Coast policies ensure that use and development within the Reserve 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. During this CMMP design guidelines will be updated to reflect these requirements. The City of Greater Geelong has recently established a Land Subject to Inundation Overlay based on the LCHA results. The overlay will require a planning permit to be obtained for new buildings and works in certain areas and will assist with planning for the impacts of sea-level rise and inundation.

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, sand nourishment and removal of redundant coastal protection structures. 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.

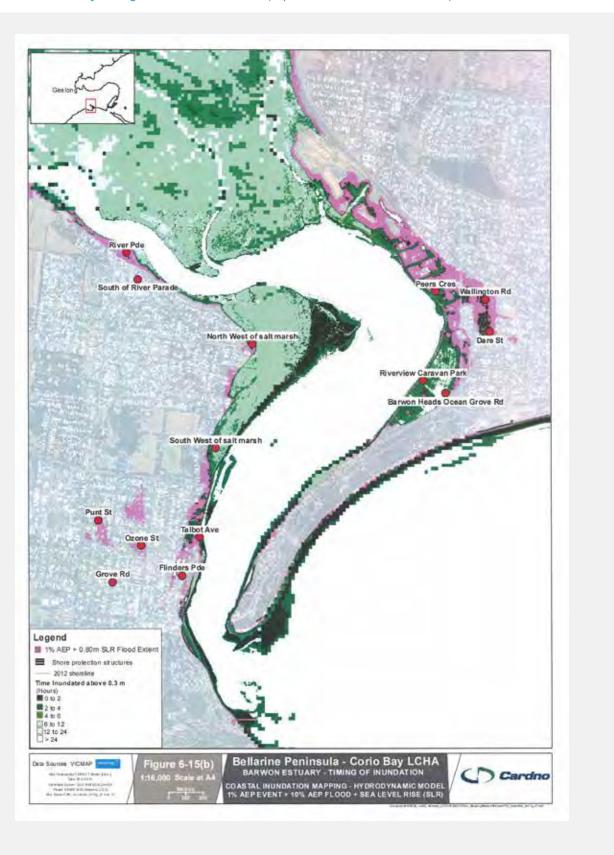
The precinct actions for this CMMP identify an interim set of adaptation priorities across the Reserve. The actions address the findings from the LCHA for inundation and storm tides and respond to known hazards and risks from erosion and coastal processes.

Figure 4. Barwon Estuary extent of future inundation⁹ (reproduced from Cardno, 2015)



⁹ Cardno. 2015. Our Coast Bellarine Peninsula – Corio Local Coastal Hazard Assessment. Inundation Summary Report

Figure 5. Barwon estuary timing of future inundation¹⁰ (reproduced from Cardno, 2015)



¹⁰ Cardno. 2015. Our Coast Bellarine Peninsula – Corio Local Coastal Hazard Assessment. Inundation Summary Report.

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

		ptariffing 113K and adaptive managemen	•		
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 Priority 1. Caravan Parks, Ocean Grove Spit, Barwon River Estuary Priority 2. Thirteenth Beach, Barwon Bluff, Ocean Grove Main Beach and Ocean Grove Dunes	Each PMP will have three deliverables and will involve community consultation at each stage Design Concepts Draft Precinct Master Plan Final Master Plan	Barwon Coast	DELWP, WTOAC, Parks Victoria	Priority 1. PMPs 2020-21 Priority 2. PMPs: 2021-22
P&I 1.2	Make operational a whole- of-business strategic risk management framework	Finalise strategic risk framework, register and policy Define and review risk appetite, maturity and risk tolerance	Barwon Coast		2020-21
P&I 1.3	Develop an asset management plan	Complete asset register Define level of service and inspection regime Develop maintenance and renewal schedule Infrastructure design standards updated in response to climate change projections	Barwon Coast	DELWP	2021-22
P&I 1.4	Consolidate and prepare a Barwon Coast Emergency Response Plan	Prepare Emergency Response Plan	Barwon Coast	VicPol, Ocean Grove Fire and Rescue, Barwon Heads CFA, DELWP	2021-22
P&I 1.5	Continue to participate in the Our Coast partnership and complete erosion mapping	Participate in working group Complete erosion mapping	Barwon Coast	Borough of Queenscliffe, CoGG, BB FCM, CCMA, DELWP	Annual External funding required
P&I 1.6	Develop an adaptation plan with feasible and practical options to address climate change and coastal hazards	Develop climate change and coastal hazard adaptation plan	Barwon Coast	DELWP, CoGG	2022-23

4.2 PARTNERSHIPS AND INTEGRATION

TEN-YEAR OBJECTIVES FIVE-YEAR OUTCOMES Strengthen our partnerships and integration with agencies, Traditional Coordination and partnerships with Traditional Owners and agencies Owners and the community have improved

TRADITIONAL OWNER INCLUSION

Barwon Coast recognises the importance of Traditional Owner participation in the management of the Reserve. Barwon Coast will work with WTOAC to understand and incorporate Traditional Owner priorities from the Wadawurrung Healthy Country Plan (in preparation) into the management of marine and coastal Crown Land. Barwon Coast will also pursue an Aboriginal Cultural Heritage Land Management Agreement and will work towards a more inclusive approach to Traditional Owner participation by building its organisational cultural competency.

Through the CMMP process, WTOAC and Barwon Coast have identified a range of opportunities for greater involvement of Traditional Owners. The initial priorities include formal participation by WTOAC 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 (see Appendix 4 for details on the partnership focus with key agencies). Partnerships with community groups and volunteers are vital and Barwon Coast actively supports community participation in the management of the Reserve (see Section 5).

Day-to-day partnership activities with agencies include coordination of environmental programs, compliance and water safety activities, use and development consents and education and awareness programs.

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. As a Crown land manager, Barwon Coast has an active 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 regularly 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 estuarine and marine ecosystems 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 marine and coastal ecosystems and to 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 coastal and marine environment, 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 a formal management agreement with the Department of Transport. Recreational boating is the main activity in the Local Port with the number of commercial, tour and activity operators regularly using the facilities regulated by Barwon Coast. Management of the Local Port is guided by a Safety and 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 in the marine environment. 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. Barwon Coast also 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	Develop and deliver a cultural competency program for Barwon Coast staff and Committee	Prepare cultural heritage training Develop Traditional Owner inclusion policy	Barwon Coast	WTOAC	2021-22
P&I 2.2	Hold an annual meeting with WTOAC to identify priorities for collaboration (education, works, interpretive activities)	Identify priority projects and initiatives Provide advice and input on program design	Barwon Coast	WTOAC	Annual
P&I 2.3	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 2.4	Develop a communication and engagement plan for community and agency involvement in coastal management	Define communications and engagement policy and processes Establish issue-based working groups Establish public consultation procedures	Barwon Coast		2021-22
P&I 2.5	Participate in investigations into the consolidation of coastal reserves on the southern Bellarine Peninsula	Provide advice and input	DELWP, CoGG, Barwon Water	Barwon Coast	2023-24
P&I 2.6	Review boating compliance and safety management of the Barwon Estuary	Complete Local Port Safety & Environment Management Plan review	Barwon Coast	MSV, Vic Police, Water Police, Parks Victoria	Annual program

4.3 GOOD GOVERNANCE AND FINANCIAL MANAGEMENT

TEN-YEAR OBJECTIVES FIVE-YEAR OUTCOMES Provide a high level of governance and sound organisational structure >50% increase in off-peak caravan park occupancy over the life Broaden Barwon Coast's revenue base and service offerings of the plan Publicly reported compliance with all governance requirements

Barwon Coast is a modern organisation which has sound and effective governance arrangements through the Barwon Coast Committee of Management. Barwon Coast's policies and procedures are implemented by the Chief Executive Officer and a senior management team. In addition to business as usual management activities, there are two priorities for this CMMP to ensure continued strong governance. The first is to ensure that Barwon Coast takes a proactive approach to meeting its corporate and regulatory obligations and adapting 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 knowledge is accessible across the organisation.

Financial sustainability is an essential part of Barwon Coast's Corporate Plan to ensure the Reserve is managed as efficiently and effectively as possible. Accommodation services are the primary source of income, and optimal financial returns from Barwon Coast's commercial operations are required to support management activities.

Whilst income has remained stable in recent years, 2020 presented significant challenges in the form of the COVID-19 pandemic. In the last half of the 2019-20 financial year, Barwon Coast's Caravan Parks were closed by government regulations, in response to the COVID-19 pandemic, resulting in a significant reduction in occupancy and revenue during the shoulder season.

Travel restrictions associated with the pandemic have highlighted the potential to engage with a different market looking for local nature-based holidays. Barwon Coast has responded with a tailored marketing approach and packaging of products to engage with new visitors, improve market share, and increase repeat visitation.

To ensure optimal market performance, the provision of wellmaintained and higher-quality facilities continue to be a focus for Barwon Coast. Expenditure on infrastructure maintenance and renewal must be balanced with environmental programs, erosion protection and climate change preparedness.

Challenges include:

- Competition e.g. from Air BnB
- Ageing infrastructure
- 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
- 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 opportunities.

Barwon Coast has an important role in the administration of leases and licences on marine and coastal Crown land. Commercial leases and licenses are allocated through a public advertising process after consideration of community perspectives and 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 ensure the affordable and equitable access to camping on Crown land. Barwon Coast offers a mix of roofed accommodation, short-term camping and Twelve-Month Permit holders (TMPs). Bookings have historically been managed through a preferential booking system. The next steps for Barwon Coast are to establish the turnover and demand for short-term sites, complete a review of the allocation and mix of camping sites and consult with campers about potential changes to the booking system. These steps will be taken as part of the Precinct Master Plan for Accommodation Services. The PMP will also seek to improve the amenity and sustainability of facilities and to improve equity of access to Barwon Coast's accommodation services.

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	Establish regulatory register and review annually	Barwon Coast	rai uiei	Timeframe 2021-22 Annual
P&I 3.2	Implement strategies to retain corporate knowledge	Further develop land information system Establish document management system	Barwon Coast		2020-21 2021-22
P&I 3.3	Review the process for three- year activity provider licensing	Complete review of activity license process and develop related procedures Advertise and select activity provider licenses	Barwon Coast	DELWP	2020-21
P&I 3.4	Review mix of sites, accommodation types and preferential booking system to maximise service provision and revenue generation	Complete review of accommodation mix site turnover and demand Identify options to replace the preferential booking system Identify options for additional cabin accommodation Implement consultation and system changes	Barwon Coast	DELWP	2021-22
P&I 3.5	Complete the implementation of the online booking system	Implement an online booking system Review of booking system performance	Barwon Coast		2020-21 2021-22
P&I 3.6	Undertake a feasibility study to establish group and conference facilities	Decide preferred option and location for group stay facilities	Barwon Coast		2021-22
P&I 3.7	Identify options to improve service offerings, including package deals with education programs, nature tours or major events on the Bellarine	Develop an accommodation/tour packages and marketing plan	Barwon Coast	AFDO	2021-22 and then an annual plan

SECTION 5

USE AND ENJOY SUSTAINABLY



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5.1 COMMUNITY AWARENESS AND PARTICIPATION

TEN-YEAR OBJECTIVES FIVE-YEAR OUTCOMES 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.

Barwon Coast recognises and values the work, knowledge and experience of all community participants. Community participation includes both individual efforts and a strong network of organised groups.

Education and awareness programs are a part of Barwon Coast's role as a marine and coastal Crown land manager. 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. Education and awareness activities support all aspects of Barwon Coast operations from accommodation services, assets and infrastructure, compliance and regulation and environmental programs.

COMMUNITY CARING FOR THE COAST

Ocean Grove Coastcare

Ocean Grove Coastcare is a group devoted to protecting the coastal and marine environment. Coastcare volunteers work closely with land managers and the community to address environmental problems including dune restoration. The group has a focus on community education.

Friends of the Bluff

The Friends of the Bluff is a group of committed environmentalists supporting habitat vegetation enhancement, litter removal and education activities to raise awareness of the natural vegetation and habitat of the Barwon Bluff area.

Friends of Lobster Pot

The Friends of the Lobster Pot provides environmental and historical interpretive services to raise awareness of the values and heritage of the local area. The group operates from the Barwon Estuary Heritage Centre.

Friends of the Hooded Plover Bellarine

The Friends of the Hooded Plover Bellarine is a group of volunteers working in partnership with Birdlife Australia and Barwon Coast. The group works throughout the year to raise awareness of the threats to Hooded Plover. Volunteers undertake activities along beaches to protect of Hooded Plover during the breeding season.

Festival of the Sea

Festival of the Sea is an incorporated group of volunteers that was formed in 1999. The festival is held during March each year and aims to engage the community to highlight and celebrate the diversity and beauty of the coastal and marine environment. Activities are delivered throughout the festival by a range of groups and agencies.

EstuaryWatch

EstuaryWatch is a citizen science program that supports community members to actively participate in the monitoring of estuary health. EstuaryWatch volunteers are passionate about their local environment and meet once a month to collect valuable data and information.

Friends of Riverside Camp Ground

The Friends of Riverside Camp Ground is a group of campers who assist in revegetation and landscape improvement works along the Barwon River estuary and camp ground.

Barwon Estuary Project

The Barwon Estuary Project aims to increase community knowledge and appreciation of the Barwon River estuary. The project team conducts a range of education and awareness-raising events and supports citizen science and volunteer efforts to protect the biodiversity of the Barwon River estuary.

Barwon Coast actively supports a range of other groups including, Ocean Grove Surf Lifesaving Club, Barwon Heads-13th Beach Surf Life Saving Club, Barwon Heads Football Netball Club, Barwon Heads Sailing Association and Ocean Grove Paddlers.

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 WTOAC 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		2021-22
U&E 1.2	Expand the portfolio of education programs	Produce a community coastal ecology course	Barwon Coast	GORCC, Bellarine Bayside, WTOAC	2021-22 2022-23
U&E 1.3	Deliver Responsible Pet Ownership awareness and education activities Priorities: Schools program, Share our Shores	Expand schools program (domestic cat and dogs) Produce Share Our Shores workshops Attend community events	Barwon Coast	Vic Pol, 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 Priorities: Share our Shores and How Deep are your pockets campaigns	Attendance at community events	Barwon Coast	Vic Pol, DELWP, CoGG, Surf life saving clubs, CFA, Water Based Activity Providers, 13th Beach Boardriders Club SOUL	Annual program
U&E 1.5	Continue the Summer holidays education program and investigate its extension beyond the caravan parks	Pilot an expanded summer holiday program	Barwon Coast	DELWP	2023-24

5.2 POPULATION GROWTH, ACCESS AND INFRASTRUCTURE

TEN-YEAR OBJECTIVES	FIVE-YEAR OUTCOMES
 Maintain and improve facilities and public infrastructure Strengthen consistency and clarity of signage 	 >70% of users are satisfied with the amenity, facilities and accessibility of the Barwon Coast. Comprehensive audit and update of all signage completed

By 2050, Melbourne's population is projected to grow by two million. 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 residents¹¹.

Given the short distance from Geelong and Melbourne to the Bellarine Peninsula, the number of visitors is expected to increase, particularly to patrolled beaches at Ocean Grove Main Beach, Ocean Grove Spit and Thirteenth Beach. Negative impacts on the Barwon coastline from the influx of additional visitors are expected to include traffic congestion and increased pressure on available car parking, visitor amenities and the natural environment. Increased visitation may also have benefits such as improved occupancy and revenue from accommodation services and increased interest and participation in community education and volunteer programs.

ACCESSIBILITY

Access is an important principle in Barwon Coast's planning for use and development across the Reserve. Accessible 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.

When complete, PMPs will provide the detailed management directions for access and use in each precinct. Initial priorities for improving accessible 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. 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.

¹¹ Ocean Grove Structure Plan Review Community Consultation May 2015.

INFRASTRUCTURE AND ACCESS

Regular maintenance and replacement of facilities and infrastructure is required to support coastal and marine values. Barwon Coast recognises that these activities need to be carefully planned and balanced with the need to protect coastal and marine ecosystems. There are also major challenges in managing increased demand for community access to the coast. Managing access is made more complex by a lack of knowledge of the current levels of use, future demand and the ability to accommodate increased demand particularly during peak periods.

Barwon Coast will continue to support access to the coast for recreation where it is sustainable and consistent with the objectives for protecting the natural environment and managing risks to public safety.

Barwon Coast will manage and accommodate increased demand within the footprint of existing activity and recreation nodes and developed areas and will be informed by the *Marine and Coastal Policy (2020)* and the *Siting and Design Guidelines for structures on the Coast* (May 2020). Barwon Coast will incorporate sustainable design principles into its infrastructure projects and will develop a sustainable resource demand strategy to guide this. At a precinct level, the PMP process will ensure use and development is consistent with the *Marine and Coastal Policy* and the City of Greater Geelong Planning Scheme.

Options to accommodate and manage demand will include:

- improving the design and efficiency of parking, 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

Initial infrastructure projects are identified in the precinct priorities (see Section 6) with a focus on the main activity and recreational nodes associated with the Ocean Grove Main Beach, Caravan Parks and Camp Ground (Ocean Grove Spit) 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, provide consistent messaging and standardise the format. This will be addressed through a review of signage across the Reserve and development of a signage plan, applying the Australian Standards where applicable.

Table 12. Strategic actions to improve access, visitor experience, facilities and parking

Ref.	Action	Deliverable	Lead	Partner	Timeframe
U&E 2.1	Undertake a feasibility study for alternative modes of transport to access the coast including increased public transport and 'park and ride' options	Prepare feasibility study Pilot alternative transport options during peak period	Barwon Coast	CoGG, RRV, GORCC, Bellarine Bayside	2022-23
U&E 2.2	Plan for improved cycle and pedestrian access	Review and update Barwon Coast Trails Strategy	Barwon Coast	CoGG, BikeSafe Geelong	2021-22
U&E 2.3	Undertake an audit of signage across the Reserve (messaging, compliance with standards, style, location, condition)	Undertake signage audit	Barwon Coast		2020-21
U&E 2.4	Develop and implement a signage plan in collaboration with agency partners	Prepare signage style guide Prepare signage upgrade plan	Barwon Coast	CoGG, Parks Victoria, LSV, MSV, Barwon Water, RRV	2022-23
U&E 2.5	Analyse user numbers and impacts at high-use areas of the Reserve at different times of the year and the assess capacity of those areas	Undertake use and Capacity audit of high-use areas of the Reserve	Barwon Coast	DELWP, COGG	2021-22

5.3 COMPETING USES AND IMPROVED COMPLIANCE

TEN-YEAR OBJECTIVES	FIVE-YEAR OUTCOMES
Enable enforcement of Barwon Coast regulations.	 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 undertaken during the CMMP highlighted four main areas of concern:

- The control of dogs in open areas such as feeding and breeding areas for migratory and resident bird populations and where families and other users may be affected.
- 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 water-based commercial service providers at Ocean Grove Main Beach impacting on other beach users.

Barwon Coast manages competing uses through controls such as regulations or tenure agreements to ensure coastal and marine values are maintained. In support of this, coordination of compliance activity remains the focus of a partnership approach with CoGG, DELWP and Parks Victoria. As an example, 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.

Barwon Coast and CoGG have also commenced a review of local dog access controls to ensure a strategic approach to the management of Dog Control Zones. A broad range of options has been suggested by the community to improve Dog Control Zones including simplifying the rules and regulations, implementing no-dog zones all year round, reviewing signage, and enabling local enforcement of regulations. The review will consider the issues raised during community consultation for the CMMP and will include a strategic assessment of protected areas.

Since 1990 thoroughbred horse trainers have had Ministerial permission to access and use the Thirteenth Beach. There are concerns about the potential impacts from this activity on the fragile coastal dune system, resident bird populations and the safety of other recreational users. During this CMMP Barwon Coast will regulate this use to create safe and equitable access along the beach. Barwon Coast will also develop a policy and permit system to 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	Identify and evaluate options Update regulations Install signage and implement communications program	Barwon Coast	CoGG	2021-22
U&E 3.2	Improve enforcement capacity within the reserve (hooded plover, dune intrusion, dogs, parking, litter, horses and hanggliding)	Establish compliance data collection requirements Identify compliance enforcement and monitoring options Establish additional compliance resources and enforcement capacity	Barwon Coast	CoGG, DELWP, Vic Police	Continuing
U&E 3.3	Develop a policy and permit system to control horse access to beaches (thoroughbred and recreational) Priority area: Thirteenth Beach	Establish horse access policy Establish and implement permit system	Barwon Coast	DELWP, Geelong Racing Club Thoroughbred Horse Trainers, Pony Club Assn, Racing Victoria	2021-22
U&E 3.4	Develop a policy and permit process to formalise hang-gliding and paragliding activity Priority area: Ocean Grove Main Beach, Thirteenth Beach	Develop hang-gliding and paragliding policy (or permit) Implement permit system	Barwon Coast	DELWP, Hang-gliding Assn	2021-22 2022-23



5.4 SUSTAINABLE PRACTICES

TEN-YEAR OBJECTIVES	FIVE-YEAR OUTCOMES
■ Improve Barwon Coast's resource use efficiency	■ Barwon Coast has reduced its energy consumption from 2018 levels¹²

Barwon Coast is committed to minimising the environmental impact of its operations. During this CMMP, Barwon Coast will work with Barwon South West Waste Recovery Group to minimise waste generation and improve recycling practices across business 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.

Other priorities for Barwon Coast are to ensure compliance with new regulations for the disposal of e-waste and to increase staff awareness of sustainability goals. There will also be an emphasis on identifying solutions and practices that can easily be implemented by Barwon Coast and adopted by customers, residents and visitors using facilities within the Reserve.

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	Conduct staff awareness training Identify and trial alternative options to chemical weed control Develop sustainable purchasing policy	Barwon Coast	Geelong Sustainability Barwon South West Waste & Resource Recovery Group and other stakeholders	2021-22 Continuing 2020-21
U&E 4.2	Undertake a comprehensive review of waste management facilities with consideration to coastal hazards and OH&S issues	Complete E-waste review Develop waste management policy and plan Establish additional recycling capability	Barwon Coast		2020-21 Continuing

¹² This outcome will be reviewed and additional sustainability outcomes identified following the development of the Sustainable Purchasing Policy.

SECTION 6 37

PRECINCT PRIORITIES



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Barwon Coast has divided the Barwon Coastal Reserve 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
- Local native vegetation, habitat for native fauna and biodiversity

Each precinct has a distinct role in the region and is valued for different attributes and assets. The precincts face different challenges and prospects. Managing the Reserve by precincts allows for a more in-depth understanding of the region's 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 and are supported by the delivery of day-to-day management activities. PMPs are expected to provide detailed planning for use and development over a ten-year period. The PMP process will involve extensive consultation with the community, Traditional Owners and agencies.

Planning for use and development through the PMPs will consider and be consistent with the *Marine and Coastal Policy (2020)*, the *City of Greater Geelong Planning Scheme* and other relevant regulations for safety, environment and emergencies.

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

Precinct Master Plans will be developed in full recognition of the special intrinsic environmental and cultural values of the marine and coastal environment.

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

Priority values

- Local native vegetation and habitat for native fauna
- 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 local native vegetation that provides important habitat for native fauna. 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, with dogs required to be under effective control at all times. Responsible dog ownership and monitoring of dogs on the beach and their potential impact on bird populations and other users is important in this precinct because of its high environmental values. A strategic review of dog controls will aim to simplify and clarify regulations.

Precinct Master Plan Priorities

- Manage to enhance habitat and support biodiversity
- Provide for passive recreation where it does not impact upon natural values
- Manage informal access to dunes (intrusion) to reduce damage to native vegetation and minimise disturbance of fauna

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 local native vegetation and fauna and address pest plant encroachment into dunes from neighbouring properties	Contain and reduce cover of Polygala (Bellarine Pea) introduced 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	Implement pilot trapping program	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

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

Priority values

- Broad, easy access to surf beach for a variety of recreational purposes
- Accessible amenities and beach access
- Provision of car parking to enable access 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 guard¹³ 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* and the Surf Life Saving Club, both of

which form part of the Ocean Grove Surf Beach Complex. Other key infrastructure includes an accessible beach access ramp and amenity block. The beach provides access for accessible 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. Existing coastal asset protection structures include a beach access ramp, seawall and rock revetment supported by sand nourishment (when required), to protect built assets on the foreshore (toilets and parking). Further works are planned during this CMMP to extend asset protection measures to provide a long-term climate adaptation response. Other priorities include the provision of accessible access and completing upgrades to the facilities of the Surf Beach Complex.

A strategic review of dog controls will aim to simplify and clarify regulations and provide for dog control orders that include an all-year dog exclusion zone within the Ocean Grove Main Beach.



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 accessible access including access to the beach, provide a graded path at the east end terraces, also an further option for a new path linkage at the west end of the promenade.

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

Ref.	Link to strategic action	Precinct action	Deliverable	Lead	Partner	Timeframe
P2.1	action	Construct an open grassed terrace area adjacent to the beach that extends from the west end of the sea wall to the next timber elevated stairs, 15W (Mick's Steps)	Construct open grassed terrace	Barwon Coast	raitiei	2023-25
P2.2		Upgrade visitor facilities associated with the surf beach complex	Install upgrades to shade around kiosk and public toilets	Barwon Coast	Tenants	2022-23
P2.3		Liaise with tenants to enable community access and use of Surf Beach Complex for events and functions	Establish working group Establish Surf Beach Complex events and functions policy	Barwon Coast	Tenants	Continuing
P2.4	P&I 1.6	Extend the coastal protection features of the current seawall, service ramp and revetment for long term protection of assets at Ocean Grove Main Beach	Undertake works for beach access ramp, seawall extension, rock revetment and associated sand nourishment	Barwon Coast	DELWP Barwon Water CoGG	Annual program of sand nourishment as required
P2.5		Review and implement traffic management measures for Surf Beach Road	Prepare traffic management plan Undertake works for traffic calming, improved cycle and pedestrian access, sealing and drainage upgrades	Barwon Coast	CoGG	2023-24
P2.6	N&C 1.2	Replace ageing Cypress (Cypresses macrocarpa) with appropriate local native species	Obtain arborist report Conduct community engagement for options Undertake works to plant coastal tree species	Barwon Coast		2020-25



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

Priority values

- Extensive dune vegetation and habitat for resident and migratory bird species along 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
- Shared 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. 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.

Several toilet facilities are maintained all year for community use including three on the ocean side and one on the river side of the Spit. Within this precinct, there is an ageing coastal protection structure (timber sea barrier) located at RAAF's beach. This structure has degraded over the last twenty years, the majority of it is now exposed and it is a potential safety hazard. Barwon Coast undertakes regular inspections of the structure to ensure public safety is maintained and will remove redundant parts when the opportunity arises.

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 shared 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 parking and provide additional picnic facilities within the Ocean Grove Spit
 riverside area

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

Ref.	Link to strategic action	Precinct action	Deliverable	Lead	Partner	Timeframe
P3.1	P&I 1.6	Support management of sand on Barwon River Bridges through the consent process and transfer of sand	Obtain use and development consent Manage removal, transfer and placement of sand	Regional Roads Victoria	Barwon Coast	As required
P3.2	N&C 1.1	Protect and enhance local 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
P3.3	P&I 1.6	Continue maintenance program for low grade informal rock wall along eastern bank of Barwon River	Regularly inspect for rock displacement and litter hazards. Replace rocks as required	Barwon Coast		Annual program
P3.4		Maintain lifesaving services at EBAN 18W over the summer period	Paid life guard patrols	LSV	Barwon Coast	Seasonal
P3.5	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

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

Priority values

- Ecological and habitat values of the Barwon 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
- Adjacent to Lake Connewarre State Game Reserve (part of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site)

The estuary has a distinctive landscape with high ecological and habitat values and is well connected to the Barwon Bluff Marine Sanctuary and the Lake Connewarre State Game Reserve (a Ramsar wetland of international importance). 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 Sheepwash Road in Barwon Heads.

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 accessible access are planned for this precinct during the life of

this CMMP. Permits are issued for water-based activity licenced service providers over the year who hire out small craft such as 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 including yoga and fitness classes. A promenade links the bridges to the At the Heads restaurant, main jetty and onto the Barwon Bluff.

Coastal protection structures are located along both banks of the lower Barwon River, south of 22W. These structures were first constructed in the 1930s and have had been added to over the years to protect the visitor and accommodation facilities in the precinct. The Our Coast LCHA identified the threat of inundation from sea-level rise on the eastern bank of the estuary. Planning is currently underway to identify adaptation options through the Barwon River Revetment, Ocean Grove project.

Barwon Coast is responsible for the operation of the Local Port of Barwon Heads where the main activities include the operation of navigation aids for waterway safety and provision of two jetty structures that are popular for walking and recreational fishing.

The Barwon River Estuary maintains strong cultural heritage values including Aboriginal heritage and post-settlement heritage linked to the township's settlement. The strong environmental and cultural heritage values are promoted, interpreted and presented at the Barwon Estuary Heritage Centre on Jetty Road. A strategic review of dog controls will aim to simplify regulations in this precinct and help to manage competing uses.



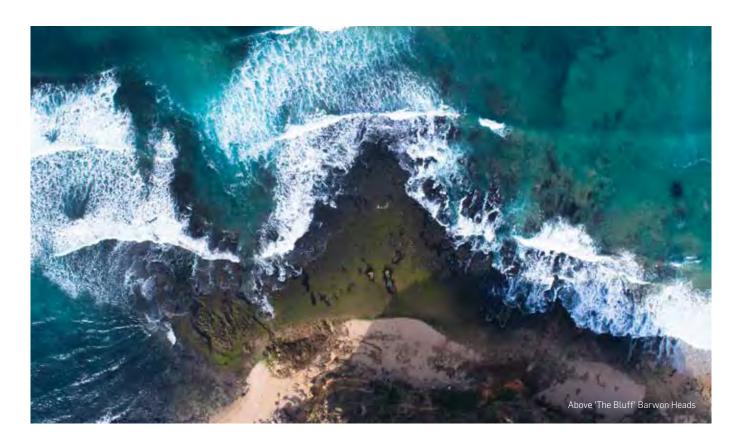


Precinct Master Plan Priorities

- Investigate the feasibility of connecting the toilet block at Ozone Road to the sewer and installing 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, 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 accessible access to the Barwon River estuary and more equitable use of available carparking

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	Upgrade public toilets to provide additional cubicles and accessible access	Barwon Coast		2022-23
P 4.2		Upgrade facilities and infrastructure at Jetty Road to address public safety, drainage, access and parking	Develop landscape plan Complete upgrade	Barwon Coast	CoGG	2022-23 Requires external funding
P 4.3		Upgrade the BCCM and Barwon Heads Caravan Park office complex	Provide additional storage and administration facilities	Barwon Coast		2023-24
P 4.4	N&C 4.3	Continue Barwon Estuary Heritage Centre infrastructure upgrades	Complete refurbishments to increase the capacity of the education room and install a kitchenette and DDA compliant toilet	Barwon Coast		2022-23 Requires external funding
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 lease Establish public tender process and finalise new lease	Barwon Coast		2020-21
P 4.6	N&C 1.1	Enhance local 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	Coordinate compliance servicing and infrastructure maintenance within Barwon River.	Barwon Coast	MSV, Victoria Police, Transport Victoria Parks Victoria	Annual program
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	2021-22
P 4.9	P&I1.6	Identify adaptation options for the inland side of Barwon Heads promenade to protect assets from flooding and coastal inundation	Investigate levee modifications and drainage infrastructure	Barwon Coast	CCMA	2022-23
4.10		Assess options for the protection of Riverview Family Caravan Park from inundation by river flood, coastal storm surge and sea level rise	Identify design options to address sea-level rise risks identified in the LCHA report	Barwon Coast	CoGG CCMA DELWP	Requires external funding



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 habitat for fauna
- Walking trail network
- Participation by Friends of the Bluff in environmental management and education services
- Adjacent to the Barwon Bluff Marine Sanctuary

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

The Bluff and surrounds are rich with Aboriginal cultural and post-settlement heritage and support important areas of native vegetation and habitat. 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 pool rambling 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.

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.



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)

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	Provide for future park and ride service (south side carpark) Seal road shoulders	Barwon Coast		2022-23
P 5.2	N&C 1.1	Protect and enhance local native vegetation and fauna	Control Acacia cyclops, 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	Conduct fox baiting Conduct 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	Re-establish research and monitoring project Monitor photo-points	Barwon Coast	Universities DELWP	Requires external funding 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



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

Priority values

- Biodiversity and habitat for native fauna
- Extensive remnant dune vegetation
- Wild-beach character
- Significant surf destination
- Passive recreation including dog walking

The Thirteenth Beach stretches along 5.6 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 13th Beach Surf Lifesaving Club. Thirteenth Main Beach (34W - 35W) is patrolled by both paid and volunteer lifeguards.

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). A shared trail is provided from Stephens Parade, Barwon Heads to both the First car park (30W) and 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 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 Plover. Volunteers from Friends of the Hooded Plover Bellarine support hooded plover breeding through on-site wardening service. Barwon Coast actively controls 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 will be introduced during this CMMP to control both recreational and thoroughbred horse activity.



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
- Establish a permit system for use of the designated section of beach for horse access
- Identify options to address safety issues for cyclists and pedestrians along Thirteenth Beach Road (Barwon Coast, BikeSafe Geelong and CoGG)

Table 20. Precinct actions Thirteenth Beach (30W to 42W)

	I bula ta	·	,			
Ref.	Link to strategic action	Precinct action	Deliverable	Lead	Partner	Time- frame
P 6.1	N&C 2.7	Deliver Hooded Plover protection activities	Monitor breeding site 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 local 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 13th Beach SLSC	Review and input to detailed design Manage approvals and permits	BH- 13th Beach SLSC	Barwon Coast DELWP CoGG	2022-23 SLSC determined time line
P 6.4		Investigate the provision of a public toilet in vicinity of the club's building	Identify preferred position adjoining the club building Construct toilets	Barwon Coast		2020-21
P 6.5	U&E 2.2	Finalise design and construct 13th Beach Shared Trail between Sign Post cark park and Surf Life Saving Club	Finalise design and consultation Manage approvals and permits Construct trail and undertake 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	Conduct fox baiting Conduct cat and fox trapping	Barwon Coast		Annual program
P 6.7	U&E 3.3	Control horse activities to designated beach at 40W	Install signage Implement permit system	Barwon Coast	DELWP, Trainers Assn	2020-21
P 6.8	U&E 3.4	Control hang-gliding and para-gliding	Install signage	Barwon Coast	DELWP Hang Gliding Assn Victoria	2021-22

6.7 ACCOMMODATION SERVICES

Priority values

- Natural character
- High-quality facilities and services
- Range of accommodation types and camping options
- 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. 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 have visited 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, quality of facilities and accessibility. An additional service to campers is the summer activities education program provided free by Barwon Coast.

Barwon Coast's accommodation services underpin its financial viability providing the surpluses that fund management and improvements to all the public reserves. Optimising revenue generation is essential to realise the ambitions of this CMMP. All parks have aging infrastructure that requires substantial investment for upgrade or replacement in particular communal facilities like amenities blocks. Riverside Camp Ground requires connection to the sewer before the rationalising and installation of new amenities blocks can be installed, replacing the septic tank dependent facilities that are well beyond their useful life.

It is paramount that the review of accommodation services maximises revenue generation while also providing a broad mix of accommodation types.15

BARWON HEADS CARAVAN PARK

The Barwon Heads Caravan Park offers a diversity of experiences for visitors including access to the estuary, Barwon Bluff and the marine sanctuary. 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 accessible access and has a wide range of accommodation options including, six standard cabins, a duplex cabin 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 and other times according to demand. Barwon Coast has resolved to maintain the camp ground to provide for a bush camping experience and recognises the opportunity for group camping use.

The camp ground offers 232 unpowered camp sites. Many of these are shaded by native vegetation and are only minutes to the ocean beach. The overall site strategy is to create a vegetative barrier between the road and river and the camp site areas. Toilet and laundry facilities and a shared trail network along with licenced food vendors are provided within the grounds.

The camp ground community has recognised the potential of this unique site forming a Friends of Barwon Riverside Camp Ground (FBRCG) to assist with maintaining the amenity of the site and enhancing vegetation.

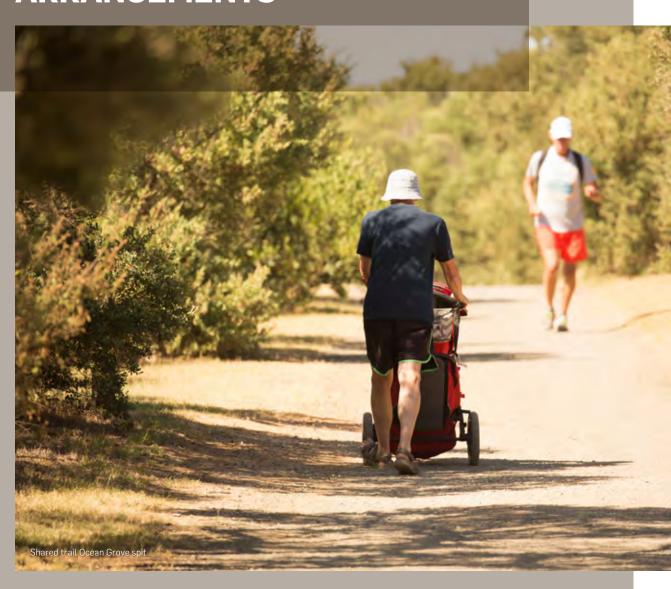


Table 21. Precinct Priority Actions Accommodation services

Ref.	Link to strategic action	Precinct action	Deliverable	Lead	Partner	Timeframe
		avan Park (CP2)	Deliverable	Lead	T di tilei	Timename
CP 2.1		Review current accommodation offerings and consider opportunities to provide new and upgraded accommodation	Complete PMP adopting a business expansion focus Manage design specification and approvals	Barwon Coast		2020-21 2021-22
CP 2.2		Review current shared shower and toilet facilities and upgrade to incorporate new standards required to reflect health and social distancing standards	Develop design standard Mange tender program for TB 2	Barwon Coast		2022-23 2024-24
CP 2.3	P&I 3.5	Consider construction of facilities that provide group and family facilities that comply with new standards for health and social distancing.		Barwon Coast		2022-23 2024-25
CP 2.4		Implement the Howard Hamer Oval Master Plan, including implementing traffic management plan and improved facilities for the Multipurpose facility.	Undertake detailed design Manage approvals and permits Construct building addition and ring road	Barwon Coast & BHFNC		2020-22 2021-22 2022 – 24 (requires external funding)
Riverv	view Family C	Saravan 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	DELWP CCMA	2020-21
CP 3.2		Review location of cabins and develop an area with new cabins that provide for family accommodation and reflect the new standards required to reflect health and social distancing standards	Undertake and complete PMP with a business expansion focus Manage design specification and approvals	Barwon Coast		2020-21 2021-22
CP 3.3		Identify options and upgrade toilet blocks to reflect new standards required to meet health and social distancing standards	Document preferred options Secure approvals	Barwon Coast		2020-21 2022-23
CP 3.4		Consider alternative sites for a replacement commercial kiosk/cafe	Complete PMP to assess capacity Initiate EoI process	Barwon Coast		2020-21 2022-23
CP 3.5		Improve signage and directions for vehicle turn off from BH-OG Rd to the visitor car park.	Install signage and road marking	Barwon Coast		2021-22
CP 3.6		Improve the accessibility of car parking at Riverview Family Car Park.	Upgrade carpark surface Improve access points	Barwon Coast		2021-22
Rivers	side Camp Gr	ound (CP4)				
CP 4.1		Review and improve campsite layout and identification of sites	Install site marking system	Barwon Coast		2020-21
CP 4.2		Investigate the provision of sewer connections and consolidation of amenity blocks and a new waste management system.	Complete feasibility study and assessment of risks	Barwon Coast		2020-21
CP 4.3		Investigate further camping opportunities with a focus on groups	Increase school group camping use	Barwon Coast		2021-22
CP 4.4		Rename Riverside Camp Ground respecting Aboriginal Heritage	Adopt a new name that reflects the cultural values of the area	WTOAC Barwon Coast		2020-21

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IMPLEMENTATION ARRANGEMENTS



The CMMP sets the strategic direction and actions for managing the Reserve over the period 2020–2025. The CMMP is supported by a five-year business plan with an annual corporate plan and budget program designed to cost and prioritise the completion of CMMP actions. Precinct actions will be further developed through the PMP process.

Supporting the actions and priorities of the CMMP are the everyday activities that Barwon Coast undertakes to maintain assets and facilities at an appropriate level of service and ensure a quality experience for the community and customers.

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

Barwon Coast's experienced senior management team is well equipped to successfully implement the strategic direction and actions, as well as 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 will lead monitoring, research and evaluation activities. The group will be accountable to the CMMP subcommittee, which is 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 6) and its assumptions describe the relationships between activities, outcomes and the objectives of the CMMP and help to identify knowledge gaps and uncertainties in the program logic.

Elements of the program logic include:

Vision: an overarching long-term aspiration for the Reserve

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

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

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

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

Figure 6. Barwon Coast CMMP simplified program logic

The natural environment of our coastline will flourish whilst meeting the needs VISION of our engaged communities Natural and cultural **Planning and** Sustainable use 10-YEAR **OBJECTIVES** values integration and enjoyment Publicly-reported compliance 5-YEAR Maintain populations of Maintain participation in threatened and significant (locally with all governance requirements volunteer and education **OUTCOMES** indigenous) native vegetation Adaptation and mitigation Reduce the extent of priority pest options are developed for >70% of users are satisfied coastal hazard and climate with the amenity, facilities and plants and invasive vegetation change risks accessibility of the Barwon Coast Maintain a breeding population of Hooded Plover Coordination and partnerships Comprehensive audit and update Reduce the level of informal with Traditional Owners and of all signage completed agencies have improved human access to the dunes ■ There is improved compliance >50% increase in off-peak with priority regulations Protect Aboriginal and caravan park occupancy over Barwon Coast has reduced post-settlement cultural the life of the plan heritage sites its energy consumption **External Factors** Product On-Ground Planning Stakeholder Investigation Education Asset management **DELIVERABLES** Works & & Engagement & & Renewal & development Compliance & Strategy Collaboration Review Maintenance Maintenance Awareness & customer service Strategic actions

Precinct Master Plan priorities and Precinct actions

The main assumptions supporting the program logic are:

ACTIONS

- 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, REPORTING AND REVIEW OF THE CMMP

Evaluation will occur at four time frames across the life of the CMMP, six-monthly, annual, mid-term and final. The focus of the six-monthly and annual evaluation will be on CMMP implementation progress to inform annual reporting. The mid-term and final evaluation will consider a broader range of matters to help understand progress towards the five-year outcomes and the effectiveness of the Barwon Coast's implementation processes. The final evaluation report at five years will provide for formal review (and renewal) of the CMMP per the *Marine Coastal Act 2018*.

Evaluation and reporting processes will be underpinned by evaluation questions which provide the basis for assessing the success of the CMMP. The questions will also be used to identify monitoring requirements and existing and potential sources of data.

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?	
	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

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

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

Management effectiveness monitoring aims to understand whether 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	Adjust delivery method within a given project.
(six monthly)	Reallocate funds / reprioritise effort in response to adverse conditions or unexpected results.
Annual review (twelve 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 (2.5 years and 5 years)	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 identified a number of 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.





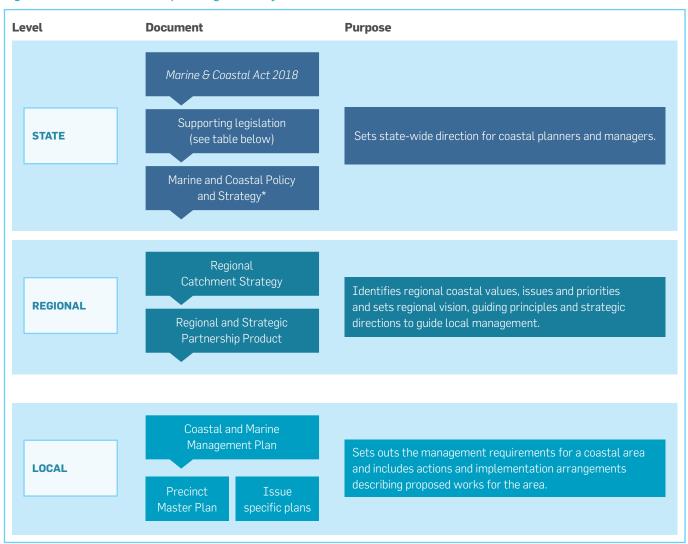


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APPENDIX 1. LEGISLATION AND POLICY FRAMEWORK

The Crown Land (Reserves) Act 1978 enables Committees of Management to be established for the 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	 Marine and Coastal Act 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 (DELWP, 2020) Flora and Fauna Guarantee Act 1988 Guidelines for the development of Coastal Management Plans (DELWP, 2017) Siting and Design Guidelines for structures on the Victorian Coast. May 2020 (DELWP 2020) Assessment of the values of Victoria's marine environment (Victorian Environment Assessment Council, 2019) 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 Planning for Biodiversity — Guidance (DELWP, 2017) with guidelines for the removal, destruction or lopping of native vegetation and compliance and Enforcement Strategy Victorian Water Safety Strategy 2016 – 2020
Regional	 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	 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. Crown allotments within the Barwon Heads Foreshore and Ocean Grove Foreshore reserves

Barwon Heads for	eshore comprises the f	following parcels and the total area is 201ha
Parish/township	Parcel identification	Land status
TOWNSHIP OF BARWON HEADS PARISH OF	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
CONEWARRE	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
	LA. 2009	Part of permanently reserved for public purposes. Gaz. 1880 Page 2661 part of temporarily reserved for public purposes. Gaz. 1995 Page 1618
	LA. 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	C.A. 17	Temporarily reserved for public purposes. Gaz. 1995 Page 1618
CONEWARRE	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. 2042	Temporarily reserved for public purposes. Gaz. 2012 Page 2200
OCEAN GROVE FO	RESHORE COMPRISES	THE FOLLOWING PARCELS AND THE TOTAL AREA IS 92ha
PARISH OF	C.A. 23 SECTION 4	Temporarily reserved for public park purposes. Gaz. 1972 Page 2993
BELLARINE	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 & legal/12-007

APPENDIX 3. MONITORING OVERVIEW AND KNOWLEDGE GAPS

INITIAL MONITORING PLAN – FIVE-YEAR OUTCOMES

Table 26. Initial monitoring plan – Five-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 ¹⁶ Reduce the extent of priority pest plants and invasive vegetation ¹⁷	Vegetation quality and diversity (habitat hectares measures) Cover / abundance (indigenous / exotic species) Species list (presence / absence)	Every two to three years (spring)	Existing monitoring program
Maintain a breeding population of Hooded Plover ¹⁸	Number of breeding pairs Number of breeding attempts Number of eggs laid/hatched Supporting evidence 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
Protect Aboriginal and post-settlement cultural heritage sites	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 Six monthly	Possible partnership with WTOAC
Publicly reported compliance with all governance requirements	Responses from DELWP and other Stakeholders	Annually	Established in Annual Report
Coordination and partnerships with Traditional Owners and agencies have improved	Effectiveness and satisfaction with partnership and coordination arrangements Partnership arrangements established and maintained	Year 3 and 5 Annual	New program

¹⁶ Priority native (locally indigenous) vegetation species and communities as indicated in the Barwon Coast Vegetation Management Plan include Coastal Moonah, Austral Lotus, Coast Wirilda, orchids and associated dune and woodland vegetation communities locations in the Ocean Grove Dunes, Ocean Grove Spit, Barwon River Estuary, The Barwon Bluff and Thirteenth Beach precincts.

¹⁷ 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 precincts.

¹⁸ 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
Adaptation and mitigation options are developed for coastal hazard and climate change risks	No. of Responses developed No of responses funded	Continuing	Existing program
>50% increase in off-peak caravan park occupancy over the life of the plan	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 ¹⁹ (hours, satisfaction, highlights) Effectiveness and satisfaction with schools' programs	Collected after each activity Annual Collected after each activity	Existing programs
Comprehensive audit and update of all signage completed.	Responses from Public and stakeholders	Annually	New Program
>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
There is improved compliance with priority regulations	Number of infringements issued / patrol day Number of reports received Attitudes and behaviours related to regulations (survey)	Continuing	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)



INITIAL PRIORITIES – KNOWLEDGE GAPS

Table 27. Initial priorities – knowledge gaps

Priority knowledge gap	Strategic response	Available supporting information
Establish a complete understanding of the jurisdictional extent of the Reserves	Review with DELWP and CoGG Senior Officers	Previous initiatives and correspondence with DELWP and CoGG
Investigate the currency and potential update of Crown Land Reserve regulations applicable to the land managed by Barwon Coast	Review with DELWP and other Category 1 Committees of Management	Outcomes from previous negotiations and regulations in place for other similar areas of coastal crown land
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	Mapped locations of known party sites
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
Improve knowledge of WTOAC aspirations for Healthy Country Planning	Develop the relationship with WTOAC for an Aboriginal Cultural Heritage Land Management Agreement	CHMP consultancy, Heritage Advisor, (Barwon Heads Caravan Park Cultural Heritage Management Plan)
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 of 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 about dog /wildlife interactions and dune intrusion	Undertake social research to inform the 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	To be defined during implementation	
Improve knowledge about the capacity of the reserve, current levels of use and future demand. Improve knowledge on accessibility constraints and car parking occupancy rates	Undertake audits of beach use numbers and at the same time look at peak capacity limits Advocate for support from the Victorian Government to evaluate future demand and potential implications for carrying capacity	SLSC Beach use numbers; Barwon Water and COGG peak holiday population numbers
Determine systems, databases and processes required to support MERI processes	To be defined during implementation	

APPENDIX 4. AGENCY PARTNERSHIPS

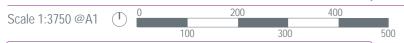
Table 28. Agency partnership

Agency	Partnership focus	
Department of Environment, Land, Water and Planning (DELWP)	DELWP oversees and supports the Barwon Coast Committee of Management on behalf of the Minister. DELWP provides general advice and support to Barwon Coast for strategic and operational matters. Regional DELWP offices are responsible for administering consent for use, development and works under the <i>Marine and Coastal Act 2018</i> . Other parts of DELWP provide policy direction on management issues and coordinate state-wide projects and initiatives including the provision of project-based funding.	
City of Greater Geelong (CoGG)	CoGG is the relevant Local Government Authority for the Barwon Coast managed Reserve. CoGG has a range of responsibilities including public land management, provision and maintenance of facilities and infrastructure, community services and enforcement of State and local laws relating to land use planning, environment protection public health, traffic, parking and animal management. Barwon Coast and CoGG work together on a range of matters including regulatory control and compliance, land and water management, planning requirements for use and development and community services. CoGG also provides and services amenities at Ocean Grove and support surf life saving services at Thirteenth Beach and Ocean Gove.	
Parks Victoria	Parks Victoria is the State's park management agency with responsibility for designated areas of Crown land and waters and associated regulations. Barwon Coast and Parks Victoria work together on cross-boundary land and water management issues including plant and animal management, interpretive and regulatory signage and to resolve issues that may result from marine and coastal use and development. Parks Victoria is responsible for reserves adjacent to the Barwon Coast managed Reserve including the Barwon Bluff Marine Sanctuary and Lake Connewarre State Game Reserve.	
Wadawurrung Traditional Owners Aboriginal Corporation (WTOAC)	Wadawurrung Traditional Owners Aboriginal Corporation (WTOAC) is the representative body for Wadawurrung Traditional Owners. The role of WTOAC is to support the aspirations of Traditional Owners and fulfil statutory obligations to protect Aboriginal Cultural Heritage. Barwon Coast works closely with Wathaurung representatives on all matters related to Aboriginal Cultural Heritage and Traditional Owners participation in coastal and marine management including; protection of cultural Heritage sites, preparation of Cultural Heritage Management Plan, development of Aboriginal Cultural Heritage Land Management Agreement, provision of education and engagement activities, and training about Aboriginal Cultural Heritage.	
Corangamite Catchment Management Authority	Corangamite Catchment Management Authority have responsibilities for catchment, waterway and floodplain management. They have a regulatory role for works on waterways and development in floodplain areas and are responsible for advice on coastal erosion. Barwon Coast and CCMA work together to plan for flooding and inundation, climate change adaptation and partner on a range of strategic matters including the Barwon River Parklands project, EstuaryWatch monitoring and the Barwon North Revetment project.	
Transport Safety Victoria	Transport Safety Victoria is responsible for administering marine safety legislation. Barwon Coast is a waterway manager for the Local Port of Barwon Heads under the <i>Marine Safety Act 2010</i> . TSV also regulates the operation of craft and use of the waterway, they conduct inspections and engage with Barwon Coast on matters related to the operation of craft and use of the waterway.	
Department of Transport	Barwon Coast is the Local Port manager for Barwon Heads. The Department of Transport provides oversight of Barwon Coast's Safety and Environmental Management Plan for the Local Port on behalf of the Minister for Ports. Barwon Coast and DoT engage on matters relating to the management of hazards and risks associated with Local Port and infrastructure upgrade requirements.	
Barwon Water	Barwon Water is responsible for managing public land adjoining the Barwon Coast managed Reserve. Barwon Coast and Barwon Water work together to address cross-boundary land management issues including pest plant and animal control and threatened species management.	

APPENDIX 5. PRECINCT MAPS



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



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

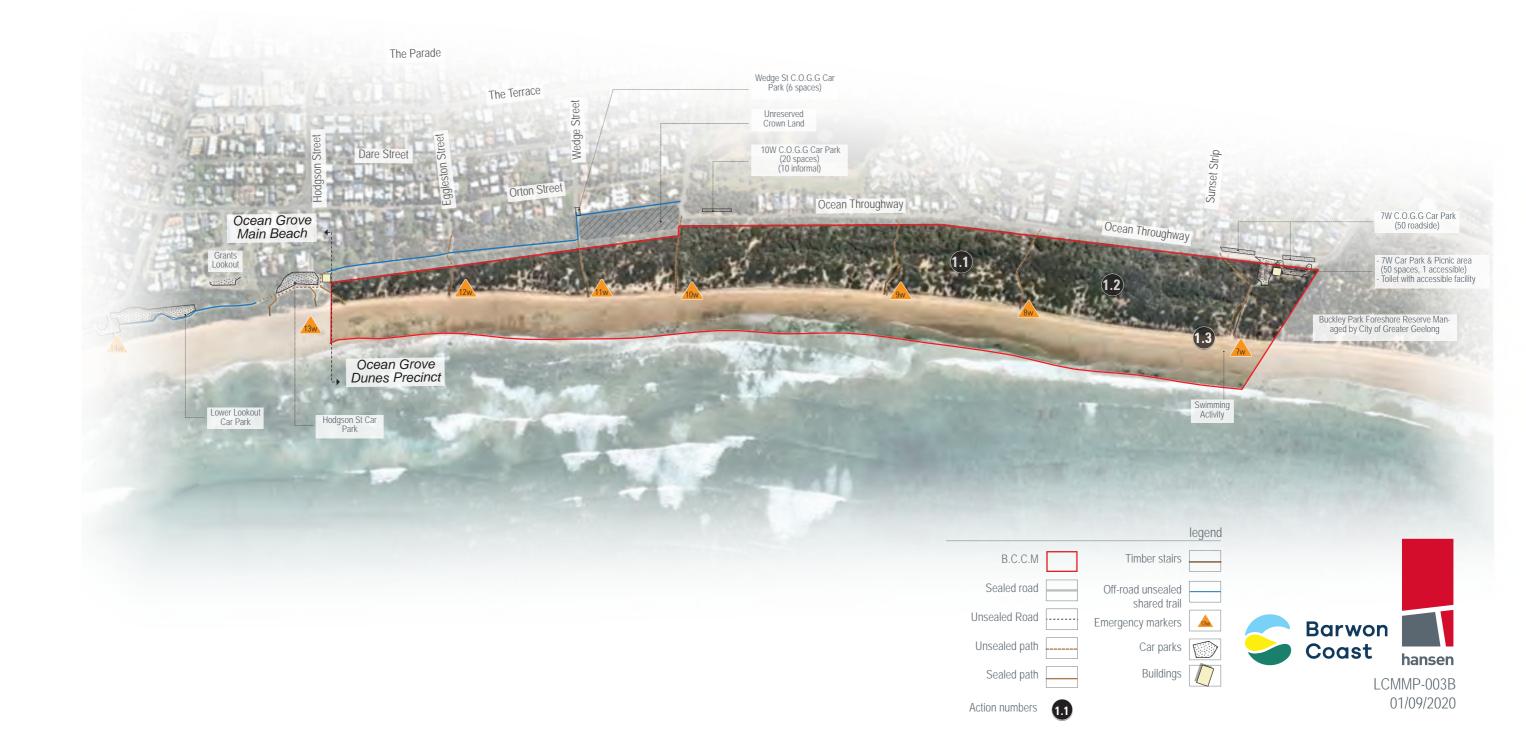
- Local native vegetation and habitat for native fauna Natural, quieter and uncrowded beach Passive recreation including dog walking Threatened Coastal Moonah Woodland Community and

Precinct Masterplan Priorities

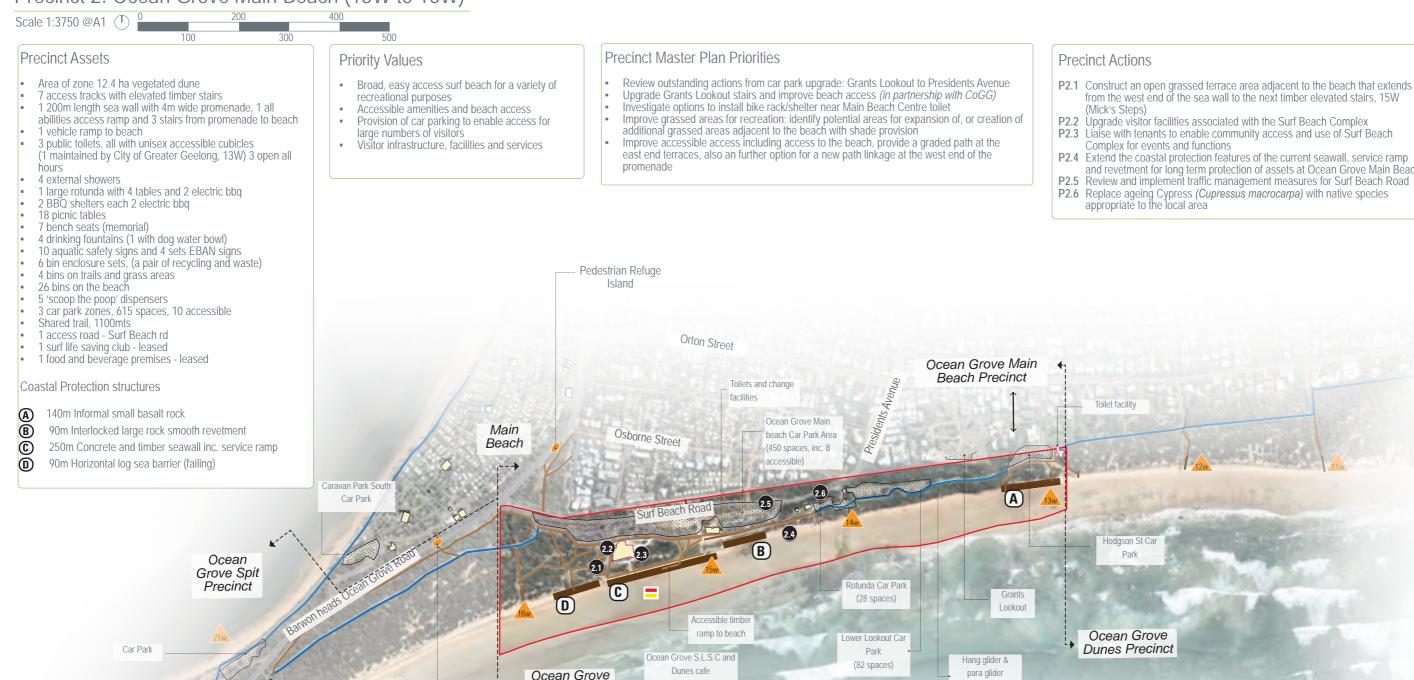
- Manage to enhance habitat and support biodiversity
- Provide for passive recreation where it does not impact upon natural values
- Manage informal access to dunes (intrusion) to reduce damage to native vegetation and minimise disturbance of fauna

Precinct Actions:

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



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



Main Beach Precinct

Pedestrian Refuge Island

Horse Shoe

- P2.1 Construct an open grassed terrace area adjacent to the beach that extends from the west end of the sea wall to the next timber elevated stairs, 15W
- 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
- and revetment 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 (*Cupressus macrocarpa*) with native species appropriate to the local area

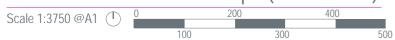






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Precinct 3: Ocean Grove Spit (16W - 20W)





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 (1 with 2 accessible cubicles), 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

Coastal Protection structures

- **(E)** 475m timber sea barrier and groynes (failing)
- F 100m timber seawall (buried)
 G 300m basalt rock rubble sea wall
- H 500m basalt rock rubble sea wall

Priority values

- Extensive dune vegetation and habitat for resident and migratory bird species along 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
- Shared trails and paths on both sides of the Spit

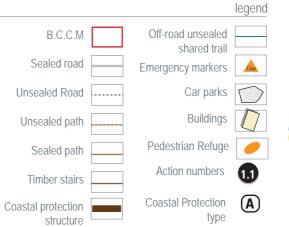
Precinct Master Plan Priorities

- Consider and address safety hazards associated with shared trails and intersections with car parks, on the ocean side of the
- Consolidate Riverside shared 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 parking and provide additional picnic facilities within the Ocean Grove Spit river side 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 local native vegetation and fauna
- Continue maintenance program for low grade informal rock wall along eastern bank of Barwon River
- P3.4 Maintain lifesaving services at EBAN 18W over the summer period

P3.5 Deliver Hooded Plover protection activities





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Precinct 4: Barwon River Estuary (22W to 27W) Grassed open space area with storm water drain outfall Scale 1:5625 @A1 ① 0 200 400 Riverview Family Caravan Park Car Park Nth (176 informal Lake Connewarre State Features Game Reserve Barwon Heads Caravan Park Parks Victoria Barwon Heads River Foreshore Barwon River Riverview Family Caravan Park Local Port of Barwon Heads Riverview Family Caravan Park Car Park Str (70 informal spaces) **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 Local Port of 3 toilet blocks, 2 with accessible cubicles Ocean Grove Barwon Heads 7 bin enclosure sets, (pair recycling and waste carts) Waterway 4 bins on beach Management 4 bins grass area and trail 14 picnic tables and 1 table shelter ground boundary 6 electric bbqs (4 sites) 800m length concrete promenade along Barwon river foreshore Riverside Camp fronted by bluestone and timber sea walls Ground 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. (4.7) 2 risk management signs (promenade) 1 access road - Jetty rd Shared path - 1,950mts Bass Strait Lease site - 'At The Heads' Ozone Road Jetty, storr water outfall Coastal Protection structures Ozone rd. Car Park Spit Car Park ground boundary 700m rock and concrete seawall RAAFs Car Park (J) 30m concrete block seawall (K) 60m masonry seawall (L)200m adhoc rock and timber barrier (buried) Flinders Ramp Car Park (M) 50m cemented small rock seawall N 600m masonry seawall Flinders Pde. (92 east, inc. 2 accessible - 44 west, both 0 325m timber seawall C.O.G.G) Local Port Assets Bridge Oceanside Car Park Main Jetty + Ozone Road Jetty Aids to Navigation with light Bridge (Lahey Sq) Car Park (38 informal spaces, inc. 2 accessible) legend Jetty Road & Jetty Car Park (110 informal spaces, inc. 1 Ocean Grove Off-road unsealed B.C.C.M Spit Precinct shared trail At The Heads Lease, Barwon Sealed road Emergency markers Car parks **Unsealed Road** Barwon Heads Caravan Park Buildings Unsealed path Barwon Heads Golf Club Barwon River Timber stairs Sealed path Estuary Precinct Bluff Road North Thirteenth beach Road Concrete Action numbers Car Parks Promenade **Coastal Protection** Coastal protection structure type Multi-purpose facility Barwon Bluff Precinct Barwon LCMMP-006D Coast 01/10/2020 hansen

Priority values

- Ecological and habitat values of the Barwon River estuary
- Access to safe beaches with family-focused facilities
- On-water activities
- Strong landscape character

Ocean Grove Main

- Cultural heritage, and its presentation at the Barwon Estuary Heritage Centre Adjacent to Lake Connewarre State Game Reserve (part of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site)

Riverview Family

Caravan Park

Precinct Master Plan Priorities

- Investigate the feasibility of connecting the toilet block at Ozone Road to the sewer and install a playground/picnic area
- Address shared trail congestion issues for pedestrians and cyclists in the vicinity of At the Heads
- Review the pedestrian facilities and landscaping around Fishermen's Jetty, 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 accessible access to the Barwon River estuary and more equitable use of available parking

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
- Continue Barwon Estuary Heritage Centre infrastructure upgrades
- Review and complete public tender process for the lease agreement for At the Heads, including an extension of the lease area

- P4.6• Enhance local 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
 P4.10 Assess options for the protection of Riverview Family Caravan Park from
- inundation by river flood, coastal storm surge and sea level rise



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



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 and habitat for native fauna
- 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
- Establish a permit system for use of the designated section of beach for horse access
- Identify options to address safety issues for cyclists and pedestrians along Thirteenth Beach Road (Barwon Coast, Bike Safe Geelong and

Precinct actions

- P6.1 Deliver Hooded Plover protection activities
- Protect and enhance local native vegetation and fauna
- Support expansion of club house and training facility at Barwon Heads 13th Beach SLSC
- Investigate the provision of a public toilet in vicinity of the club's building Finalise design and construct 13th Beach Shared Trail between Sign Post car park and Surf Life Saving Club
- Control pest animals including feral cats and foxes Control horse activities to designated beach at 40W Control hang-gliding and para-gliding





