

Coastal and Marine

MANAGEMENT PLAN

Final plan

April 2022



City of KINGSTON

ACKNOWLEDGEMENT

The City of Kingston proudly acknowledges the Bunurong People of the Kulin Nation as the Traditional Owners and Custodians of this land, and we pay our respect to their Elders, past and present and emerging.

Council acknowledges the Bunurong's continuing relationship to the land, waterways, coast and sea. We respect that their connection and spiritual identity is maintained through ancient ceremonies, songlines, dance, art and living culture.

Council pays tribute to the invaluable contributions of the Bunurong and other Aboriginal and Torres Strait Island elders who have guided and continue to guide the work we do, especially in managing the natural landscape.

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Useful terminology

Adaptation	The process of adjustment to actual or expected disturbances such as coastal hazards. In human systems, adaptation seeks to proactively manage or avoid harm or make use of beneficial opportunities. Some natural systems may benefit from human intervention in helping to facilitate these adjustment process.
Climate change	A change in the state of the climate (such as temperature, typical weather) that persists for an extended period, typically decades or longer. Climate change may be due to natural processes such as solar cycles, volcanic eruptions, as well as persistent human-induced impacts on the earth's atmosphere.
Coastal hazards	Natural coastal processes that may negatively impact on the marine and coastal environment, including impacts on human use, values, property or infrastructure. Hazards include coastal erosion and inundation (flooding) due to storm tide and sea level rise.
Coastal adaptation	Future modification of behaviour through change in coastal land management, land-use or infrastructure, that reduces or prevents adverse impacts associated with coastal hazards.
Marine and coastal environment	In Victoria, this includes all private and public land and waters between the outer limit of Victorian coastal waters (3 nautical miles) and five kilometres inland of the high-water mark of the sea, and 200 m below the land surface, as defined in the Marine and Coastal Act 2018.
Marine and coastal processes	The physical, chemical and biological processes that occur in the marine and coastal environment over short and long timescales, such as sediment transport, erosion, accretion, changes in coastal and marine flora and fauna.
Resilience	The capacity of social, economic, and environmental systems to cope with a hazardous event, trend or disturbance, responding or reorganising in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation.
Remnant vegetation	Indigenous (locally native) vegetation which was not planted, typically existing since pre-European settlement.
Sea-level rise	An increase in the mean level of the ocean. Relative sea level rise occurs where there is a local increase in the ocean level relative to the land, which might be due to ocean rise and/or land subsidence



Mordialloc Beach

Abbreviations

ABM	Association of Bayside Municipalities
AEP	Annual exceedance probability
BBV	Better Boating Victoria
BLCAC	Bunurong Land Council Aboriginal Corporation
C&EP	Communication and Engagement Plan
CMMP	Coastal and Marine Management Plan
DELWP	Department of Environment, Land, Water and Planning
EPA	Environment Protection Authority Victoria
EV	Electric Vehicle
EVCs	Ecological Vegetation Classes
GPTs	Gross Pollutant Traps
IPCC	Intergovernmental Panel on Climate Change
LGA	Local Government Area
LSV	Life Saving Victoria
LXRA	Level Crossing Removal Authority
LXRP	Level Crossing Removal Project
MAC	Marine and Coastal (as used in Victorian legislative context)
MER	Monitoring, Evaluation and Review
MSV	Maritime Safety Victoria
MW	Melbourne Water
PPBCHA	Port Phillip Bay Coastal Hazard Assessment
PV	Parks Victoria
RAP	Registered Aboriginal Party
SLR	Sea level rise
VMaCC	Victorian Marine and Coastal Council
Vic WPS	Victorian Water Police Squad
WSUD	Water Sensitive Urban Design



Bonbeach Beach

Document version history

Final CMMP	V1	November 2021
Final CMMP	V2	April 2022



1 Introduction

Kingston's coastline is an iconic part of Port Phillip Bay. Combining continuous sandy beaches, vegetated dune systems, access to the water and stunning bay views, our coastal and marine areas attract locals and visitors all year around. Our foreshore provides a wide range of recreational, economic and lifestyle opportunities. These are supported by facilities, infrastructure and management initiatives that maintain our open space, preserve areas of cultural importance and protect and enhance our sensitive and unique environments.

This Coastal and Marine Management Plan will help guide appropriate and effective management of our marine and coastal areas. With increasing pressures from development and growth, a changing climate and aging and inadequate infrastructure, a range of initiatives are needed to appropriately balance the management of social, cultural, environmental, and economic values of our coastline and the bay, ensuring it remains a desirable place to live, work and visit.



The City of Kingston (Council) require a strategic approach to help manage their coastal and marine areas. This Coastal and Marine Management Plan (CMMP) has been created in consultation with the Kingston community, the Bunurong Traditional Owners, Council staff and other agencies. It has been structured to align closely with legislation, guidelines and government policy.

The CMMP presents:

- a vision and objectives reflecting community and stakeholder sentiment, and aligns with legislative direction
- the values and future aspirations for Kingston's coastal and marine areas
- current and emerging issues, including those which may potentially threaten values
- potential opportunities, priority actions and projects for delivery, over the next 5-10 years
- an implementation pathway and monitoring framework.

This plan is intended to reflect interests of 'our' Kingston community. This includes all those who enjoy, use, care for and rely upon Kingston's coastal and marine areas - our residents, businesses, workforce, visitors and council.

Kingston Council commenced CMMP development in August 2020, which has been undertaken in stages (Figure 1).

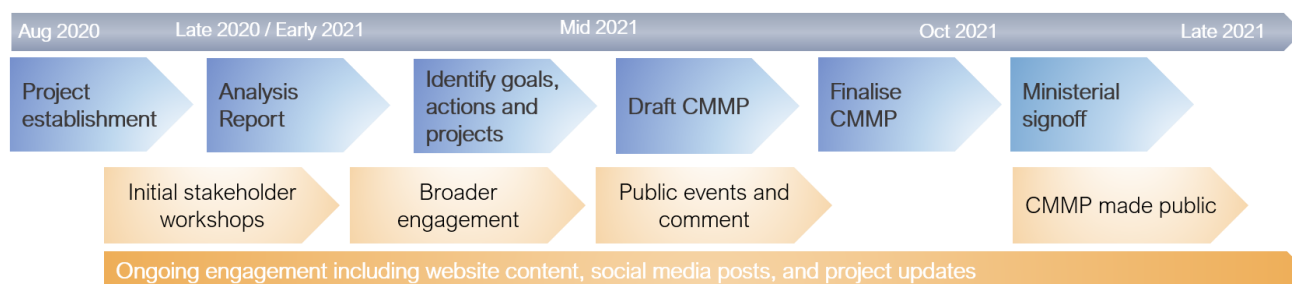


Figure 1. Timeline for developing the CMMP

A tailored stakeholder engagement plan informed the approach to engagement throughout the development of the CMMP. This enabled insights and perspectives from the Kingston community and stakeholders to be considered and included. Summaries of key engagement activities with stakeholders to date are available in Attachment A.

1.1 Strategic context

Coastal management reform in Victoria, led by the Department of Environment, Land, Water and Planning (DELWP), has involved the release of several key pieces of legislation, policies and guidance material over recent years. These reforms aim to support coordinated coastal and marine management and provide the tools to identify and adapt to coastal hazards in the future.

A summary of the relevant legislation and policies is provided in Table 1.

CMMP guidance

DELWP is currently developing new CMMP guidelines, under Victoria's Marine and Coastal Reforms Final Transition Plan (2018). The development of this CMMP has been guided by:

- Marine and Coastal Act 2018
- Marine and Coastal Policy (2020)
- DELWP advice (formal and informal) on the development of new CMMPs (or conversion of CMPs) that is to be in accordance with the Act
- Existing Guidelines for the Preparation of Coastal Management Plans (2017)
- Victorian Coastal Strategy (2014)

Table 1. Victoria's marine and coastal policy context.

Marine and Coastal Act 2018

The spearhead of these reforms is the *Marine and Coastal Act 2018* which replaces the previous *Coastal Management Act 1995*. It aims to provide a coordinated, simpler and more integrated approach to planning and managing the marine and coastal environment. The Act requires the development of a Marine and Coastal Policy, including a Marine Spatial Planning Framework, a Marine and Coastal Strategy, and the development of Coastal and Marine Management Plans.

Victorian Marine and Coastal Council (VMaCC)

The Act also established the Victorian Marine and Coastal Council (VMaCC) to provide independent advice on marine and coastal issues.

Marine and Coastal Policy (2020)

The Marine and Coastal Policy, endorsed in early 2020, has been developed in line with the Marine and Coastal Act under the supervision of the responsible ministers and the VMCC. It aims to manage the coastal environment to achieve the long-term vision for a 'healthy, dynamic and biodiverse marine and coastal environment that is valued in its own right, and that benefits the Victorian community, now and in the future'.

The Policy also outlines a 'Planning and Decision Pathway' (Figure 2) based on the objectives and guiding principles of the *Marine and Coastal Act 2018*. Planning, management and decision making under the Act, including development of a CMMP, must apply the policies within the steps of this Planning and Decision Pathway.

Marine and Coastal Strategy (draft, to be finalised in 2022)

The Marine and Coastal Strategy will support and give effect to the Policy and detail priority actions. It will also be accompanied by an implementation and evaluation plan. The first of three strategies, it outlines priority actions to achieve the intended outcomes of the Policy. As the first strategy, it lays the foundations for the subsequent strategies.

Coastal and Marine Management Plans

Under the new Act, Coastal and Marine Management Plans are one of the management tools used to guide coastal and marine management and are intended to translate the marine and coastal policy and strategy to on-ground actions.

1.2 State policy context

Integration of the Policy context with coastal and marine management and planning is complex. Legislation, policies, guidelines, plans, strategies and assessments from Commonwealth, State, regional and local government levels evolve and interact with each other. A summary of key documents that relate to managing coastal and marine areas in Kingston's Local Government Area (LGA), and in particular this CMMP, is provided in Attachment B. This includes the 2009 and 2014 coastal management plans (predecessors of this CMMP) and strategies for open space, biodiversity and climate change.

Victoria's marine and coastal reforms focus on managing the health of marine and coastal environments and on increasing the resilience of our ecosystems, communities and built assets, through improving and refining our management, interaction and use of our marine and coastal environments. Kingston Council's planning, management and decision-making approach looks to align closely with the Marine and Coastal (MAC) Policy (2020). The Planning and Decision Pathway from the Marine and Coastal Policy (2020) (Figure 2) shows how the objectives and guiding principles of the Act should be used in decision making in the marine and coastal environment.

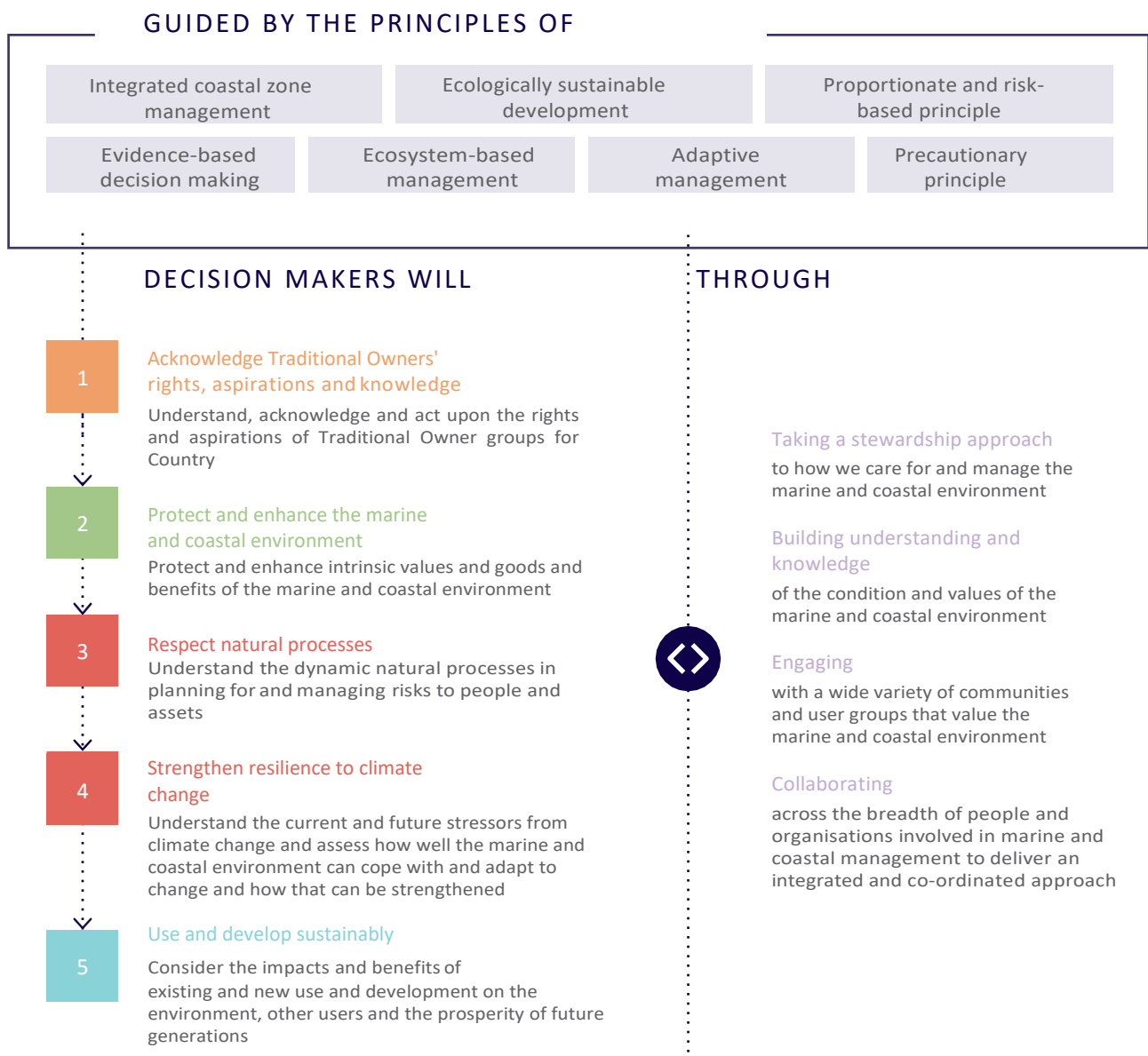


Figure 2. The Planning and Decision Pathway sets out how the guiding principles and policy must be considered in decision making (Source: DELWP 2020).

The integrated nature of marine and coastal environments means management must be holistic, informed by the science ('evidence-based') and consider potential current and future risks. This includes the interaction of changing conditions, such as natural hazards, climate change and population growth with our ecosystems and communities.

Several key pieces of work are currently being undertaken by DELWP that will inform and shape Kingston's ongoing management approach.

- **Port Phillip Bay coastal hazard assessment:** A bay-wide coastal hazard assessment aims to increase understanding of potential current and future coastal hazards around Port Phillip Bay, and their possible implications on our marine and coastal areas. A coordinated, bay-wide management approach is needed to enable land and marine managers, stakeholders and communities to manage and protect the health and condition of the bay, and prepare for potential emerging change and risk.
- **Victoria's Resilient Coast – Adapting for 2100+:** DELWP is also developing a state-wide approach to long-term coastal hazard resilience and adaptation, including a framework and guidelines to support local governments, land managers and communities to adapt to climate change impacts on the coast. This will include guidance for developing and implementing adaptation opportunities to increase resilience, using a pathways approach to help inform decision making, planning, triggers and timing of actions.

Kingston's CMMP aligns with and builds upon the directions in the Marine and Coastal Policy (2020) and its guiding principles, preparing for integrating its management with the state-wide approach to hazard adaptation and sustainable marine and coastal management.

Kingston will also develop more detailed coastal adaptation planning following the delivery of the Port Phillip Bay coastal hazard assessment and the Victoria's Resilient Coast framework. This planning will respect natural coastal processes and apply an adaptation pathways approach to manage hazard risk. Options will be considered in the following order: non-intervention, avoid, nature-based methods, accommodate, retreat, and protect.



Chelsea Beach

1.3 CMMP framework

The CMMP sets the strategic direction for Kingston's marine and coastal management for the next 5-10 years and is to be reviewed after five years. The framework for the plan, including the vision and objectives, has been informed by community and stakeholder perspectives, reflecting their expectations and aspirations for the Kingston coastline. It also draws on the experience of past management plans. Summaries of key engagement activities with stakeholders and the community are available in Attachment A.

The proposed vision for Kingston's coastal and marine areas is:

Vision

To protect, enhance and care for Kingston's coastal and marine areas, increasing our resilience and providing enjoyment and inspiration for present and future generations.

The intent of this vision can be defined as:

Protect, enhance and care for	<p>Management and decision making of Council and stakeholder agencies influences environmental, social, cultural, recreational, and economic benefits of the Kingston coastal and marine areas.</p> <p>Considered management provides opportunities to protect, enhance and care for:</p> <ul style="list-style-type: none"> • environmental health • facilities and amenity • sense of place, culture and history • access and connectivity • community connection
Kingston's coastal and marine areas	<p>The CMMP takes a 'catchment through to coast' perspective, acknowledging the potential for upstream and inland processes to influence downstream coastal and marine areas, in particular Port Phillip Bay. Kingston's coastline covers 13 km, from Charman Road, Mentone in the north, to Osprey Lane, Carrum in the south. The coastal and marine environment extends across nearshore marine areas and inland, up estuaries and into our catchments.</p>
Increasing our resilience	<p>The ability of our coastal and marine areas, including our communities and ecosystems, to withstand and thrive, despite pressures and future changes. These changes might include natural hazards such as coastal erosion, climate change impacts such as sea level rise, and population growth.</p>
Enjoyment and inspiration	<p>Our coastal and marine areas are enjoyed and act to inspire in a wide range of ways. This emphasises the importance of balancing the diversity of perspectives, interests and values in management approaches and decision making.</p>
Present and future generations	<p>This includes addressing the needs and concerns of present and future generations of residents, visitors and all users of the Kingston coastal and marine areas.</p>

Using state policy as the foundation, objectives for managing Kingston’s coastal and marine areas have been shaped through discussions with council, agency and community stakeholders. These objectives cover the intended timeframe of the Marine and Coastal Policy (10-15 years) and are the **long-term objectives** for the Kingston CMMP (Figure 3).



Figure 3. Long-term objectives for CMMP.

The values, concerns, and opportunities analysis (Section 3) considers each objective for the Kingston local government area and its community. These objectives are to be realised through the implementation of short-term actions and projects guided by a range of medium-term goals. These are described further in Section 5.

Under the *Marine and Coastal Act 2018*, CMMPs must be reviewed five years after commencement. Monitoring, evaluation, and review will play an important role in tracking the progress of CMMP implementation, success of the plan and identifying opportunities for refinement.



Mordialloc Beach

2 Kingston



2.1 Background

Located on the north-eastern side of Port Phillip Bay, the City of Kingston coastline extends for approximately 13 km, from the suburb of Mentone in the north, to Carrum in the south.

The first custodians

This coastal region is recognised as land of the Bunurong Peoples. Historically, the coastal zone, water bodies (Carrum Carrum Swamp) and water courses (including what is now known as Mordialloc Creek) were important food sources for the Bunurong People. Artifacts such as middens and scar trees have been found along the foreshore and creek systems.

Although the land and seascape has experienced significant change, especially since European settlement, the Bunurong Traditional Owners continue to have a strong connection to Country. They have, and will continue to play an important role in management of land, water, and the natural landscape, and have been managing sites of significance within the region for many years.











Present day management

Today, management of the foreshore is a shared responsibility between the City of Kingston and other agencies including DELWP, Parks Victoria, Melbourne Water, and other stakeholders, including the Bunurong Traditional Owners.

Table 2 and Figure 4 show the roles and public land management arrangements for the Kingston LGA. Strong collaboration between all stakeholders will be important in successfully managing the coastal and marine areas of Kingston and in achieving the objectives of the CMMP.

A significant proportion of Kingston's coastline is the management responsibility of Council, as the Committee of Management (CoM) for the crown land foreshore. Management of these Crown land reserves is to be in accordance with the Crown Land (Reserves) Act 1978 (CLRA).

Table 2. Land managers and other key stakeholders.

Agency	Role
 Environment, Land, Water and Planning	<p>The Department of Environment, Land, Water and Planning (DELWP) is responsible for overseeing management of Crown land and marine areas for its environmental, conservation and recreational values. DELWP recently reformed coastal and marine management with the new <i>Marine and Coastal Act 2018</i> and associated Policy and Strategy, which replaces the previous <i>Coastal Management Act 1995</i>.</p>
	<p>Kingston City Council has multiple roles in managing the coastal and marine environment. Council is the Committee of Management for large portions of coastal Crown land, administers the Kingston Planning Scheme and manages Council-owned foreshore infrastructure.</p>
	<p>Parks Victoria (PV) is the State government agency responsible for the management of protected areas of land and marine parks and reserves. Parks Victoria is the port and waterway manager for Port Phillip and Western Port (excluding the commercial port waters), responsible for safe navigation (boating and swimming zones, aids to navigation), moorings and berths, public piers and jetties, dredging and some other coastal reserves. This includes Mordialloc Pier, Patterson River Launching Way, and maintenance dredging activities at Mordialloc Creek and Patterson River.</p>
	<p>Melbourne Water (MW) is a statutory authority owned by the Victorian Government that manages and protects Melbourne's major water resources. Melbourne Water has responsibilities with respect to managing water quality, drainage and flooding. Melbourne Water owns and maintains major water, sewer and drainage infrastructure within the City of Kingston, including drainage reserves and outlets.</p>
Traditional Owners 	<p>Previously a contested area, the entire City of Kingston LGA has recently been formally designated as being within the Registered Aboriginal Party (RAP) boundaries of the Bunurong Land Council Aboriginal Corporation.</p> <p>Bunurong Land Council Aboriginal Corporation (BLCAC) is a Traditional Owner organisation that represents the Bunurong people of the South-Eastern Kulin Nation.</p>
Bay Watch Committee	<p>The Bay Watch Committee was made up of Councillors, local members of Parliament, relevant state agency staff, and community representatives. This Committee was specifically created to contribute to the development of Kingston's CMMP and will dissolve upon its adoption by Council.</p>
	<p>The Association of Bayside Municipalities (ABM) is an unincorporated association of the councils that have frontage to, and are affected by the tidal influences of, Port Phillip Bay. The ABM is the key representative of local government in relation to the sustainable management and health of Port Phillip Bay. The ABM approaches matters on a regional basis and is a forum for information exchange, advocacy, and collaboration to achieve integrated "whole-of-bay" outcomes.</p>
	<p>Better Boating Victoria (BBV) is a division within the Victorian Fisheries Authority, first established within the Department of Transport in March 2019. They oversee the implementation of boating reforms and the Victorian Government's investment in boating infrastructure and facilities. This includes upgrading boat ramps and reviewing management arrangements for boating infrastructure.</p>
 Environment Protection Authority Victoria	<p>Environment Protection Authority Victoria (EPA) is Victoria's environmental regulator. They are an independent statutory authority, established in 1971 under the <i>Environment Protection Act 1970</i>. A new Environmental Protection Act comes into effect on 1 July 2021. The EPA's role is to protect human health and the environment by reducing harmful effects of pollution and waste.</p>
	<p>Level Crossing Removal Project (LXRP) was established by the Victorian Government to oversee one of the largest rail infrastructure projects in the state's history. There are recent and upcoming upgrades happening to the rail network within Kingston's LGA, including redevelopment to stations used to access the coastline.</p>
	<p>Life Saving Victoria (LSV) (est. 2002) is an initiative of the Royal Life Saving Society Australia Victoria Branch (est. 1904) and Surf Life Saving Victoria (est. 1947). LSV work under the umbrella of Emergency Management Victoria (EMV) as part of the State's emergency management services and is recognised by the Victorian Government as a core agency that plays a role in delivering EMV's strategic action plan. LSV's mission is to prevent aquatic related death and injury in all Victorian communities.</p>

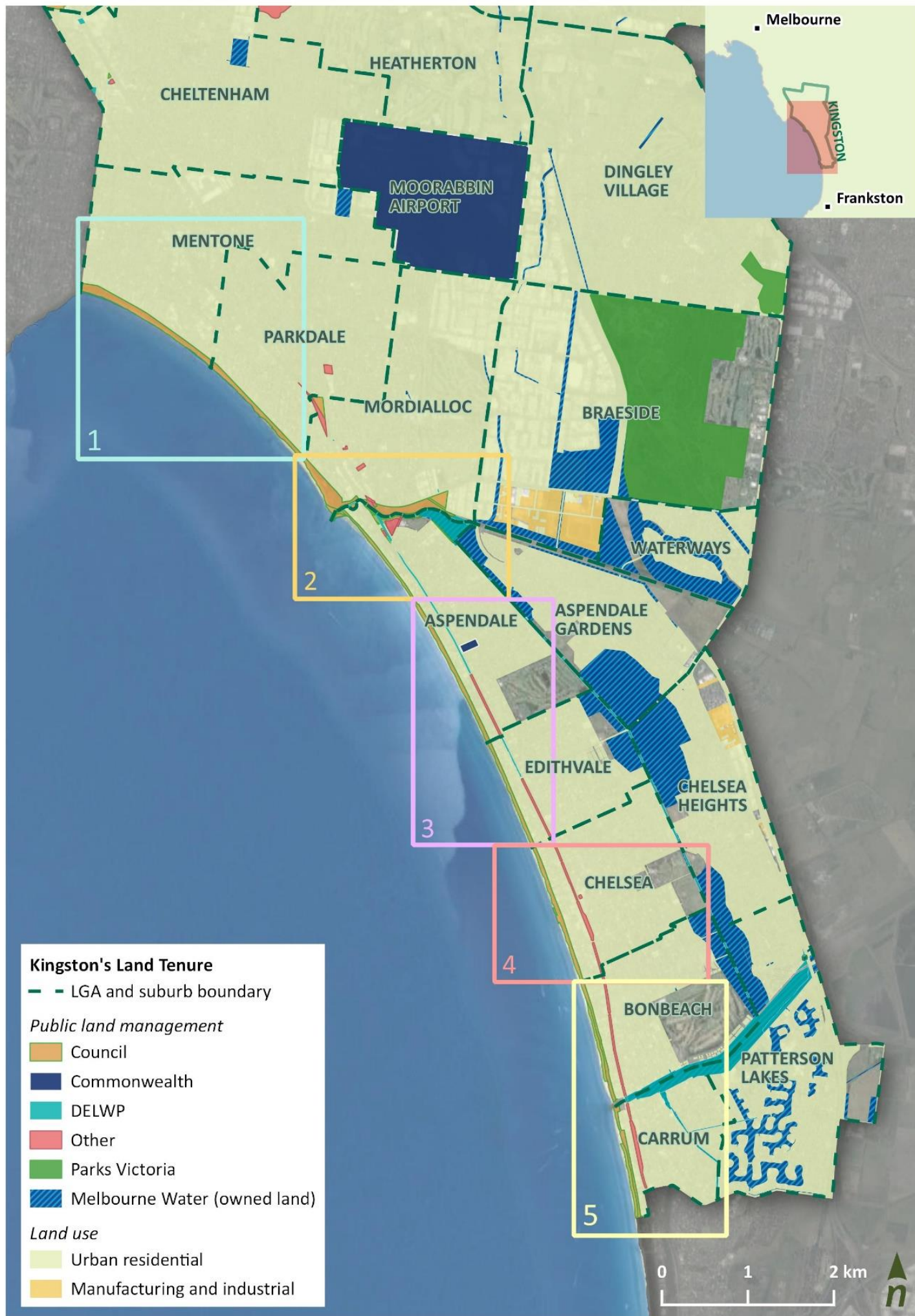
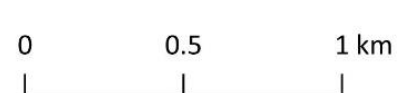
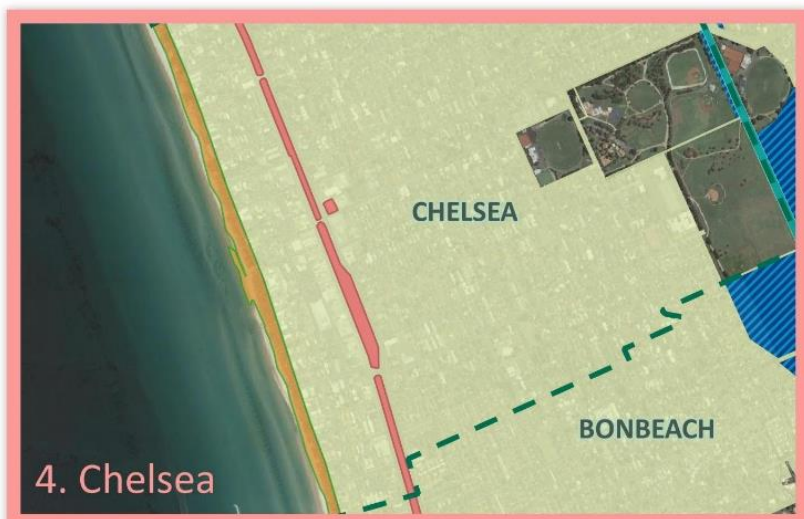
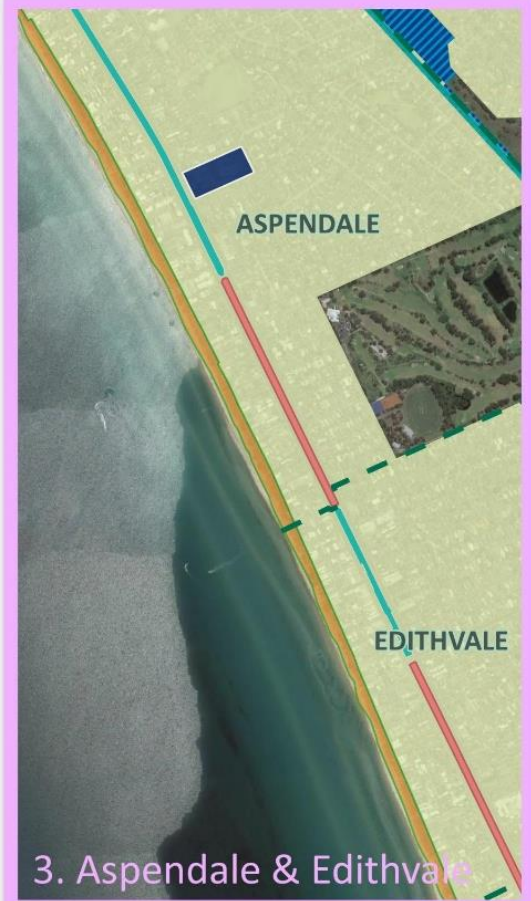


Figure 4. Public land management arrangements along the Kingston coastline.



2.2 Local government area

The City of Kingston's LGA covers around 91 km² of south-east Melbourne, approximately 15 km from the Melbourne city centre. Kingston's coastal suburbs are Mentone, Parkdale, Mordialloc, Aspendale, Edithvale, Chelsea, Bonbeach and Carrum, while Waterways, Braeside Aspendale Gardens, Chelsea Heights and Patterson Lakes are adjacent to these coastal areas (Figure 4).

Community

The LGA has an estimated population of around 167,000 people and is forecast to grow to around 198,000 by 2041 (forecast.id, 2021). Around 31% of Kingston's population were born overseas and the municipality currently has an ageing population with 23% of residents aged between 50 and 69 years of age in 2016 (profile.id, 2021). However, with new development and regeneration, this may potentially see an increase in younger demographic.

Kingston's coastal and marine areas have a wide range of stakeholders. In addition to land managers, there are various public agencies, private organisations and community groups with an interest in the coast, each with particular values, interests and concerns. Integration of the diverse range of users, activities, management actions and priorities is complex and requires a considered and clear approach.

The *Communication and Engagement Plan* (C&EP) was developed to identify those stakeholders and inform the approach to engagement throughout the development of the CMMP.

Industry and development

The region's swampy heathland was transformed into farmland by early European settlers, who ran sheep and cattle, while market gardens were also prevalent. Following the Second World War, Kingston rapidly expanded, with migration driven population increases seeing significant development of these areas and the region becoming part of Melbourne's outer suburbs.

Manufacturing has historically been important in Kingston, but emerging employment sectors include construction, accommodation and food services, health care and social assistance, and education and training. Employment is varied, with many residents commuting to other areas of Melbourne for work. Transport networks and access are seen as key drivers for the success of the local economy.

The coastal and marine areas, particularly Kingston's iconic foreshore and vital waterways, provide a diverse range of commercial, development, business and tourism opportunities for residents and visitors.

Land use

Land use in the Kingston LGA is largely residential and industrial, with some large areas of open space. Major industrial nodes are located around Moorabbin, Braeside, and Clayton South. There are also significant retail areas around Southland Shopping Centre and Moorabbin DFO.

Transport and connectivity

The Mornington Peninsula Freeway runs through and along the boundary of the Kingston LGA, with the Nepean Highway, Beach Road, Moorabbin Airport and Frankston and Dandenong railway lines providing further transport links.

A range of major expansion and upgrade works are currently being undertaken on several of these transport networks. The Level Crossing Removal Project (LXRP) is seeing the major redevelopment and relocation of several stations on the Frankston line (Edithvale and Bonbeach), while the Suburban Rail Loop link, with a station proposed at Cheltenham, will improve connectivity to and from the region. The Mordialloc Freeway construction will provide a link between the Mornington Peninsula Freeway and the Dingley Bypass.

As key transport linkages to Kingston's coastal areas, these major changes have the potential to change local and regional movement patterns and accessibility to the coastline. Facilities, including access and parking, may need to be upgraded to accommodate these transport network changes.

The shared trail networks also provides important connectivity for this coast.

2.3 Environmental setting

Kingston's coastline extends approximately 13 km, from Mentone through to south of Carrum.

Landscapes and seascapes

Port Phillip Bay formed at the end of the last ice age, when rising sea levels flooded what was previously the lower reaches of the Yarra River. Prior to European settlement, Kingston was a coastal saltmarsh and swampy area with coastal scrub woodlands and grassy wetlands. These wetlands included the Carrum Carrum Swamp, which stretched from Mordialloc to Frankston, and was bound by the coastal dunes.

A major change to the region's landscape resulted from the draining of Carrum Carrum Swamp in 1879 for grazing and housing. The swamp was drained by cutting through the sand dunes, creating the current Patterson River outlet. Edithvale Wetlands is one of two wetland areas that remain from the original Carrum Carrum Swamp, comprising of open freshwater marsh and shallow freshwater marsh, sustaining sensitive flora and fauna, particularly significant and diverse birdlife, as well as providing flood mitigation.

The present-day coastline includes sandy beaches, recreational parks and reserves and major waterways and drainage outlets. Although there are still significant ecological assets, including the Edithvale Wetlands Ramsar site, native vegetation along the foreshore itself is limited to a thin strip with some sporadic pockets. The dune systems and coastal reserves retain high-value flora and fauna, which may be threatened by high recreational and commercial demand for foreshore areas, along with perceived impacts on aesthetic values.



Looking north-west towards Mordialloc Pier

Coastal processes

Kingston's coastline is characterised as a swell-sheltered tidal embayment shore with narrow sandy beaches, backed by mostly soft-rock materials (NCCARF, 2017). The dominant features of the City of Kingston coast are the mostly unbroken, sandy beach, much of which is backed by dune ridges parallel to the coastline. This narrow dune system, vegetated in grasses, scrub or woodland, including small pockets of remnant vegetation, represents a relatively thin buffer between the sea and developed land. The estuaries of Mordialloc Creek and Patterson River intersect the coastline. There are rocky areas (classified as infralittoral rock) in shallow, subtidal areas at Mordialloc and Parkdale.

Sand movement along this coast has some seasonal variation (tending northward during calmer, summer periods and southward in the winter), with wind and wave action driving a net migration of sand in a southerly direction. Physical barriers, including engineered structures and waterways, impact upon longshore transport process, trapping sand at some locations. The northern beaches such as at Mentone are generally narrowing over time, while beaches north of physical barriers (e.g. Mordialloc Pier) tend to widen (Bird, 2011).

Generally, northern coastal areas are higher in elevation than the south, and rocky headlands around Beaumaris provide some protection to these northern areas from northern and westerly prevailing winds. Beaches in the south have been assessed as being more vulnerable to coastal erosion, and also experience greater loss of sand and significant erosion scarps following storm events (Cardno, 2016, 2017).

The elevation of Kingston's dune system helps to limit coastal flooding in nearshore areas. However, some low-lying areas further inland, particularly in the south, will likely be increasingly exposed to coastal flooding at high-tide, in storm tide events, and with rising sea levels in the longer term. Mordialloc Creek, Patterson River and parts of the drainage network provide flow paths for flooding to reach these low lying, inland areas.



Erosion in front of Carrum Surf Life Saving Club

Changing climate for Kingston's coast

Changing climate conditions anticipate rising sea levels, more intensive riverine flooding, changes in wave action, increases in swell energy and storm tide events and ocean acidification. Based on Intergovernmental Panel on Climate Change (IPCC) projections, by 2100, global sea levels are projected to increase between 0.6 m and 1.1 m above 1986-2005 baseline levels, under a high emission scenario; with a global average increase of approximately 0.8 m. For the Kingston region, sea levels are estimated to rise by almost 0.7 m above the baseline by 2100 (CoastAdapt, 2017).

These changes in climate will likely influence storm tide extents (inundation areas), shoreline position and response, magnitude of storm events and resulting sand loss off beaches, as well as changes in shoreline recovery (beaches rebuilding during calmer conditions). The existing stormwater network and its outfalls within coastal zone, will likely be impacted by rising sea levels, reducing drainage efficacy and high intensity rainfalls will put pressure on the capacity of the broader network, including at the foreshore.

The Port Phillip Bay Coastal Hazard Assessment (PPBCHA) is currently being undertaken, which will help Kingston to better understand their projected coastal hazards at a local scale and identify vulnerabilities of their foreshore in being able to withstand current and future hazards. Improved understanding of potential coastal hazard risks, opportunities for adaptation, and future-focused planning and decision making enables improved preparedness to respond and recover following hazard events (such as erosion and flooding).

More broadly across the LGA, rising temperatures, hotter days and heatwave events further highlight the impacts urban heating, and the importance of 'green' and 'blue' spaces within and near to our urbanised areas. This emphasises the value of our coastal and marine environments in helping with urban cooling and respite during heat waves.

Council is striving to leave a positive legacy for future generations through addressing climate change. Declaring a climate and ecological emergency, they have made a commitment towards limiting global warming. Council has adopted its own Climate and Ecological Emergency Response Plan, which includes a range of initiatives and pledges for emissions reductions via mitigation measures. They are also actively encouraging the Kingston community to take positive action.

Coastal and marine management

The now urbanised coastline is a heavily modified environment. The legacy of a range of historical and present-day coastal management and engineering decisions can be seen along this coastline. Masonry, concrete seawalls and promenades, rock revetments, rock armouring around coastal infrastructure and geofabric bag protection structures have been and are still used to manage coastal erosion processes and mitigate flooding impacts. Renourishment and active sand management (i.e. artificially moving sand along the beach) has been happening since late 1970s, including at Mentone, Parkdale and Aspendale. Conservation efforts such as vegetation and weed management and access control help to protect vital dune stabilising vegetation and habitat areas.

There is a wide variety of infrastructure and facilities that support the community to live near, enjoy and use these areas, such as stormwater assets, roads, piers, jetties, boat ramps and access, surf lifesaving clubs, recreational and sporting clubs, bathing boxes, pathways and trails.

The region's natural processes have been permanently altered and will continue to change. However, it is important that future management decisions carefully consider potential influences on these natural systems.

Shaped by previous management plans, council plans, community sentiment, recent management of these areas brings together an array of actions, led by various agencies including:

- provision, maintenance and upgrades to infrastructures and facilities
- connectivity and access improvements – roads, car parks, shared trails, walkways, beach access
- drainage and water quality improvements
- enhancement and protection of vegetation, habitat and sensitive sites
- provision of services – including surf lifesaving clubs, emergency response, event response
- coastal hazard mitigation
- beach cleaning and litter management
- zoning, signage and enforcement.



All abilities access matting at Mordialloc Lifesaving Club

3 Values, concerns and opportunities



Through discussions, workshops and online activities from mid-2020 to mid-2021, community and stakeholder perspectives have been gathered to understand key values, concerns and opportunities for Kingston's marine and coastal areas.

Kingston's coastal and marine areas are valued, used and enjoyed by the community and its visitors in a wide variety of ways, providing:

- community benefits such as open space, clean beaches, good air and water quality, natural beauty and views, peace, and serenity
- a healthy environment that supports unique and diverse ecosystems and is further enhanced by conservation initiatives
- a natural buffer between the land and the sea, that provides protection and increases our resilience to hazards
- a connection with history, character, identity and culture
- facilities, access and open space that improve recreational opportunities and promote and support healthy, active lifestyles, wellbeing and enjoyment
- commercial, development, and business opportunities.

As the coastal zone plays an important role in the lifestyle of Kingston residents and its visitors, considered strategic planning is needed to manage the increasing pressures from development and growth, a changing climate and aging and inadequate infrastructure, ensuring it remains a desirable place to live, work, and visit.

This section summarises values, concerns and opportunities for Kingston's marine and coastal areas, and has been framed around the long-term objectives of the plan, with consideration to the intended outcomes of the Marine and Coastal Policy (2020).

Objective 1: Acknowledge and act on our Traditional Owners’ rights, aspirations & knowledge

Acknowledge and act on our Traditional Owners’ rights, aspirations and knowledge



In managing our marine and coastal areas, there is the need to listen to, act upon and respect Traditional Owners’ voices and knowledge throughout planning, management and decision making.

We can support and enable our current and future generations of Traditional Owners to care for and respect Country through self-determination.

Kingston context

The region’s Indigenous history brings together a strong connection with Land, River and Sea Country for the Bunurong Traditional Owners. There are many important stories and experiences to be shared from living within this environmental setting. Rich storytelling tells of the changes in land and seascape, interactions with flora and fauna, and significant sites, from places of ritual and ceremony to activities of everyday life. It is acknowledged that European settlement significantly altered the way of life for the Bunurong Peoples and drastically modified the land and seascape. This included the draining of Carrum Carrum Swamp and associated floodplains and the channelisation of creeks.

The region’s foreshore, waterways and the swamplands were abundant food and water sources for the Bunurong Peoples. These resources included eels, fish, birds, crustaceans, molluscs and plants, such as water ribbons. There are thought to be many sites of cultural significance throughout Kingston’s coastal areas (Figure 5), many of which remain undocumented. Significant sites containing artefacts, scar trees and shell middens are located within the region, including along foreshore and waterway areas.

It is Traditional Owners who determine how their rights and obligations are embedded into planning and management of the marine and coastal environment, and how they would like to participate in its future management. There is an opportunity to learn from marine and coastal knowledge and practices of Traditional Owner groups who have managed marine and coastal areas over time. Acknowledgement and appreciation of this history allows us to draw from such knowledge in our management approaches, protecting and enhancing what has come before, enabling its continuation in the future.

Values	Concerns	Opportunities
<ul style="list-style-type: none">Places and areas of cultural sensitivitySites of cultural significance – middens, burials, etc.Connectivity along the coastlineSight lines and views of the bay and sky from the coast	<ul style="list-style-type: none">Limited opportunity for involvement in planning decisions and management of the foreshoreLimited awareness and understanding of the region’s cultural historyDisconnection between the Bunurong Traditional Owners and CountryDamage/loss of culturally significant sites	<ul style="list-style-type: none">Strengthen partnerships with the Bunurong Traditional OwnersEnable inclusion of Traditional Owner experience and knowledge in management approachProtect, promote and retain culturally significant sitesEnrich the coastal experience by connecting both Aboriginal and non-Aboriginal people with land and seaProvide opportunities for re-connection with CountryPromote access/connection along the entire coastlinePromote connection to Country, share stories through walking tours, interpretative signage, educational opportunities, etc.Indigenous art sculptures along foreshore areasExplore opportunities for an indigenous cultural centre/hub/place

*Traditional Owner context, experience and values, concerns and opportunities will continue to evolve as part of our upcoming engagement activities

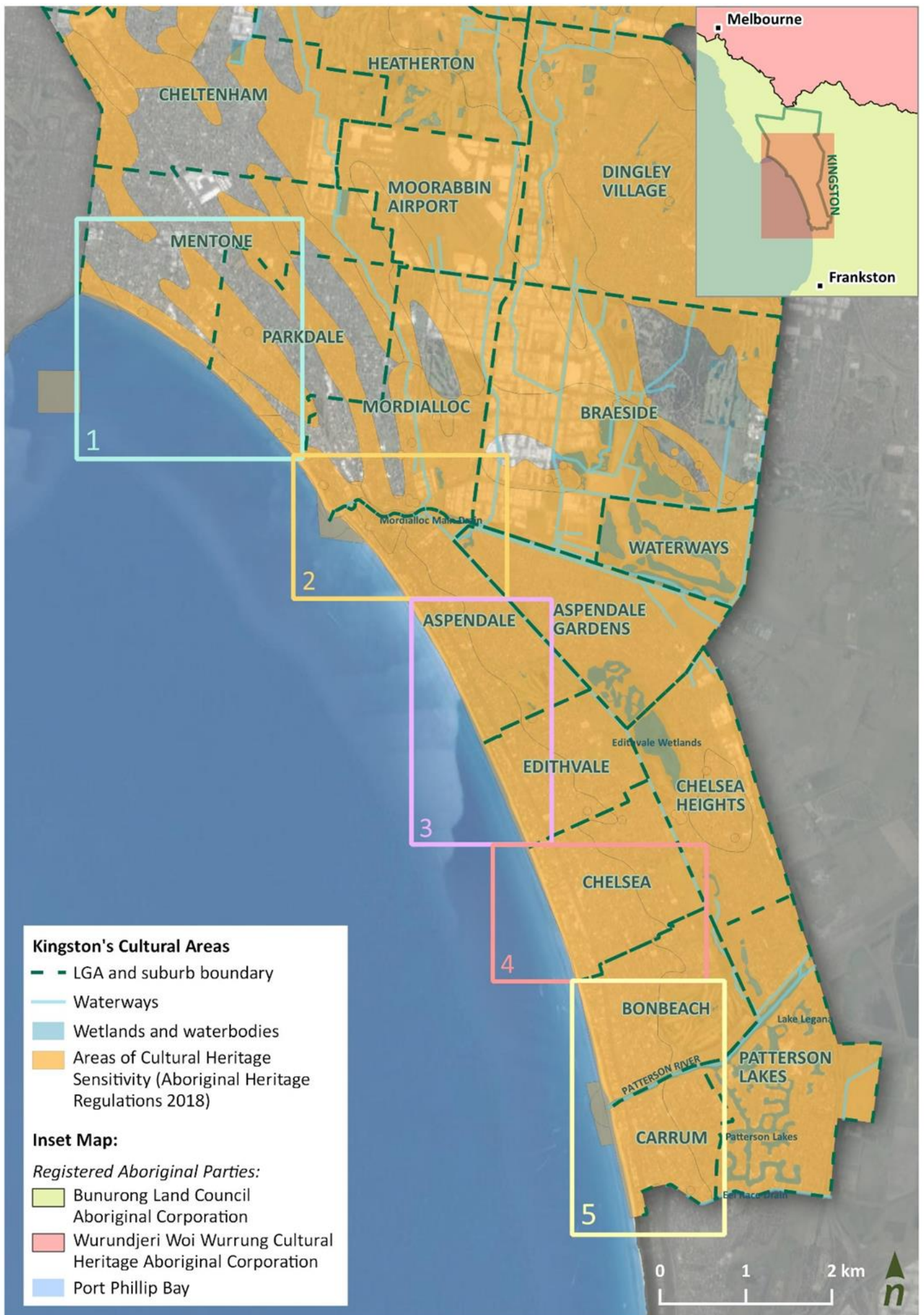
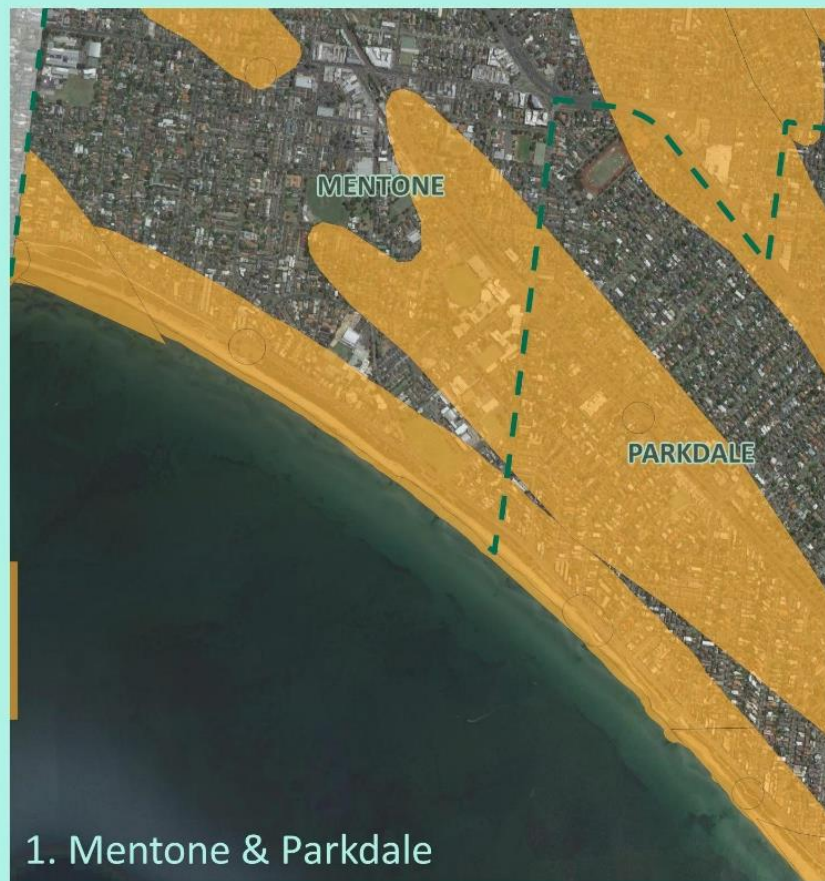


Figure 5. Areas of Cultural Heritage Sensitivity.

*We note that this map does not reflect all locations of cultural significance, and that many more are likely to exist throughout the region.



0 0.5 1 km



Objective 2: Protect and enhance the environment, from our catchments through to the Bay

Protect and enhance the environment, from our catchments through to the Bay

Protection and enhancement of our marine and coastal areas needs an integrated approach, extending from our catchment through to our coastline. It is recognised that the health, diversity, function, resilience and connectivity of important ecosystems and habitats within our landscapes and seascapes are critical to their success and survival. They have important intrinsic values along with providing essential ecosystem services for our community. These areas also hold high cultural and heritage value, tell stories and shape identities.

As we look to protect and enhance through informed, strategic management, and reflect on how we enjoy these areas, these values, natural features, natural processes and the changes that ensue must be respected. Threats and pressures, and their potential impacts on these sensitive systems, must be considered and carefully managed. Importantly, the value and benefit of our marine and coastal Crown land enjoyed by our communities should not compromise the available benefit for future generations.



Kingston context



Kingston’s coastal and marine areas, its estuaries, dune systems and coastal reserves, sustain unique and important flora and fauna communities including native and remnant vegetation, shorebirds, saltmarsh and rare and threatened species (Figure 6). The nearby Edithvale Wetlands are recognised as a Ramsar site supporting an abundance of bird and aquatic life. Rocky outcrops along with marine-based structures (i.e. jetties, rock breakwaters) provide habitat for marine life, including mussels and crustaceans, also encouraging fish and stingrays in and around these areas.

This environment is dynamic and constantly changing. While human intervention has altered the landscape, both in our catchments and along the coastline, shifts in climatic conditions are also resulting in change. The natural dune system and vegetation area vital part of the local ecosystem. They also provide a narrow, natural buffer from coastal hazards, at the interface between the land and the sea. This dune system is intersected and influenced by the estuaries of Mordialloc Creek and Patterson River. As key watercourses directing flows to the bay, the interacting upstream catchment behaviours and management also influence what happens on the coast, particularly for water quality (i.e. sediments and nutrients), litter and pollution.

The established and maturing vegetation throughout Kingston’s foreshore areas play an important role in our ecosystems, providing habitat and strengthening our dunes. However, sometimes vegetation has the potential to impact on bay views and access, and can be an issue for some local residents, resulting in tree vandalism such as illegal clearing and poisoning. Council’s current management response to such behaviour includes replacement planting, signage and education campaigns.

It is important to acknowledge the diverse range of historic and cultural experiences for the region and its foreshore areas, finding opportunities to share this knowledge with current and future generations. In addition to an extensive Indigenous history, our more recent European history is also valued by residents and visitors, including our connection to fishing, boating and access to water, our coastal lifestyle including our bathing boxes, and to other marine based industry.

The natural environment and healthy ecosystems provide many and varied benefits to humans (ecosystem services). However, environmental and human needs can also be conflicting. Management requires a holistic and balanced approach from catchment to coast, to ensure the health of Kingston’s coast and broader Port Phillip Bay is maintained. There are opportunities to find integrated and innovative ways to protect and enhance these vulnerable communities and ecosystems, while also respecting natural processes. Having access to our sandy beaches, open space, healthy and clean environments, natural beauty, and views across the bay is a crucial part of the lifestyle, health, well-being and enjoyment of our community and visitors.

Values	Concerns	Opportunities
<ul style="list-style-type: none">• Healthy and diverse ecosystems and habitats• The foreshore and creeks are key corridors, providing recreational and habitat links – Living Links Program• Natural features and landscapes, parklands, wetlands, vegetation etc.• Saltmarsh areas• Ramsar listed Edithvale Wetlands• Clean and well-preserved beaches• Rockpools and marine life (including fish, stingrays, aquatic vegetation)• Remnant Coastal Banksia Woodland• Sight lines and views (the bay and city)• Open spaces within the community; leisure centres, parks, foreshore and gardens• Fresh, clean air• Non-polluted environments• Good water quality in the catchments and bay	<ul style="list-style-type: none">• Waste management, litter, fishing waste• Poor water quality arising due to pollution, sedimentation• Saltwater intrusion of groundwater (Edithvale Wetlands)• Seaweed removal/smell• Invasive weeds and pest species, non-native species• Illegal vegetation clearance• Pollution from industry• Dune and vegetation damage due to informal access• Severe erosion scarps –beach safety and boat ramp access• Deteriorating ecosystem health and loss of marine life• Noise pollution from motors e.g. jet skis, boats, drones• Limited vegetation/trees in some places• Upstream activities impacting receiving waters, including major waterways and bay	<ul style="list-style-type: none">• Protect and enhance:<ul style="list-style-type: none">– native and remnant coastal vegetation, flora and fauna– water quality– wetlands and creeks– important ecosystems, habitat and natural ecology (marine and terrestrial)– dune systems / coastal hazard buffers• Improve:<ul style="list-style-type: none">– existing litter and waste management– stormwater management - pollutant traps (increase and prioritise maintenance)– access– vegetation cover, tree canopy and shade– erosion mitigation– existing green spaces, new planting• Communicate and/or enforce:<ul style="list-style-type: none">– illegal vegetation clearing– zoning – e.g. conservation areas, boating, fishing, dog walking• Promote/enhance interaction with and education about the natural environment• Acknowledge the value and importance of significant ecosystems and our dunes through education• Protect and retain the cultural heritage values• Engagement with other stakeholders (Melbourne Water, Councils) and upstream industry to reduce pollutants• Emissions reduction initiatives

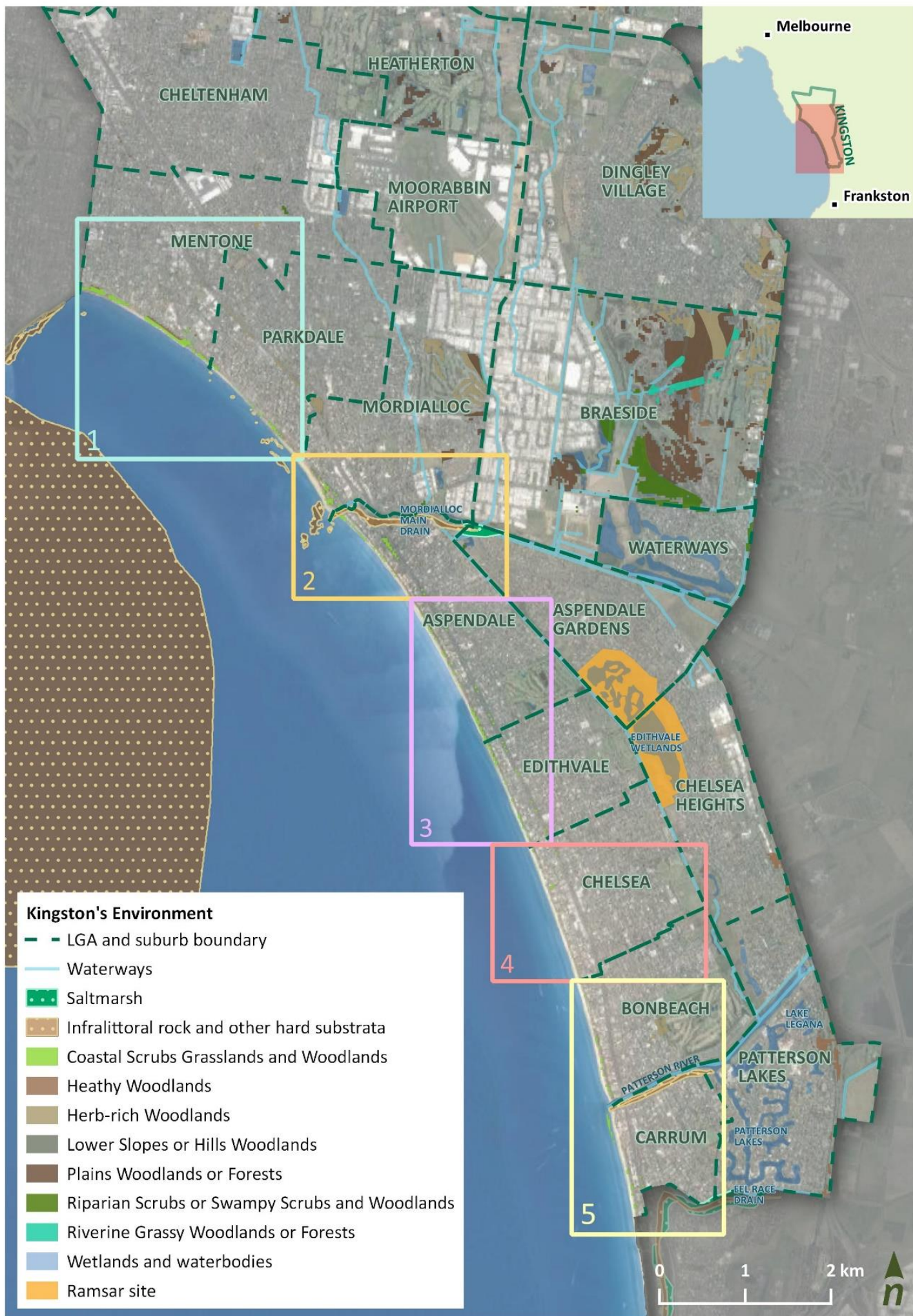
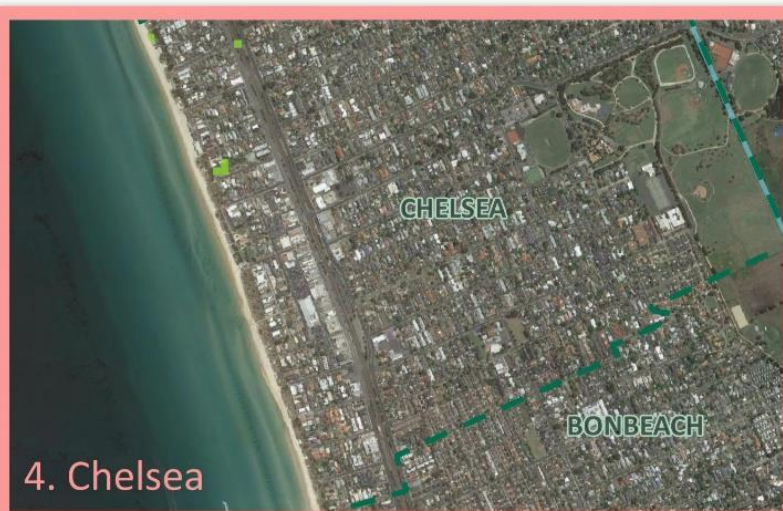
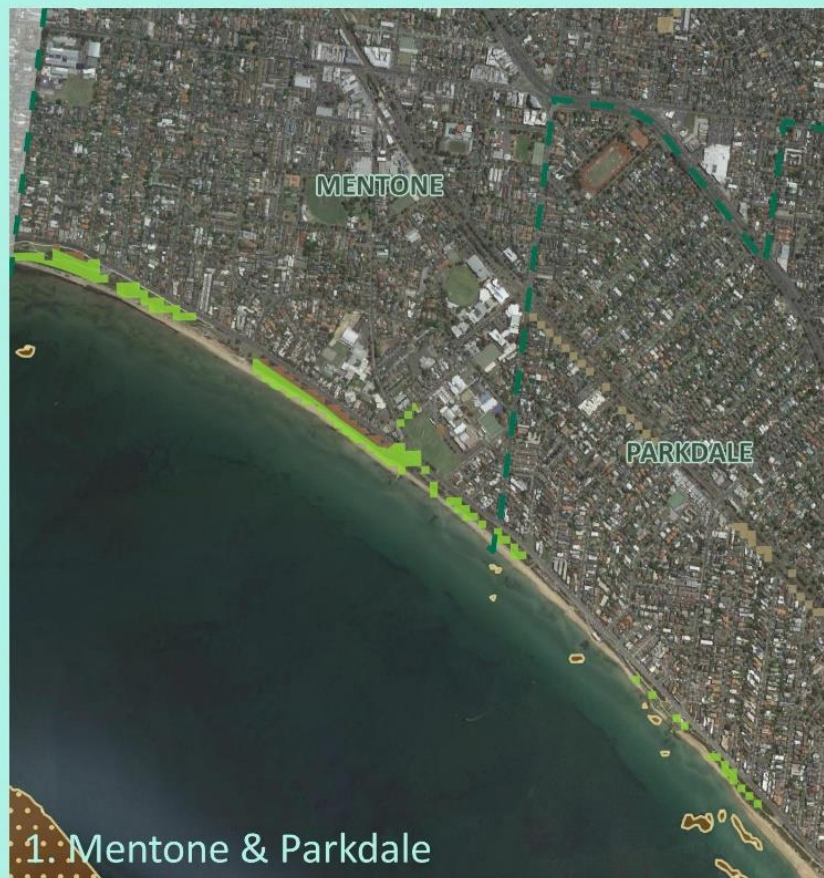


Figure 6. Ecosystems, habitats.



0 0.5 1 km



Objective 3: Respect the natural environment and proactively strengthen our resilience to a changing climate

Respect the natural environment and proactively strengthen our resilience to changing climate



Natural process of the marine and coastal environment become hazards when they impact on our social, environmental, cultural or economic values. These hazards change how we can use, interact with and enjoy the coast.

Understanding coastal hazards, risks and potential climate change impacts allows appropriate planning, management and where possible mitigation of coastal hazard impacts. Adaptation is a core component of planning in the marine and coastal environment and is used to manage uncertainty and build resilience of our marine and coastal areas, for our ecosystems, our assets and our community.

Through increasing the capability and capacity of land managers and decision makers, as well as our community, we can be more responsive to coastal hazards. Our emergency response can also be shaped to prevent or minimise consequences on human health and safety, property, the natural environment and local values, and enable recovery and reduction in future risk.

Kingston context

While proximity to the coast is one of the benefits of living in Kingston, it also means the municipality is exposed to coastal processes and the effects of climate change. A highly urbanised coastline, Kingston’s coastal zone intersects with a range of assets and infrastructure. These include seawalls, creek outlets, access points and other coastal structures, stormwater outlets, roads and footpaths, and residential and commercial assets situated within the coastal zone (Figure 7). Public and private infrastructure in these areas means only a narrow, natural buffer remains between the land and sea. The legacy of past coastal and catchment management and engineering decisions also present a challenge.

Healthy ecosystems, such as the dune system along Kingston’s coast, have an important role in the coastline’s resilience. Vegetation provides dune stability and habitat to sustain and support diverse flora and fauna. The region’s natural assets, including sensitive and significant marine and terrestrial ecosystems, are also potentially vulnerable to changing conditions, and may require management to aid adaptation.

As a coastal community, the Kingston LGA faces risk from climate change through flooding from sea level rise and storm tide inundation. Over the next ten years (by 2030), sea levels in the Kingston region are expected to rise around 0.1 m under a very high (RCP 8.5) scenario from the 1986-2005 baseline (CoastAdapt, 2017), and almost 0.7 m by 2100. The region already experiences the effects of erosion, with loss of sand from beaches resulting from storm events and sediment transport dynamics. The elevation provided by the dune system and cliffed areas of Kingston’s foreshore help to limit flooding close to the coast. However, coastal inundation via waterways and stormwater networks can potentially impact low-lying areas further inland, as well as limit the efficacy of drainage and other infrastructure for the region (i.e. paths, roads, access) (Figure 7).

Adaptation is needed to increase the resilience of our marine and coastal ecosystems, communities and built assets. Council currently works to align with the Policy, and Victoria Planning Provisions (VPP) in planning for and managing coastal hazard risk and climate change impacts. Planning is required to consider sea level rise of no less than 0.8 m by 2100, and takes into account the combined effects of tides, storm surges, coastal processes and local conditions. Improved understanding of potential coastal hazard risks, opportunities for adaptation, and future planning and decision making enables improved preparedness to respond and recover following hazard events (such as flooding and erosion). Council is working to identify vulnerabilities and inadequacies of their foreshore in being able to withstand current and future hazards. Available coastal hazard overlays are presented in Figure 8 and are soon to be updated with the Port Phillip Bay Coastal Hazard Assessment (PPBCHA).

Values	Concerns	Opportunities
<ul style="list-style-type: none">Natural coastal and riverine processes and natural areas – wetlands, sediment transport, beaches, waterways etc.Coast, wetlands and creeks providing cool areas and reducing urban heatSaltmarsh and wetlands providing green areas to absorb carbon from the atmosphereCommunity/public facilities and assets, including life saving clubsPrivate property and assetsHuman health and safetyDune system acting as a natural buffer to coastal hazards	<ul style="list-style-type: none">Sea level riseCoastal erosion impacting on valuesCoastal flooding impacting on valuesIncreasing frequency and severity of future coastal hazards and storm activitiesLimited current (up to date) understanding of local coastal hazard processes to inform planning and managementEncroaching landward and seaward pressures on narrow dune system/ natural bufferLongevity of current flood mitigation measures (levees) to withstand hazard and sea level rise predictionsCatchment impacts from coastal processes (bank erosion)Erosion impacts on usage and access (boating, recreational activities, wheelchair access)Limited monitoring and local dataGuidance/direction and funding to manage storm surges and long-term impacts of climate changeBeach renourishmentChanges/impediment of sediment supplyImpacts of changing coastal conditions on stormwater drainage network performanceCoastal acid sulphate soils	<ul style="list-style-type: none">Strengthen understanding of local coastal processesStrengthen understanding of present and emerging coastal hazardsStrengthen understanding of role our important ecosystems in our resilienceIncrease community awareness/understanding of:<ul style="list-style-type: none">changing climate and the dynamic coastal and marine environmentcurrent and possible management measuresadaptation and resilience optionsEmbed consideration of coastal hazards into decision making and designIncrease Council preparedness to respond/recover to hazard eventsIntegrate the latest hazard mapping, including Port Phillip Bay Coastal Hazard Assessment into decision making and management planningUpgrade or modify infrastructure to accommodate/withstand changing conditionsMinimise dune disturbance and maintain/enhance vegetation, to aid dune stabilisation, impacts of wave and wind erosionMaintain and enhance vegetation in catchment areas (including wetlands) to aid bank stabilisationExplore sediment management opportunities, including use of available dredge material

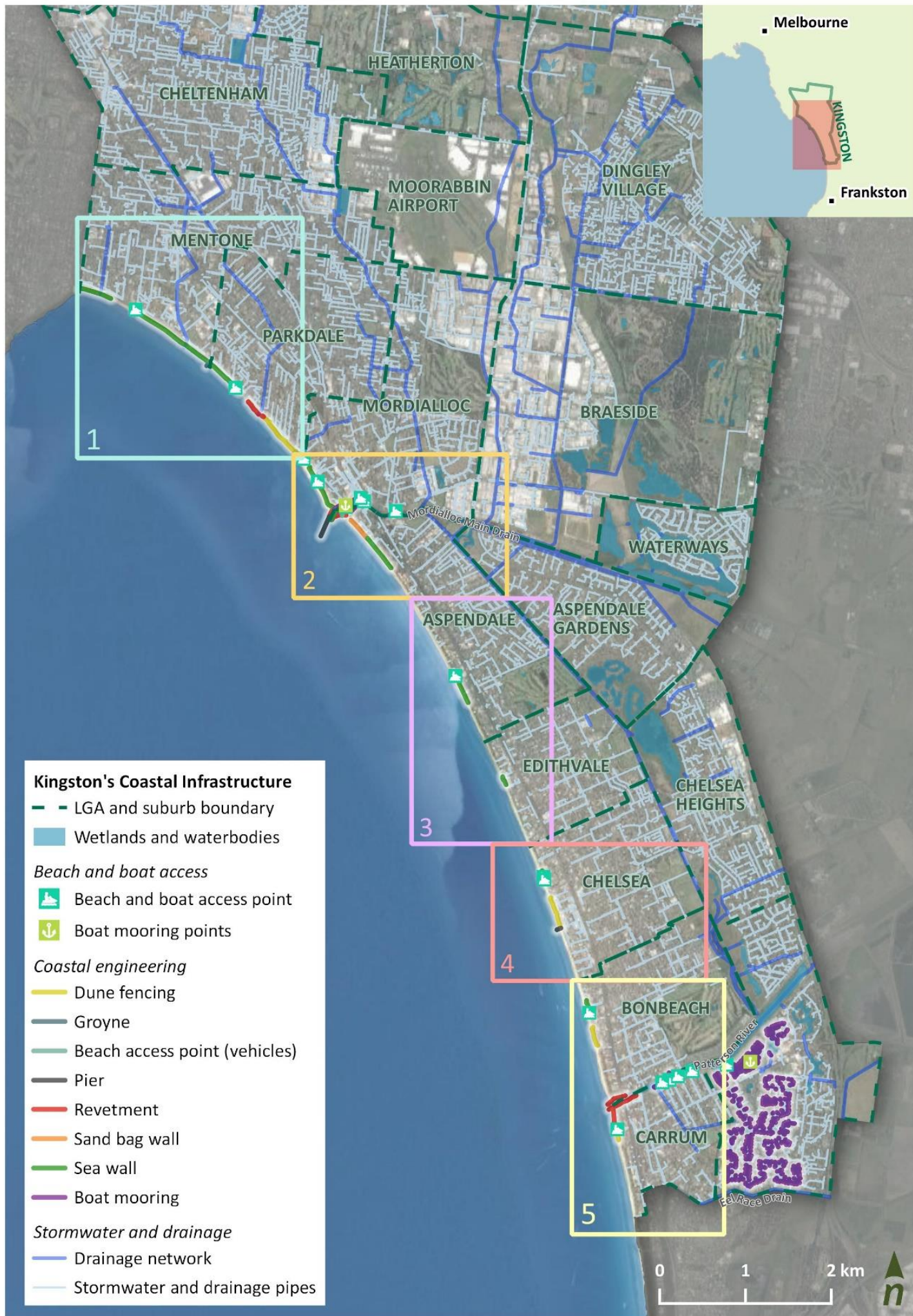
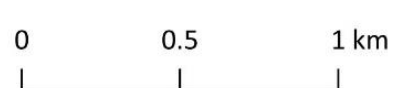
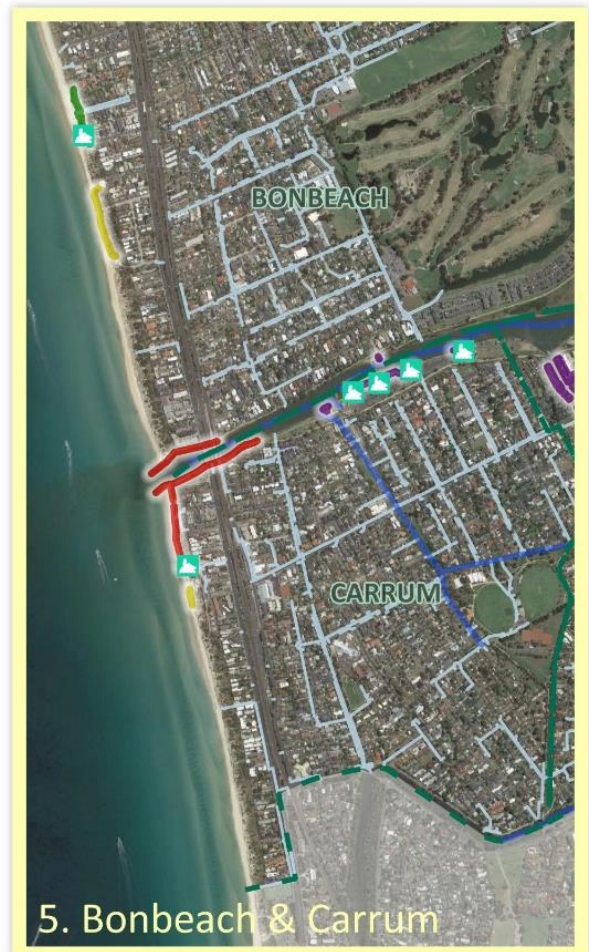
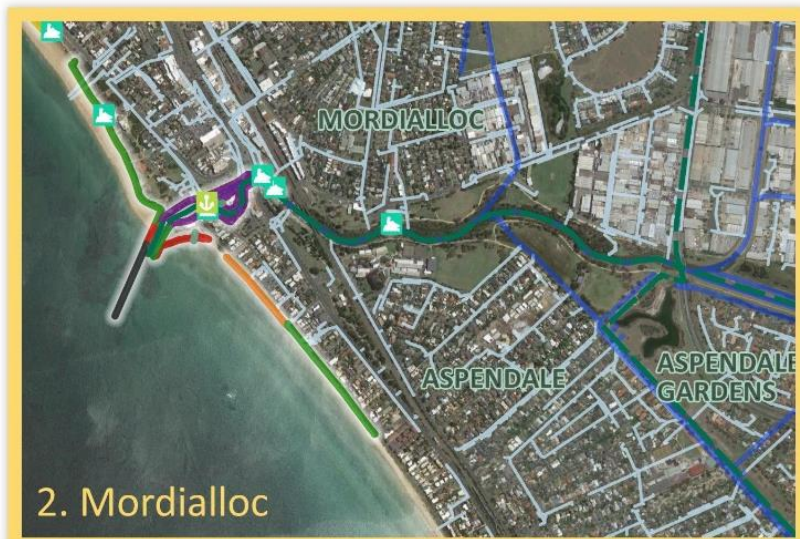
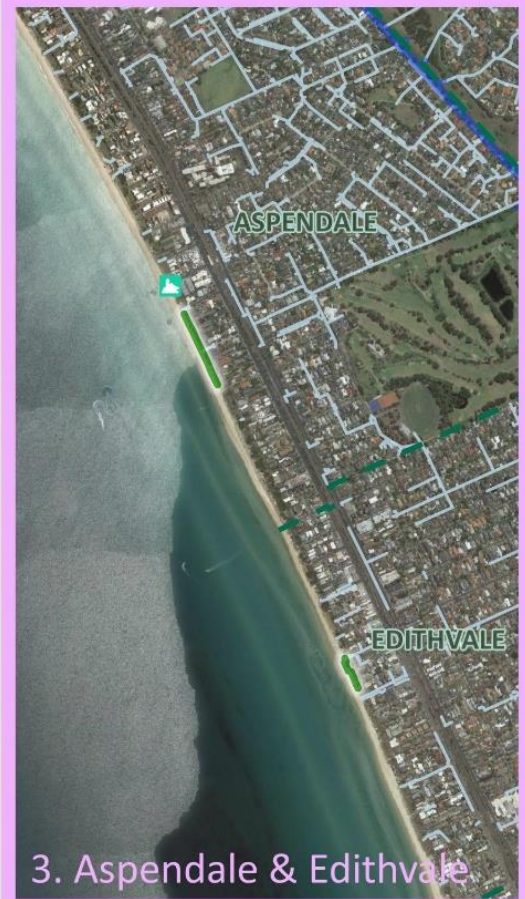
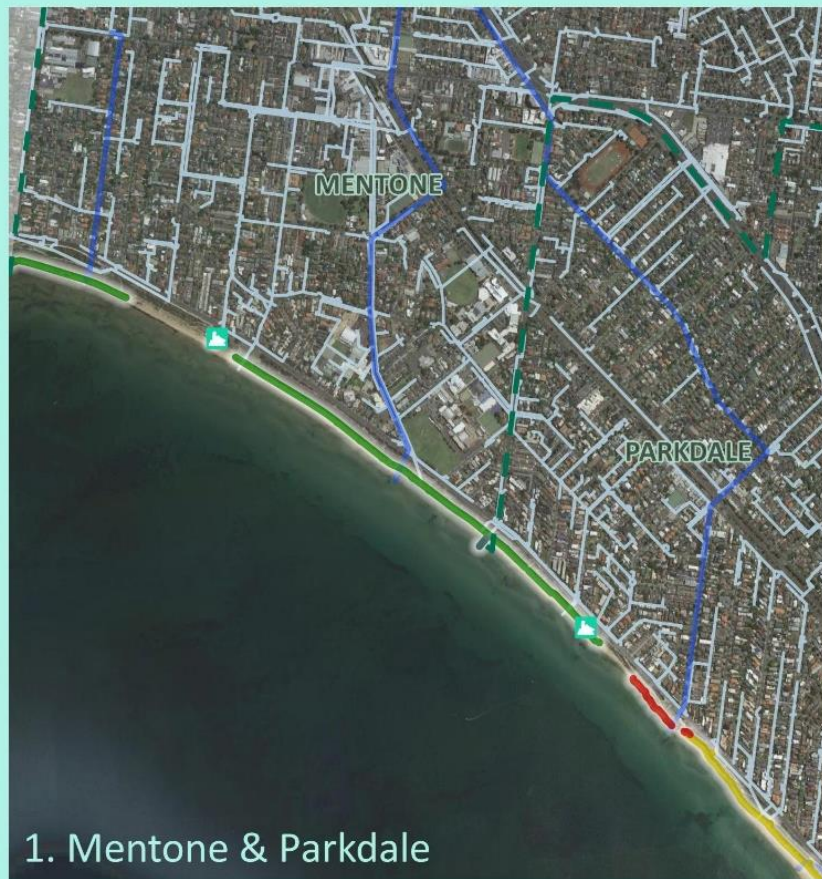


Figure 7. Coastal infrastructure.



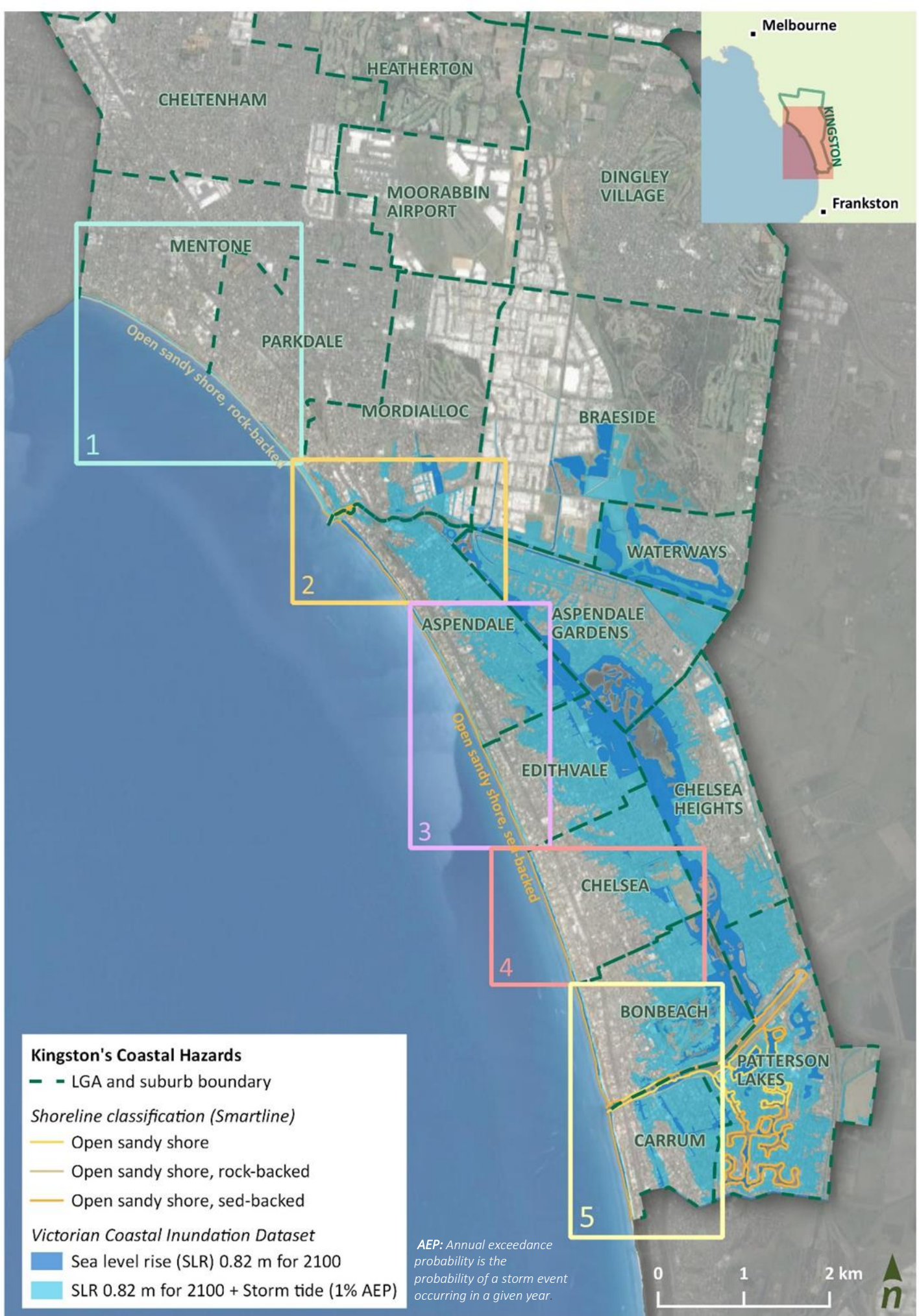
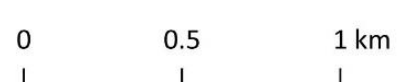
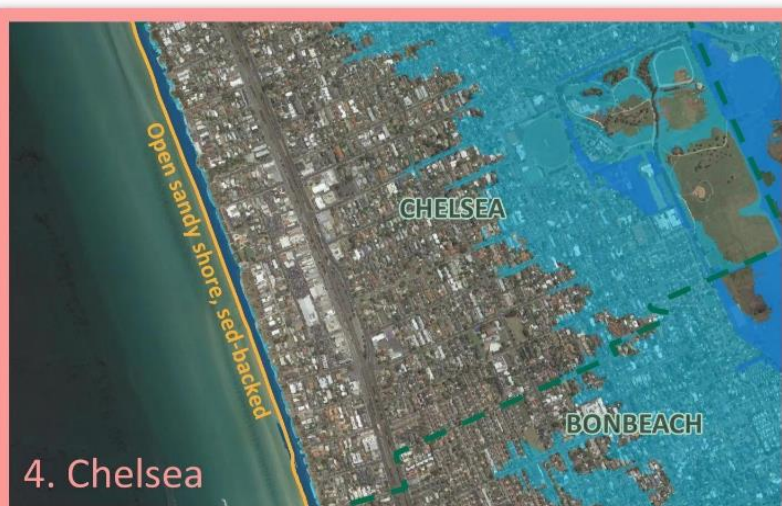
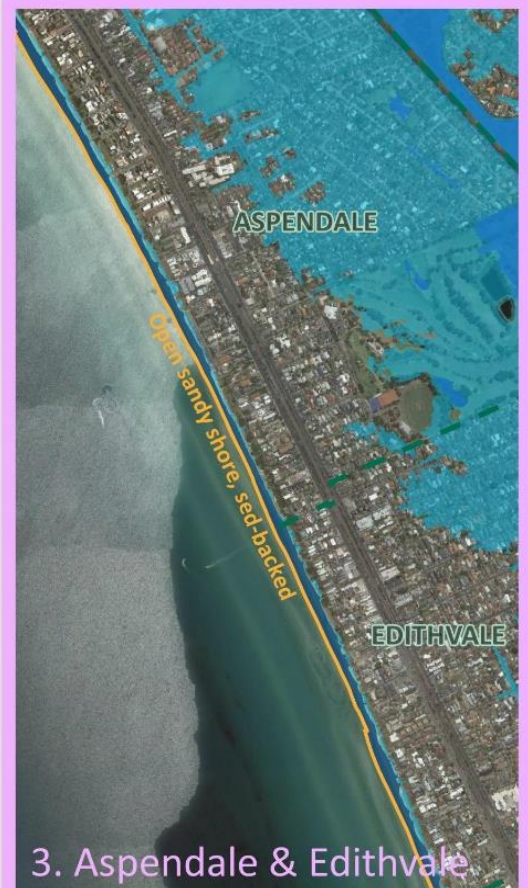
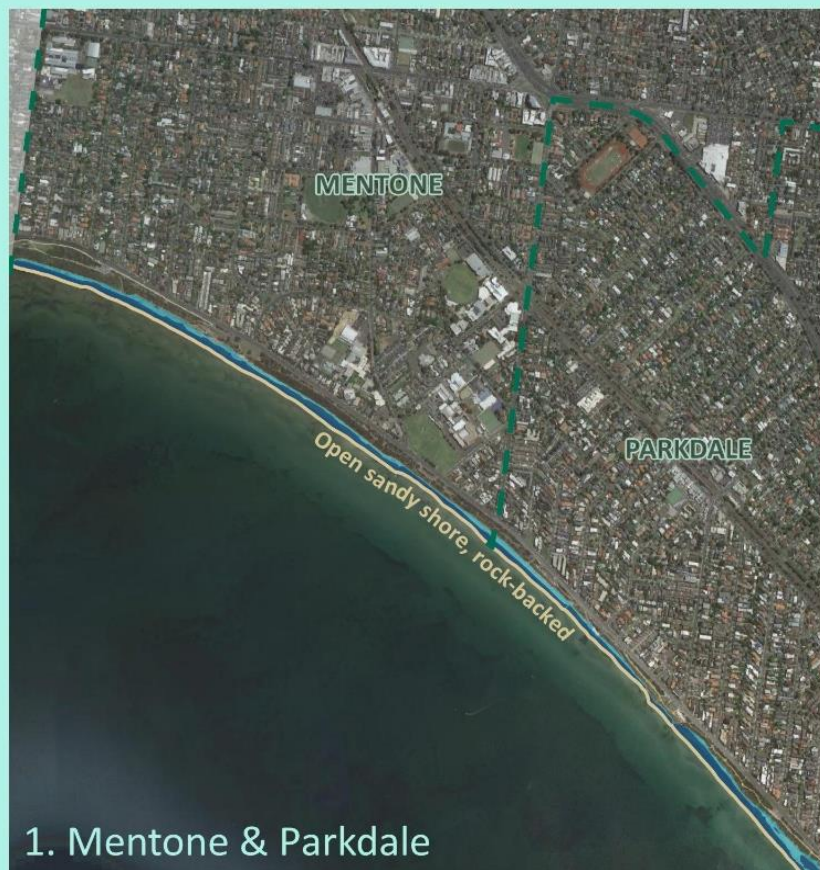


Figure 8. Available coastal hazard overlays.

Note: data to be updated with results from Port Phillip Bay Coastal Hazard Assessment.



Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future

Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future

Managing our use, interaction and enjoyment of our coastal and marine areas needs to balance a range of values, interests and demands. To ensure our coastal communities remain desirable, now and into the future, an ecologically, socially and economically sustainable approach is needed for our management of:

- coastal settlements – including residential, commercial and industrial areas. Management must recognise the importance of natural and open space, coastal character, the changing conditions of these environments, and the impacts of use, growth and urbanisation
- recreation and tourism – needs strategic planning for facilities and services to ensure they are appropriate, offer a diversity of experiences and consider public safety
- buildings, structures, and access - must consider the environmental setting, including hazards, be accordingly located and designed to minimise impacts on the environment, sensitive areas and landscape and ensure public safety. The functional need for structures located within marine and coastal areas should be carefully considered and seek opportunities for broader public benefit
- marine and coastal industries - requires a sustainable approach to protect and enhance the marine and coastal environment, to ensure the health and longevity of these ventures.



Kingston context

In addition to the natural values of Kingston’s foreshore and nearshore areas, people enjoy the recreational opportunities these areas provide. Walking, running, cycling, dog walking, swimming, fishing, wind and water sports, and boating are some of the many activities enjoyed in these areas. The coastline offers a place for people to relax, connect with nature and enjoy the coastal and marine environment. The diverse range of activities offered by the foreshore requires a balanced management approach. For dog owners, the ability to bring their dogs to the beach and have them off-leash at defined times of day is clearly a valued beach experience for parts of the community. However, it requires careful management to minimise potential impacts on the enjoyment for other beach users. Similarly, shared trails need to provide for both pedestrians and cyclists and ensure their safety.

Access and connectivity are vital in getting our community and visitors to, from and between areas of our foreshore (Figure 9). This relies on connected and well-planned transport networks throughout Kingston’s coastal zone and beyond, from shared paths and trails, roads and carparking, public transport linkages, through to all-abilities access opportunities. Recent and upcoming changes to the rail network as part of the LXP requires consideration to ensure provision of clear access thoroughfares to and from the coast. An internal access audit has also identified several locations where upgrades may be required to achieve accessibility guidelines. Mordialloc Creek and Patterson River are seen as important connections to and from the coast.

Many structures located throughout Kingston’s coastal and marine zones influence how people and the environment interact with the coast. These structures (such as pathways, seating, fences, boat ramps and walls) help to support various activities, improve amenity, and/or protect and enhance our sensitive areas. Natural areas are valued for their recreational and ecological benefits. These values are potentially threatened by continued population growth, housing demands, and limited available space. Planning scheme zones, overlays and other controls (Figure 10) need to ensure growth is carefully managed in a sustainable way.

There is a mix of publicly and privately-owned facilities, buildings and infrastructure in these areas (Figure 7 and Figure 12): from facilities (i.e. piers, jetties, and boat ramps) and buildings (i.e. houses, surf lifesaving clubs, recreation clubs, bathing boxes), to infrastructure (i.e. stormwater, amenities, roads and carparks) and coastal management and protection (i.e. seawalls, rock revetments, boardwalks and walkways, access points). In sections of the coast, settlements encroach on the foreshore, with houses directly on and behind dunes, facing onto the bay.

Some of these structures are currently and will increasingly be exposed to coastal hazards. Consideration needs to be given to the functionality, maintenance and community benefit, along with the need for buildings and structures to be located within the foreshore zone. Currently, council-managed structures undergo routine condition assessment, identifying and prioritising necessary maintenance and upgrades for delivery in operational and capital works programs. This process may need to evolve to ensure timeliness of management response and appropriate longer-term management of at-risk structures. Dredging and bank stabilisation are used to help maintain boating opportunities offered by Patterson River and Mordialloc Creek, however, the longevity of this response into the future needs to be considered.

Importantly, as we enjoy, use and benefit from Kingston’s marine and coastal environments, potential direct or indirect impacts and threats that may arise from our activities and behaviours must be considered and appropriately managed.



Values	Concerns	Opportunities
<ul style="list-style-type: none"> Cleanliness and maintenance of beaches/public places Accessible, close to home/city Boardwalks, paths, trails and cycling and pedestrian linkages along/to the coastline Safe and reliable public foreshore access for all users Safe access points for creeks and estuaries (incl. watercraft) Commercial values, shops, cafes, restaurants, markets, activity hubs Connection between water and land activities infrastructure i.e. boating zones and access Clean boating and swimming areas Support the natural values and assets, with high quality infrastructure/facilities Open space, parks and leisure areas Beaches (zones) and facilities being available for residents and their dogs, horses Atmosphere and character – farmers markets, events, parks and recreation facilities 	<ul style="list-style-type: none"> Condition, capacity and maintenance of existing infrastructure, and the increasing future demands for: <ul style="list-style-type: none"> Stormwater networks Piers/jetties, boating infrastructure Paths, walkways, steps, ramps Carparks Amenities (toilets, showers, drinking fountains) All abilities facilities Hazard mitigation Conflict with shared path users – cyclists/pedestrians – safety Conflict between watercraft, swimmers and wildlife Managing and maintaining clean dog friendly beaches – enforcement, waste management, dog attacks Public safety, antisocial behaviour, 24-hour culture over summer periods Poor street/beach lighting at some locations Stormwater outlets impacts – unsightly, water quality, scour, beach connectivity Sight lines carpark/share trail interface, impacted by vegetation - safety issues Waste management facilities and maintenance – litter, bins Foreshore development pressures – building heights, maximising views, environmental impacts Community concern for rough sleepers Increasing demands for foreshore events, festivals, commercial ventures Car parking and other transport provisions Level crossing removals and changes to beach access form public transport Balancing seasonal usage/demand fluctuations Foreshore accessibility issues, incl. people with disabilities Lack of precinct master planning Exposure, vulnerability and design challenges for foreshore building and facilities (incl. Surf Life Saving Clubs) Bathing boxes (illegal works, encroachment on public land/assets) 	<ul style="list-style-type: none"> Review and update planning schemes, planning overlays, development approvals process to ensure alignment with CMMP and understanding of coastal hazards Council-wide foreshore master planning Review and revise asset management process to improve infrastructure and its maintenance, including heritage structures Explore and implement stormwater, catchment, water quality improvement measures Examine and improve stormwater infrastructure drains and outlets Explore and include growth and demand projections in planning and decision making Review carparking, traffic/ transport planning and adequacy of facilities Update and enforce recreational area zones (boating, fishing, swimming, wind sports) Develop access management plan Maintain and improve coastal trail facilities and connectivity, sight lines, signage and enforcement Review, promote/communicate and enforce dog controls Maintain/improve/review foreshore facilities – toilets, bins, water fountains, exercise equipment, seating, tables, BBQs, etc. Review and improve existing waste management Increase signage – educational, promote connectivity to natural environment, importance of our coastal and marine ecosystems, history and culture, and help to enforce controls Consider artwork/sculptures installations (celebration/ acknowledgement of history) Promote commercial opportunities, whilst retaining character, e.g. markets, festivals, cafes, restaurants, outdoor dining etc. Review lighting, cameras to improve night safety Explore improvement opportunities to recreational facilities - incl. pontoons (for jet skis), ramps, diving platforms Explore opportunities to improve Kingston’s Life Saving Clubs and associated facilities, for use and enjoyment as multi-purpose, public benefit facilities/spaces Increase engagement and enforcement with bathing box and foreshore fronting homeowners Review and expand access to foreshore buildings



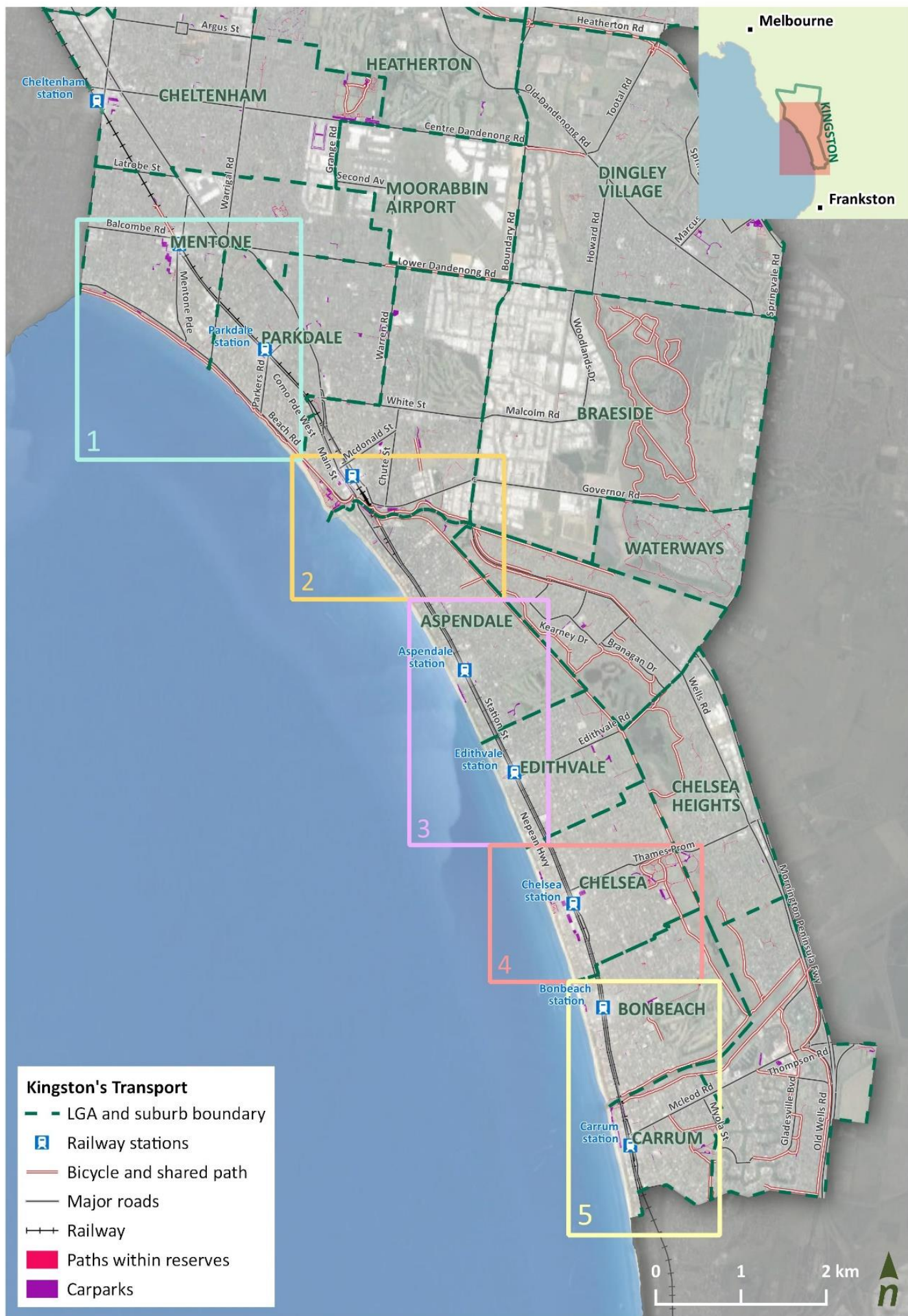
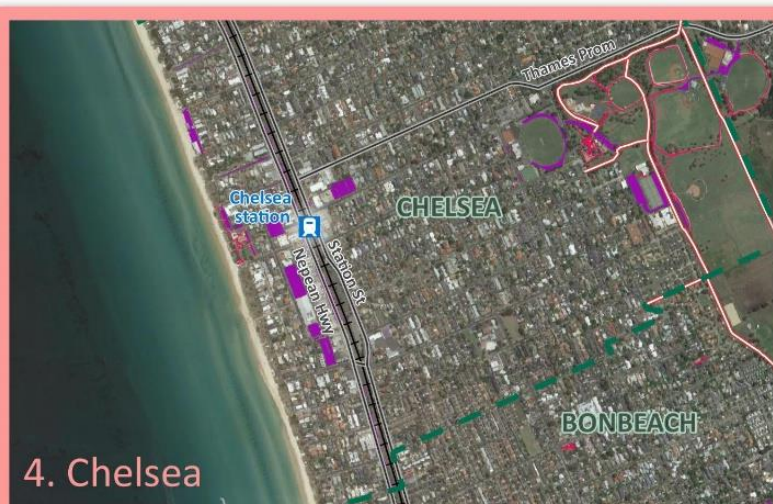
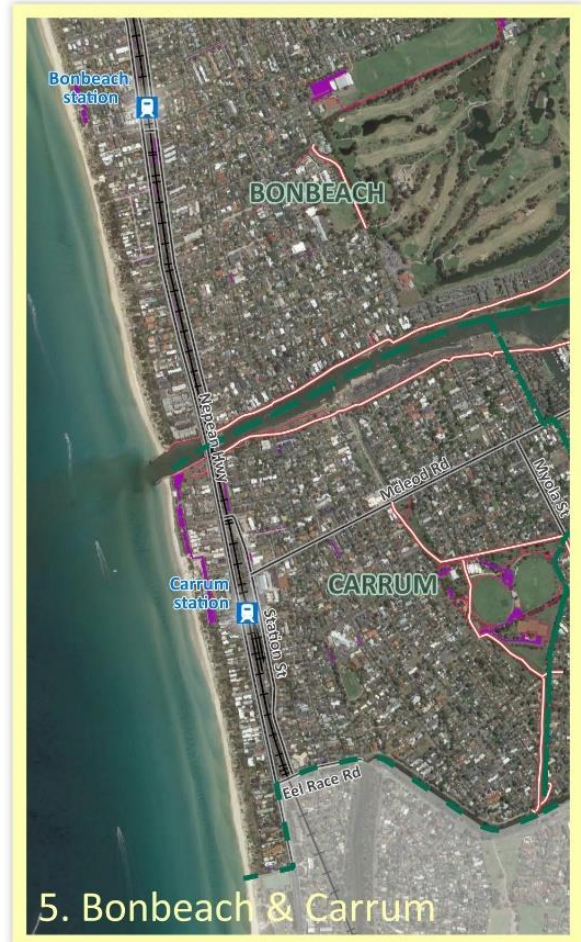
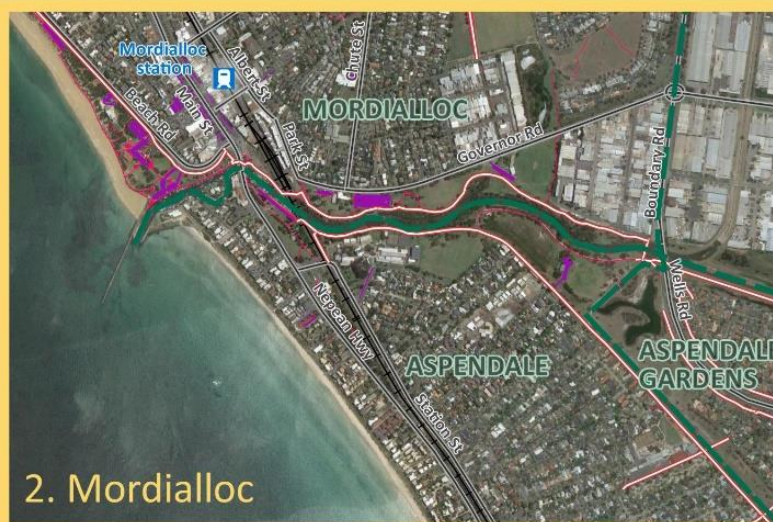
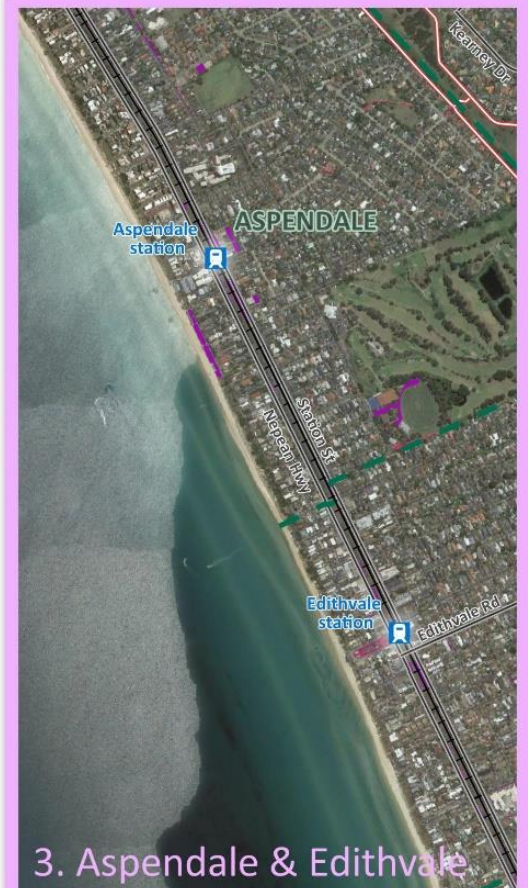
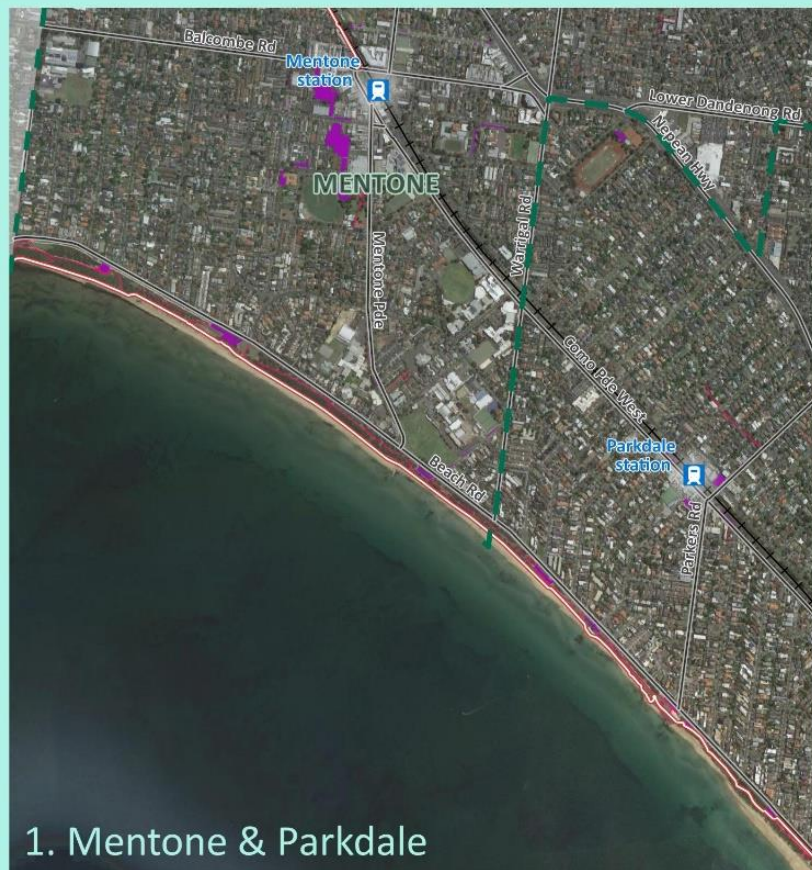


Figure 9. Transport infrastructure.



0 0.5 1 km



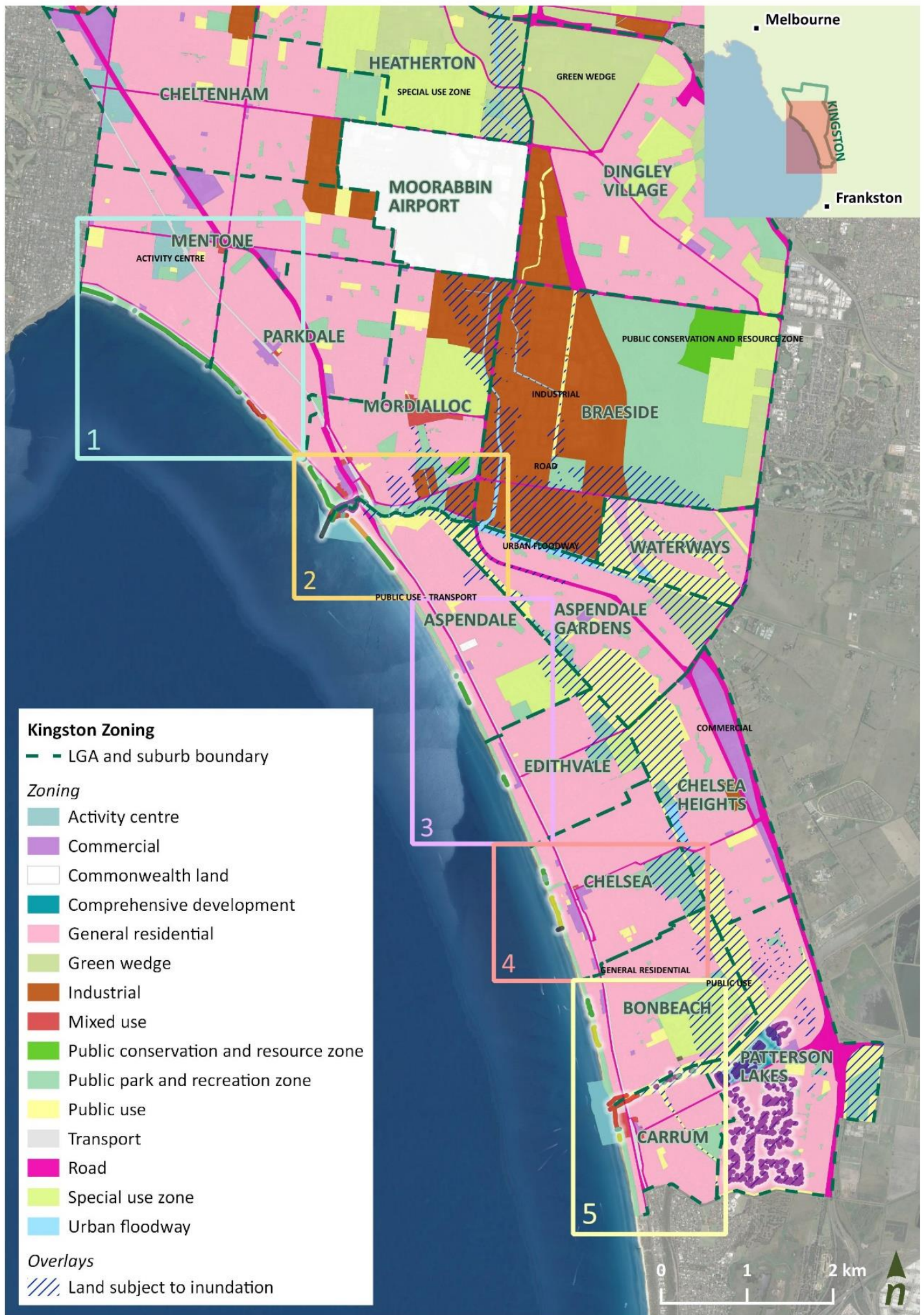
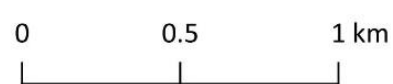
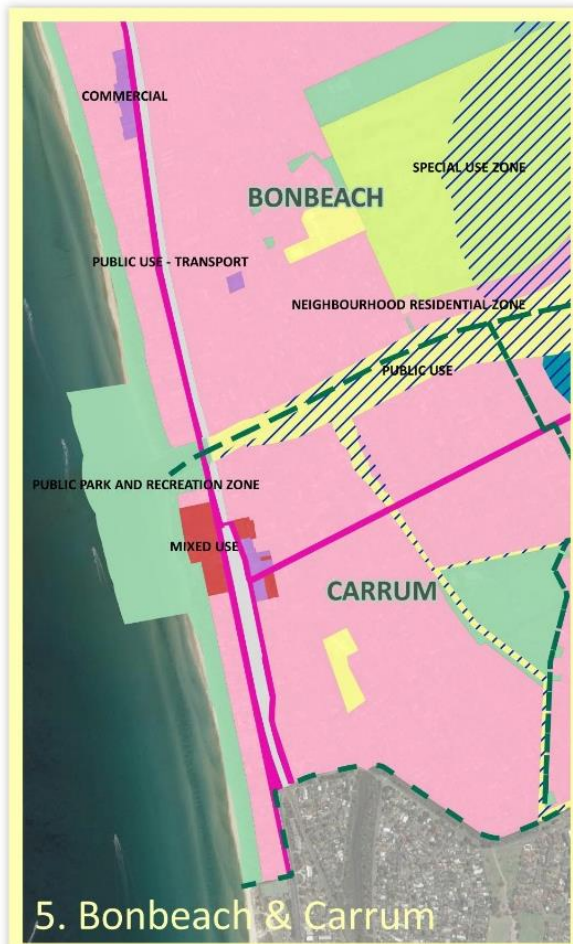
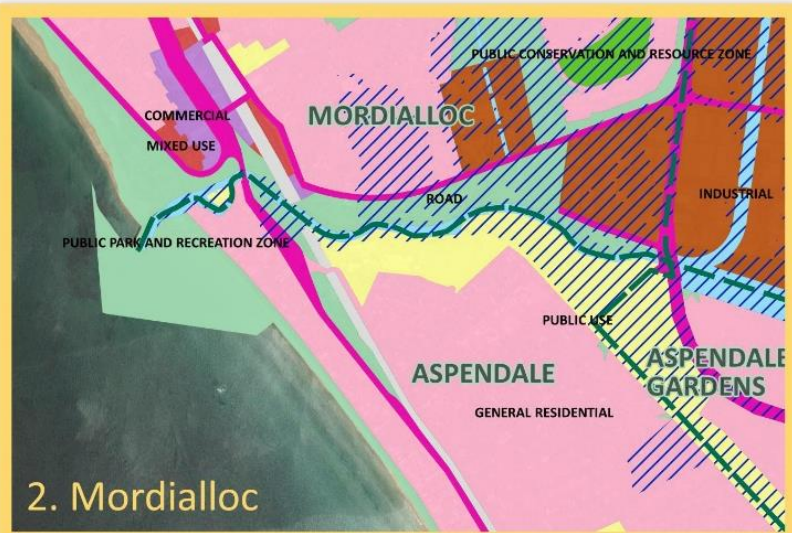


Figure 10. Kingston Planning Scheme.



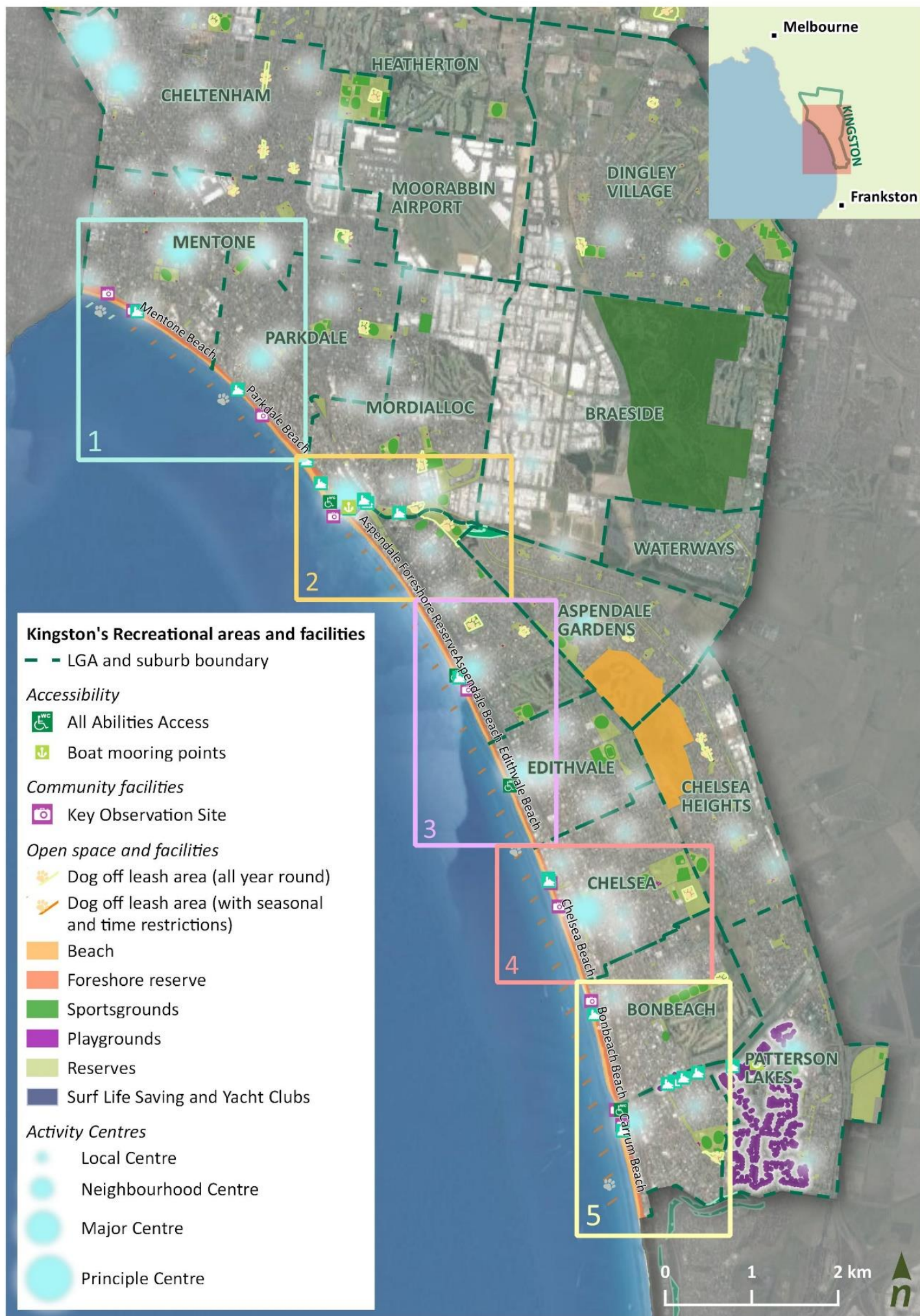
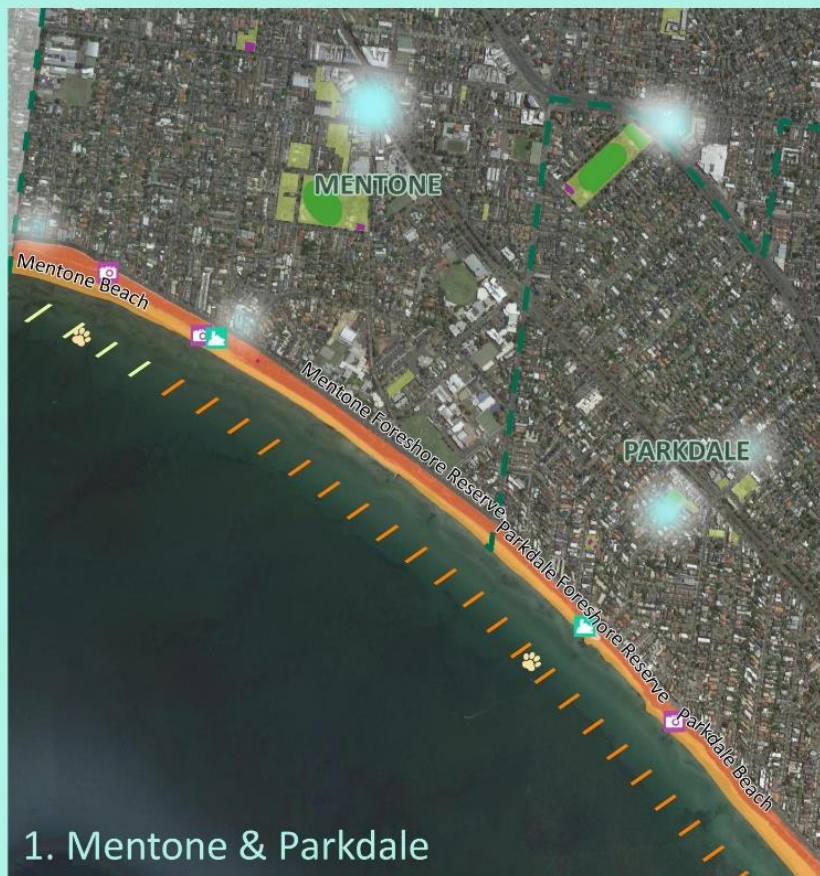


Figure 11. Recreational infrastructure and areas.



Objective 5: Engage, enable and collaborate with our community in the care of our coastline

Engage, enable and collaborate with our community in the care of our coastline

Community stewardship involves caring for the natural marine and coastal places that exist in and around the communities we live in and taking actions that benefit the environment.

Active community stewardship of the coastline provides a strong foundation for long term success in managing our marine, coastal and catchment areas. Supporting the shared care of Kingston’s coastline will maximise resilience and adaptive capacity.

A range of stewardship initiatives can be used to actively engage and empower our Traditional Owners, marine and coastal managers, community groups and user groups to care for, protect and improve the health of the marine and coastal environment. These initiatives can also be used to empower and equip communities with further knowledge, skills and capacity to help in managing current and future challenges.



Kingston context

Management of Kingston’s foreshore and nearshore areas, its facilities and the services it provides, are a shared responsibility between City of Kingston and other agencies including DELWP, Parks Victoria, Melbourne Water, and various other stakeholders (detailed in Table 2, Section 2.1.)

Working with the Bunurong Traditional Owners there is an opportunity to acknowledge and learn more about past and present experiences and historical practices in managing marine and coastal areas. Traditional Owner needs, aspirations and experience can be embedded into the day-to-day management of our coastal and marine areas.

Our community and visitors can be involved in our approach to coastal and marine management. There are community members of Kingston already taking an active role in environmental stewardship and caring for the marine and coastal environment as well as our upstream catchments. This can range from formal community and interest groups, through to behaviours of individuals that help to support a healthy coastline. There are hands-on activities such as planting and monitoring initiatives, education and knowledge sharing opportunities, through to workshops and involvement in strategic discussions. Through increasing awareness, funding and support for stakeholder and community groups, it will help to expand the reach and foster further interest and understanding in the care of the marine and coastal zone.

The Bay Watch Committee were specifically created to contribute to the development of the CMMP, as well as monitoring integrated water management and pollution reduction programs. Representatives on the committee include Councillors, local MPs, relevant state agency staff and community representatives.

Values	Concerns	Opportunities
<ul style="list-style-type: none">• An engaged community already taking an active stewardship role• Enthusiastic and willing community groups• Natural environmental education and engagement activities e.g. Gardens for Wildlife program, community planting days• Public awareness, health and safety• Shared public spaces	<ul style="list-style-type: none">• Disconnect between agency stakeholders• Insufficient or ineffective stakeholder collaboration• Uncertainty and information gaps around ownership, usage and responsibilities for agencies• Decline in community stewardship, public behaviour and accountability in summer months and busy periods• Disconnect between planning and those implementing works/actions	<ul style="list-style-type: none">• Collaborate and coordinate with relevant agencies, stakeholders• Define and communicate roles and responsibilities• Promote and support community and special interest groups, encouraging collaboration• Incorporate Traditional Owner knowledge into coastal management and knowledge sharing• Increase education/awareness, knowledge sharing around coastal and marine environment• Develop targeted relevant signage, campaigns to foster behaviour change on key, Council-wide issues• Celebrate and communicate Kingston’s coastal and marine areas promote tourism and local businesses• Promote and encourage residents and visitors to join community volunteer programs, monitoring initiatives and coastal and catchment improvement schemes

4 Our management approach

4.1 CMMP framework

An overview of the CMMP structure (Figure 12) shows the relationships between the vision and objectives set out in Section 1.3, and the CMMP goals, actions and projects.

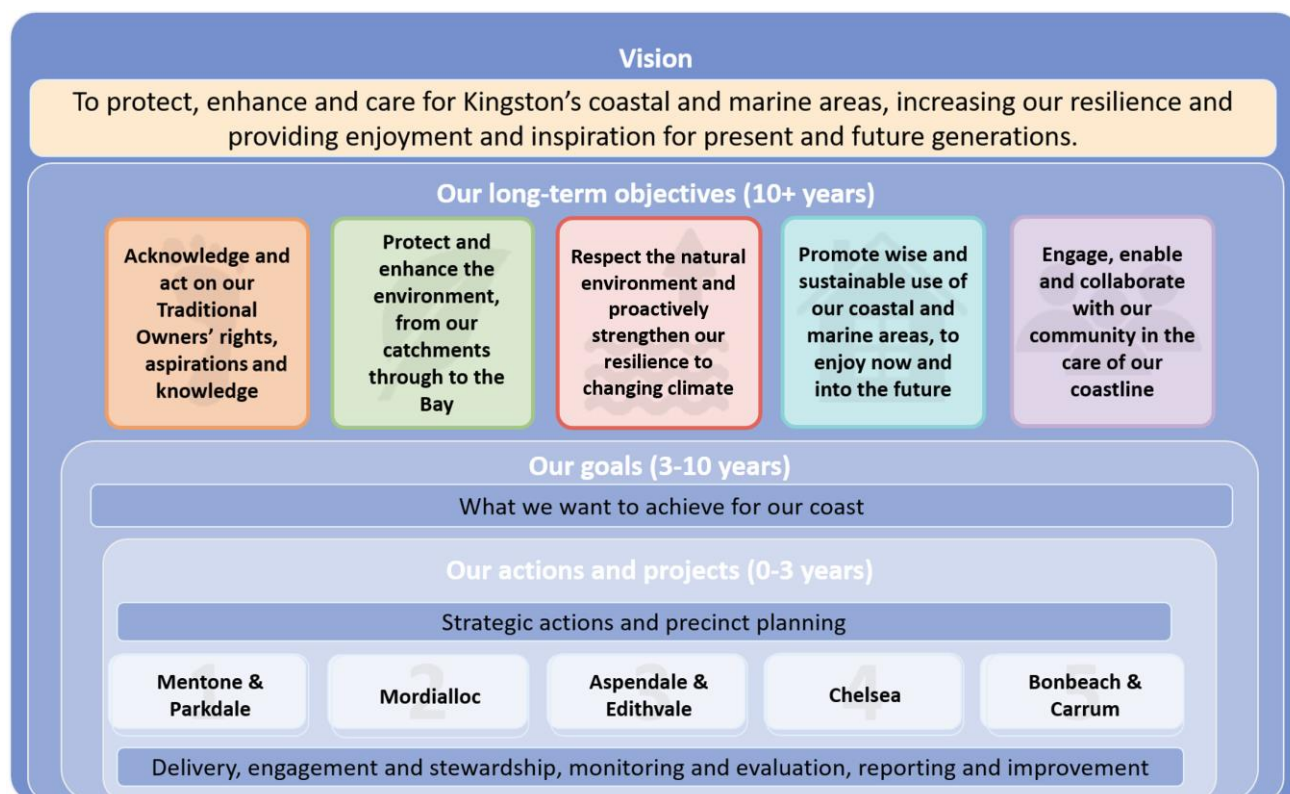


Figure 12. Kingston CMMP program logic.

Goals and actions have been developed in line with the Marine and Coastal Act 2018 and Policy and based on feedback from the community, Council and stakeholder consultation. They also aim to reflect the values, concerns and opportunities for Kingston's coastal and marine areas, detailed in Section 3.

Our approach looks to build on current management and find opportunities to improve and refine how we manage and interact with our marine and coastal environments. This includes continuing to evolve and adapt our methods and planning to consider the integrated and dynamic nature of these environments.

Our goals

Aligned with our five long-term objectives, our goals describe *what we want to achieve for our coast* over the next 3 to 10 years (Figure 13). Guide actions development and delivery, these goals act as overarching principles to be considered for any decision making, planning, works or initiatives, when managing or working within Kingston's coastal and marine areas, to ensure we act within our CMMP objectives and overall vision.



Figure 13. CMMP goals - What we want to achieve for our coast.

Our actions

A range of actions have been defined to enable a strategic approach to coastal and marine management across the Kingston region. These actions have been defined at two scales, Council-wide (Section 4.2) and for specific precincts (Section 4.3). These have been shaped to align with the objectives and goals defined for the CMMP and have been presented under the objective themes.


Using the CMMP framework and considering the Marine and Coastal Policy (2020) and Act (2018), Council's approach to strategic decision making, and the existing coastal and marine management process, the proposed actions were reviewed to determine suitability and used to inform action timing and prioritisation.

Using a tailored approach, consistent with other strategic decision-making procedures for Council, each proposed action was assessed and rated against defined criteria including:

- Alignment with CMMP framework – vision, goals and objectives
- Alignment with Victorian Marine and Coastal legalisation
- "Multi-benefit" opportunities
- Opportunity public benefit, breadth of interest groups and stakeholders
- Costs at various stages of project/action/structure lifecycle – design, construction, maintenance
- Ease of implementation – Approvals, stakeholder/public sentiment
- Work/planning already under way
- Business as usual opportunities

Guided by the assessment, timeframes and indicative costs were assigned to each action based on the following scale (Table 3). As this is a Council-led plan, Council is the lead for all actions. Some key supporting partners involved in the delivery of each action have been identified, with potential for other partners to also be involved.

Table 3. Priority and costing scale.

Timeframe		Indicative cost	
	Ongoing - implement into Council's ongoing work in a 'business as usual' capacity.	**	No significant additional cost
	Start implementing within 0-2 years	\$	Relatively low cost to implement (<\$50,000)
	Start implementing within 2-3 years	\$ \$	Moderate cost to implement (\$50,000 to \$200,000)
	Start implementing within 3-5 years	\$ \$ \$	High cost to implement (\$200,000 to \$500,000)
		\$ \$ \$ \$	Very high cost to implement (>\$500,000)

Note that timing of some actions may shift throughout the life of the plan, depending on factors such as funding, new research, safety and risk, collaboration opportunities with other projects and changing conditions (e.g. an extreme event).

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

4.2 Council-wide actions






















Timeframe									
	Ongoing		(0 -2 year)		(2-3 year)		(3-5 year)		
Indicative cost									
**	No signif. addition.	\$	Low (<\$50K)	\$\$	Mod. (\$50K to \$200K)	\$\$\$	High (\$200K to \$500K)	\$\$\$\$	Very High (>\$500K)

Table 4. Council-wide actions for the Kingston CMMP.

	Council-wide action	Timeframe	Indicative cost	Action lead Supporting partners
Objective 1: Acknowledge and act on our Traditional Owners' rights, aspirations and knowledge				
1a	Guided by the Bunurong Traditional Owners, examine and implement ways to manage and protect cultural values and heritage sites.		\$\$	Council BLC, others
1b	Work with the Bunurong Traditional Owners to investigate opportunities to establish and develop partnerships (incl. possible secondment, training program).		\$\$	Council BLC, others
1c	Recognise and promote important cultural values and experiences of Kingston's coastal and marine areas, through meaningful and considered communication and appropriate activities.		\$\$	Council BLC, others
1d	Collaborate with relevant stakeholders (including the Bunurong Traditional Owners, community groups, heritage organisations) to design and install a suite of interpretive signage, artwork/sculptures to increase awareness, acknowledge and celebrate natural, cultural and heritage values of coastal and marine areas.		\$\$	Council BLC, DELWP, others
Objective 2: Protect and enhance the environment, from our catchments through to the Bay				
2a	Continue vegetation management and habitat enhancement, integrating best-practice methods into current approaches. This includes consideration of ecological vegetation classes (EVCs), sensitive/rare species, indigenous species, and diversity along with definition of clear performance indicators (i.e. weed/pest control, native cover, number/presence of species).		**	Council
2b	Protect and enhance our dunes through minimising dune disturbance and establishing and maintaining structurally diverse native vegetation.		\$	Council
2c	Explore habitat restoration opportunities (including saltmarsh and seagrass), and potential collaborative partnerships (i.e. research institutions).		\$	Council Others
2d	Explore urban cooling opportunities in coastal areas, including vegetation-based shade management, pervious surfaces.		\$	Council
2e	Review and implement water quality improvement opportunities in line with integrated water management (including stormwater) and other Council plans. Includes review and prioritisation of foreshore stormwater drains for maintenance and improvement, to benefit and protect marine environment.		\$\$\$ to \$\$\$\$	Council Others (including MW)
2f	Continue to support and advocate for a coordinated approach towards marine pest management and control (including exploring collaboration opportunities).		**	Council Others
2g	Continue to provide a one metre vegetation buffer along property boundaries upon request, removing shrubs and trees to reduce potential fire likelihood/risk.		\$	Council
2h	Support and advocate the tree vandalism policy approach as per Council's Street and Park Tree Management Strategy.		**	Council

	Council-wide action	Timeframe	Indicative cost	Action lead Supporting partners
Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate				
3a	Review Council's asset management process to incorporate the CMMP, ensuring consideration of changing conditions and State policy.		\$\$	Council
3b	Review land use management, planning schemes, zoning and decision making to incorporate latest State policy, regional coastal hazards outcomes and Victoria's adaptation approach.		\$\$	Council
3c	Ensure foreshore infrastructure is effectively monitored, maintained, upgraded, or removed/replaced. Consider potential impacts of infrastructure changes on surrounding areas and investigate feasibility of alternate adaptation measures (incl. nature-based solutions) in line with State policy and the pathways approach.		\$\$\$ to \$\$\$\$	Council DELWP, PV, MW and others
3d	Work with DELWP to review priority renourishment locations within the LGA, for inclusion in bay and state-wide renourishment programs demonstrating the environmental and community benefit of renourishment.		\$\$	Council DELWP
3e	In line with Victoria's coastal adaptation approach being developed as part of Victoria's Resilient Coast – Adapting for 2100+, and using PPBCHA outcomes, undertake adaptation planning to assess current and future coastal and marine vulnerability and risk (environmental, social, and economic). Includes development of an economic rationale for action, and exploration and assessment of adaptation options, responses and pathways for identified "hotspot" locations, as per MAC policy's adaptation action hierarchy.		\$\$\$	Council
Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future				
4a	Continue to maintain and upgrade the shared trails (including the Bay Trail) and associated facilities to improve connectivity and safety and enhance user experience. Review usage and suitability of foreshore shared trail networks.		\$\$\$	Council
4b	Investigate opportunities to improve public access and connectivity along the coastline, while recognising and protecting culturally and environmentally sensitive areas, and addressing illegal private access controls and measures.		\$	Council
4c	Review and revise Council's litter management approach in coastal and catchment areas, exploring possible improvement opportunities and strengthening community engagement to generate behavioural change.		\$\$	Council
4d	Continue to include complementary facilities (such as seating, planting, landscaping, surfacing, and line marking) as part of all major foreshore projects.		\$\$	Council
4e	Support and contribute to review of existing lease conditions and the commercial use of public space guidelines, incorporating objectives of the CMMP and MAC Policy, and ensuring broader community benefit.		\$	Council
4f	Support foreshore lighting approach as per Council's Public Lighting Policy and guidelines. Proximity to habitat areas and wildlife impacts to be considered.		\$	Council
4g	Support the Integrated Transport Strategy and audit of on-land transport facilities in coastal zones (including car/cycling/pedestrian thoroughfares, parking) and prioritise for maintenance or improvement. Includes exploring opportunities to improve/support transport alternatives (reduce car usage, electric vehicle (EV) facilities).		\$	Council

	Council-wide action	Timeframe	Indicative cost	Action lead Supporting partners
Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future				
4h	Advocate and work with Parks Victoria to monitor, review and update (if necessary due to marine safety concerns) recreational watercraft zoning, improving promotion, communication and enforcement of zoning regulations. Includes enforcement support from Parks Victoria (PV), Maritime Safety Victoria (MSV) and Victorian Water Police Squad (WPS).		\$	Council PV, MSV, Vic WPS
4i	Review dog off leash management approach for foreshore areas, to ensure balance and retain and protect broader coastal values.		\$ to \$\$	Council
4j	Work with relevant stakeholders to explore opportunities for foreshore improvements to meet demand and/or adapt to changing climate: - trails and boardwalks - boat ramp configuration - water and wind sport infrastructure		\$\$\$\$	Council DELWP, PV, BBV, LSV
Objective 5: Engage, enable and collaborate with our community in the care of our coastline				
5a	Partner with neighbouring Councils, Melbourne Water, and Association of Bayside Municipalities to implement broader scale: - marine and coastal climate adaptation - water quality improvement measures.		**	Council
5b	Promote and contribute to environmental monitoring opportunities, collaborating with community groups. May include water quality, litter, stormwater monitoring, marine pest control.		\$	Council
5c	Strengthen partnerships and advocacy with other stakeholders to raise awareness, promote and support shared care for coastal and marine areas.		\$	Council
5d	Strengthen understanding and communication regarding obtaining approvals and consents (processes, requirements, considerations) for works and activities within marine and coastal zones.		\$	Council
5e	Strengthen engagement with foreshore fronting homeowners and bathing box and boatshed owners, to ensure impacts to Crown Land are minimised, and align with council and state management guidelines and policies.		\$	Council
5f	Define, confirm and communicate roles and responsibilities for Kingston's marine and coastal zone.		\$	Council
5g	Generate interest and awareness of marine and coastal environments, hazards, and adaptation by strategic investment in resources (staff, funding, tools, programs) for: - community stewardship programs and partnerships - knowledge sharing and education programs.		\$\$	Council
5h	Develop a marine and coastal citizen science monitoring program, including monitoring and reporting of coastal and marine changes (including DELWP Victorian Coastal Monitoring Program (VCMP), CoastSnap, Snap send solve, KCC complaints, litter/plant/wildlife surveys, estuary watch).		\$\$	Council

4.3 Precinct actions

Kingston's coastline has been divided into five precincts, to enable more localised management needs to be addressed:

Precinct 1 - Mentone and Parkdale

Precinct 2 - Mordialloc

Precinct 3 – Aspendale and Edithvale

Precinct 4 - Chelsea

Precinct 5 – Bonbeach and Carrum

As per the Council-wide actions, CMMP actions identified for each precinct have been aligned with the long-term objectives. Relevant Council-wide actions also apply within each precinct.



Activity and recreation nodes

Recreation and activity 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 recreation and activity nodes creates efficient relationships between buildings and structures and minimises development impacts on the coastal and marine areas.

Activity nodes provide for community recreation facilities and tourism activities. They are 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 functioning 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. *Marine and Coastal Policy (DELWP, 2020).*

Major activity node

Major activity nodes are areas of high use with significant existing infrastructure. These areas provide more formal activity areas including improved infrastructure, access and boardwalks, and general open spaces for fitness/play/recreation.

Primary activity node

Mordialloc Precinct is a main hub for concentrated activity on the foreshore. With extensive services, facilities and infrastructure, Mordialloc is a key location to host large-scale events (such as festivals and markets) and support formalised recreation activities. Offering diverse, wide-reaching public benefit opportunities, it is a key site for community-use facilities and buildings.

Recreation/ neighbourhood activity node

Areas identified as suitable for high levels of activity. Active recreation, community uses and events are concentrated in these areas.





Figure 14. Precinct 1 - Mentone and Parkdale, with precinct actions shown on map.



Precinct 1, Mentone and Parkdale, extends for approximately 3.3 km, from Charman Rd to Bay St. It is a sandy stretch of coastline, backed by low lying vegetated dunes, some more elevated, vegetated dunes and in sections further to the north, also cliffs.

Rock revetments and seawalls are located within the coastal zone. Key facilities include the Mentone Life Saving Club and Parkdale Yacht Club, along with major access routes particularly in steeper, elevated areas. Major public open spaces in this coastal zone include playground facilities, popular shared trails above and along the foreshore and dog off-leash areas.

The area is accessed via road, public transport (including via Mentone and Parkdale stations) and pedestrian and cycling routes and there are 20 defined access thoroughfares within the coastal zone.

Precinct priorities

- Shared trails and access thoroughfares
- Asset management
- Hazard planning
- Dog zoning
- Dune and vegetation protection
- Stormwater, water quality and pollution

Timeframe



Ongoing



(0 - 2 year)



(2-3 year)



(3-5 year)

Indicative cost

** No signif. addition. \$ Low (<\$50K) \$\$ Mod. (\$50K to \$200K) \$\$\$ High (\$200K to \$500K) \$\$\$\$ Very High (>\$500K)

	Action	Timeframe	Indicative cost	Action lead Supporting partners
Objective 2: Protect and enhance the environment, from our catchments through to the Bay				
P1.1	Continue seaweed management programs. Review current process, including improvement opportunities. Install educational signage in hotspots areas, including information on natural processes and Council's management approach.		\$ to \$\$	Council
P1.2	Undertake nominated stormwater improvements/upgrades: - Naples Road drain.		\$\$\$\$	Council
Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate				
P1.3	Advocate and work with DELWP for condition assessments (fit for purpose) of existing hazard protection and coastal structures, including seawalls and rock revetments, to inform options for strengthening resilience to climate change. Consider potential impacts of infrastructure changes on surrounding areas and investigate feasibility of alternate adaptation measures (including nature-based solutions) in line with State policy.		\$\$\$	Council DELWP
Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future				
P1.4	Undertake nominated carpark improvements/upgrades: - Parkdale Yacht Club - Mentone LSC.		\$\$\$\$	Council
P1.5	Undertake nominated public building and open space improvements/upgrades: - Mentone LSC precinct - Mentone foreshore playground /picnic area. Design principles to be used to strengthen structure resilience to sea level rise and coastal hazards and improve emergency response capacity.		\$\$\$\$	Council DELWP, LSV
P1.6	Undertake nominated access improvements/upgrades in line with DDA audit outcomes: - Bay St car park - Rennison St car park - Parkdale Yacht Club. - Parkdale Kiosk and War Memorial precinct - Antibes St car park - Dixon St.		\$\$ to \$\$\$	Council

Precinct 2 - Mordialloc

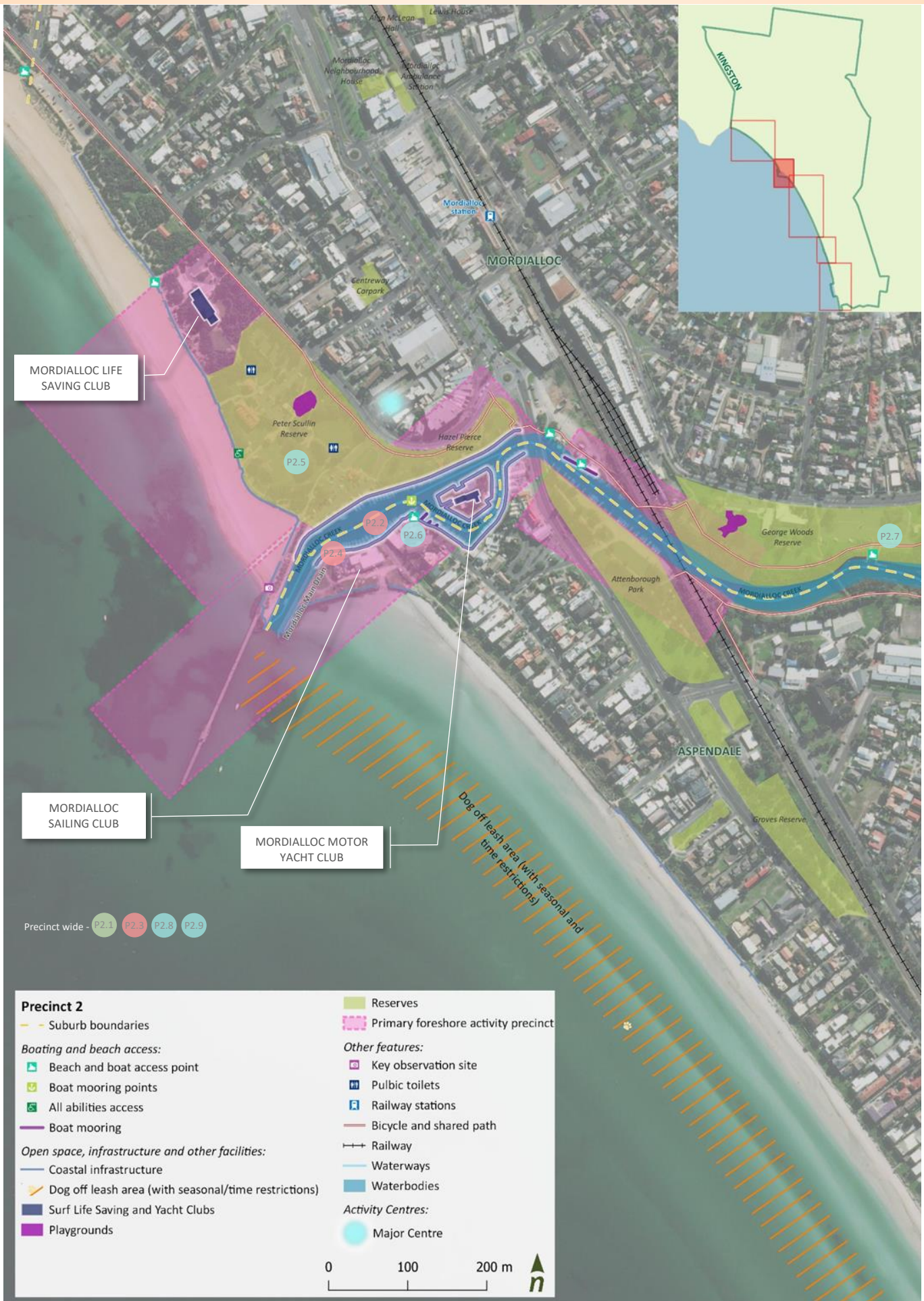


Figure 15. Precinct 2 - Mordialloc, with precinct actions shown on map.



Precinct 2, Mordialloc, is centred around the Mordialloc Creek entrance. Mordialloc Beach runs approximately 700 m to the north, up to Bay Street. Mordialloc Beach is a wide, sandy stretch of coastline, with adjacent foreshore reserves (incl. Peter Scullin and Hazel Pierce Reserves). This precinct also includes about 700 m of the Aspendale foreshore (up to just south of Hearle Ave), a sandy stretch of coast, backed by a narrow, vegetated dune, fronted by private residential properties.

Rock revetments, seawalls and geobag structures are located within the coastal zone. Key facilities include the Mordialloc Life Saving Club, Mordialloc Beach promenade, Mordialloc pier, and wide range of public and private infrastructure and facilities within the creek (i.e. boat ramps, jetties, berths, pontoons and moorings). The area is easily accessible via road, public transport (including via Mordialloc station) and pedestrian and cycling routes.

Precinct priorities

- Mordialloc Creek management (incl. dredging)
- Shared trails, access
- Water quality and pollution
- Asset management
- Recreational facilities, zoning
- Hazard planning – public/private
- Dune and vegetation protection and enhancement

Timeframe



Ongoing



(0 - 2 year)



(2-3 year)



(3-5 year)

Indicative cost

** No signif. addition. \$ Low (<\$50K) \$\$ Mod. (\$50K to \$200K) \$\$\$ High (\$200K to \$500K) \$\$\$\$ Very High (>\$500K)

	Action	Timeframe	Indicative cost	Action lead Supporting partners
	Objective 2: Protect and enhance the environment, from our catchments through to the Bay			
P2.1	Support water quality improvements in upstream catchments and within Mordialloc Creek - bank stabilisation, channel naturalisation, gross pollutant traps (GPTs), water sensitive urban design (WSUD).		\$\$\$	Council MW, DELWP
	Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate			
P2.2	Advocate for condition assessment of Mordialloc Creek training walls/retaining walls, to inform options for increasing resilience to climate change.		\$\$	Council PV, DELWP
P2.3	Advocate and work with DELWP for condition assessments (fit for purpose) of existing hazard protection and coastal structures, including rock revetments, geobag walls and seawalls, to inform adaptation/resilience options. Consider potential impacts of infrastructure changes on surrounding areas and investigate feasibility of alternate adaptation measures (incl. nature-based solutions) in line with State policy.		\$\$\$	Council DELWP
P2.4	Work with Parks Victoria (PV) to monitor, review and revise dredging operations at Mordialloc Creek entrance, in line with Parks Victoria's dredging operations Environmental Management Plan (EMP), including method suitability and longevity, onshore material placement and potential impacts on surrounding environments.		\$\$	Council PV, DELWP
	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future			
P2.5	Support and review the finalisation and delivery of the Peter Scullin Reserve Park Plan, in line with CMMP and MAC Policy objectives.		**	Council
P2.6	Work with DELWP and other relevant stakeholders (PV and MW) to develop a management plan for Mordialloc Creek, with consideration for defining roles and responsibilities, provision and condition of facilities, entrance management, hazard impacts, access, and environmental and cultural values.		\$	Council DELWP, PV, MW
P2.7	Undertake nominated carpark improvements/upgrades: - Governor Road Boat Ramp.		\$\$	Council BBV
P2.8	Review, promote and improve litter management through educational signage, on-land fishing facilities, disposal bins, and in key locations along Mordialloc Creek.		\$	Council BBV
P2.9	Undertake nominated open space improvements/upgrades – including promenade wall/lights, renewal of landscaping, lighting, and play space.		\$\$\$ to \$\$\$\$	Council

Precinct 3 - Aspendale and Edithvale



Figure 16. Precinct 3 – Aspendale and Edithvale, with precinct actions shown on map.

Precinct 3, Aspendale and Edithvale, extends for almost 4 km along the Aspendale and Edithvale foreshore, from Hearle Ave to Craigie Ave. This is a sandy stretch of coastline, backed by a low lying, narrow, vegetated dune. Private residential properties are located directly behind the dune system, facing onto the coast, and there numerous bathing boxes on the foreshore. Sections of the Edithvale wetlands are also located inland from the coast.

Key facilities include the Aspendale Life Saving Club, Edithvale Life Saving Club. In addition to the beach, major public open spaces exist in this coastal zone including Beeson Reserve, while further inland are the Yammerbook Nature Reserve and Edithvale wetlands.

The area is accessed via road, public transport (including via Aspendale and Edithvale stations) and pedestrian and cycling routes and there are 28 defined access throughfares within the coastal zone.

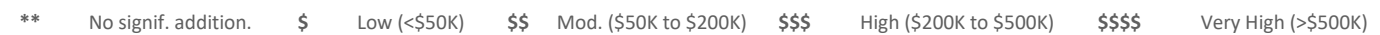
Precinct priorities

- Dune and vegetation protection and enhancement
- Stormwater, water quality and pollution
- Access management
- Asset management
- Hazard planning – public/private

Timeframe



Indicative cost



	Action	Timeframe	Indicative cost	Action lead Supporting partners
Objective 2: Protect and enhance the environment, from our catchments through to the Bay				
P3.1	Educate and encourage foreshore-adjacent residents to plant indigenous plants and remove environmental weeds from their gardens.		\$	Council
P3.2	Undertake nominated stormwater improvements/upgrades: - Wilson Grove bioswale.		\$\$	Council
Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate				
P3.3	Advocate and work with DELWP for condition assessments (fit for purpose) of existing hazard protection and coastal structures, including rock seawalls and geobag seawall, to inform adaptation/resilience options. Consider potential impacts of infrastructure changes on surrounding areas and investigate feasibility of alternate adaptation measures (including nature-based solutions) in line with State policy.		\$\$\$	Council DELWP
Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future				
P3.4	Work with the Level Crossing Removal Authority to help to facilitate enhanced linkages from public transport (Edithvale station) to key parts of the Kingston foreshore. Ensure minimal impacts to dunes, vegetation, habitat and sensitive areas.		\$	Council LXRA
P3.5	Undertake nominated public building and open space improvements/upgrades: - Aspendale Life Saving Club. Design principles to be used to strengthen structure resilience to sea level rise and coastal hazards and improve emergency response capacity.		\$\$\$\$	Council LSV
P3.6	Investigate opportunities to improve public access and connectivity - prevent private access control. Ensure minimal impacts to dunes, vegetation, habitat and sensitive areas.		\$	Council

Precinct 4 - Chelsea

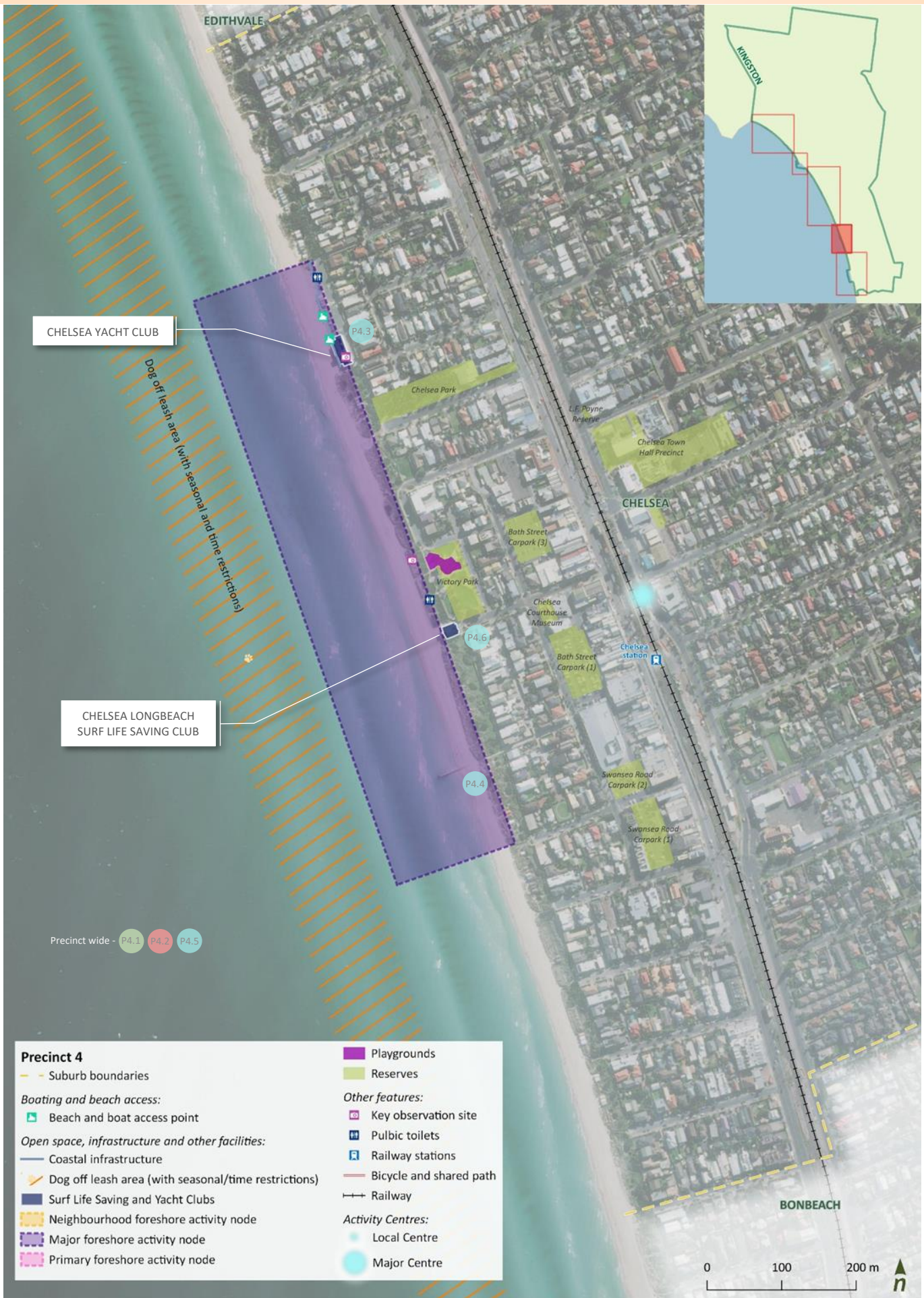


Figure 17. Precinct 4 – Chelsea, with precinct actions shown on map.

Precinct 4, Chelsea, extends for approximately 1.6 km along the Chelsea foreshore, from Craigie Ave to Shenfield Ave. Similar to Aspendale and Edithvale, Chelsea foreshore is a sandy coastline, backed by a vegetated dune that is slightly wider than the northern areas (Precinct 3). The dune is fronted by private residential properties, with bathing boxes within foreshore and dune areas. Sections of the Edithvale wetlands are also located inland from the coast.

Key facilities include the Chelsea Longbeach Surf Life Saving Club, Chelsea Yacht Club, the historic Chelsea pier and numerous bathing boxes. In addition to the beach, major public open spaces in this coastal zone include Victory Park, with playground facilities, and Chelsea Park.

The area is accessed via road, public transport (including via Chelsea station) and pedestrian and cycling routes and there are 14 defined access throughfares within the coastal zone.

Precinct priorities

- Asset management
- Access
- Recreational facilities and zoning
- Hazard planning – public and private assets
- Dune and vegetation protection and enhancement

Timeframe



Ongoing



(0 - 2 year)



(2-3 year)



(3-5 year)

Indicative cost

** No signif. addition. \$ Low (<\$50K) \$\$ Mod. (\$50K to \$200K) \$\$\$ High (\$200K to \$500K) \$\$\$\$ Very High (>\$500K)

	Action	Timeframe	Indicative cost	Action lead Supporting partners
Objective 2: Protect and enhance the environment, from our catchments through to the Bay				
P4.1	Educate and encourage foreshore-adjacent residents to plant indigenous plants and remove environmental weeds from their gardens.		\$	Council
Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate				
P4.2	Advocate and work with DELWP for condition assessments (fit for purpose) of existing hazard protection and coastal structures, including seawalls, to inform adaptation/resilience options. Consider potential impacts of infrastructure changes on surrounding areas and investigate feasibility of alternate adaptation measures (including nature-based solutions) in line with State policy.		\$\$\$	Council DELWP
Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future				
P4.3	Undertake nominated public building and open space improvements/upgrades at Chelsea Yacht Club. Design principles to be used to strengthen structure resilience to sea level rise and coastal hazards and improve emergency response capacity		\$\$\$\$	Council DELWP
P4.4	Undertake condition assessment of Chelsea pier to inform feasibility of possible design and renewal/replacement modifications.		\$\$\$ to \$\$\$\$	Council DELWP
P4.5	Advocate and work with Parks Victoria to monitor, review and update zoning (watercraft including jet skis), improving promotion, communication and enforcement of zoning regulations. Includes enforcement support from Parks Victoria, Maritime Safety Victoria (MSV) and Victorian Water Police Squad (WPS).		**	Council PV, with MSV and Vic WPS
P4.6	Undertake comprehensive review to inform nominated public building and open space improvements/upgrades at Chelsea Longbeach Surf Life Saving Club. Design principles to be used to strengthen structure resilience to sea level rise and coastal hazard, improve emergency response capacity.		\$\$\$\$	Council DELWP, LSV

Precinct 5 - Bonbeach and Carrum



Figure 18. Precinct 5 – Bonbeach and Carrum, with precinct actions shown on map.

Precinct 5, Bonbeach and Carrum, extends for nearly 3 km from Shenfield Ave to Osprey Ln. This sandy coastline is intersected by the Patterson River entrance. Like Chelsea, much of this sandy foreshore is backed by a vegetated dune that is slightly wider than the dune buffer further north. Private residential properties front onto the dune, with bathing boxes on foreshore and dune areas.

Rock revetments, seawalls and entrance training walls are located within the coastal zone. Key facilities include the Bonbeach Life Saving Club, Carrum Surf Life Saving Club, Patterson River entrance, the Carrum boardwalk, and wide range of public and private infrastructure and facilities within the river entrance and Patterson Lakes (i.e. boat ramps, jetties, berths, pontoons and moorings). Major public open spaces in this coastal zone include The Beauty Spot, Carrum Rocks and Carrum foreshore playground

The area is easily accessible via road, public transport (including via Carrum and Bonbeach stations) and pedestrian and cycling routes, including Dandenong Creek Trail.

Precinct priorities

- Dredging /entrance management
- Patterson River management
- Public transport and access thoroughfares
- Recreational facilities, zoning
- Water quality and pollution
- Asset management
- Hazard planning – public/private
- Dune and vegetation protection and enhancement

Timeframe



Ongoing



(0 - 2 year)



(2-3 year)



(3-5 year)

Indicative cost

** No signif. addition. \$ Low (<\$50K) \$\$ Mod. (\$50K to \$200K) \$\$\$ High (\$200K to \$500K) \$\$\$\$ Very High (>\$500K)

	Action	Timeframe	Indicative cost	Action lead Supporting partners
Objective 2: Protect and enhance the environment, from our catchments through to the Bay				
P5.1	Support water quality improvements in upstream catchments and within Patterson River - bank stabilisation, channel naturalisation, gross pollutant traps (GPTs), water sensitive urban design (WSUD).		\$\$	Council MW, DELWP
P5.2	Educate and encourage foreshore-adjacent residents to plant indigenous plants and remove environmental weeds from their gardens.		\$	Council
Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate				
P5.3	Advocate for condition assessment of Patterson River training walls to inform options for strengthening resilience to climate change.		\$\$	Council PV
P5.4	Advocate and work with DELWP for condition assessments (fit for purpose) of existing hazard protection and coastal structures, including rock revetments and seawalls, to inform adaptation/resilience options. Consider potential impacts of infrastructure changes on surrounding areas and investigate feasibility of alternate adaptation measures (including nature-based solutions) in line with the State policy.		\$\$\$	Council DELWP
P5.5	Work with Parks Victoria (PV) to monitor, review and revise dredging operations at Patterson River entrance, in line with Parks Victoria's dredging operations Environmental Management Plan (EMP), including method suitability and longevity, onshore material placement and potential impacts on surrounding environments.		\$\$	Council PV, DELWP
Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future				
P5.6	Support the development of Beauty Spot Park Plan, in line with CMMP and MAC Policy objectives.		\$	Council

Timeframe



Ongoing



(0 -2 year)



(2-3 year)



(3-5 year)

Indicative cost

** No signif. addition. \$ Low (<\$50K) \$\$ Mod. (\$50K to \$200K) \$\$\$ High (\$200K to \$500K) \$\$\$\$ Very High (>\$500K)

	Action	Timeframe	Indicative cost	Action lead Supporting partners
Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future				
P5.7	Work with the Level Crossing Removal Authority to facilitate enhanced linkages from public transport (Bonbeach station) to key parts of the Kingston foreshore. Ensure minimal impacts to dune system, vegetation, habitat and sensitive areas.		\$	Council LXRA
P5.8	Advocate and work with Parks Victoria to monitor, review and update zoning (swimming/fishing/watercraft) at Patterson River, improving promotion, communication and enforcement of zoning regulations. Includes enforcement support from Parks Victoria, Maritime Safety Victoria (MSV), and Victorian Water Police Squad (WPS).		**	Council PV, with MSV and Vic WPS
P5.9	Undertake nominated public building and open space improvements: - Carrum Surf Life Saving Club extension. Designs principles to be used to strengthen structure resilience to sea level rise and coastal hazards and improve emergency response capacity.		\$\$\$	Council LSV
P5.10	Work with relevant stakeholders to undertake northern extension of Carrum boardwalk to Patterson River (including viewing platform, seating and interpretive signage).		\$\$\$\$	Council DELWP
P5.11	Review, promote and improve litter management through educational signage, on-land facilities, disposal bins and in key locations within the Patterson River system.		\$	Council BBV
P5.12	Work with DELWP, Parks Victoria, Melbourne Water and other relevant stakeholders to progress master plans for Patterson River and Launching Way, with consideration for defining roles and responsibilities, provision and condition of facilities, entrance management, hazard impacts, access, and environmental and cultural values.		\$\$	Council DELWP, PV, MW, BBV and other stakeholders
P5.13	Undertake nominated carpark improvements/upgrades.		\$\$	Council

5 Implementation

Successful implementation of the CMMP requires commitment from Council and State Government to prioritise coastal and marine management and ensure its integration with other Council plans and strategies. Kingston's CMMP actions will be delivered via a range of existing Council and stakeholder mechanisms (where possible), including the annual capital works program, planning schemes, local laws, asset management plans and other Council plans, as well as business-as-usual Council operations.

Action implementation will also include elements of monitoring, evaluation, review, and improvement, to be applied using an adaptive management approach (Figure 19), ensuring tracking and accountability and improvement of the CMMP delivery.

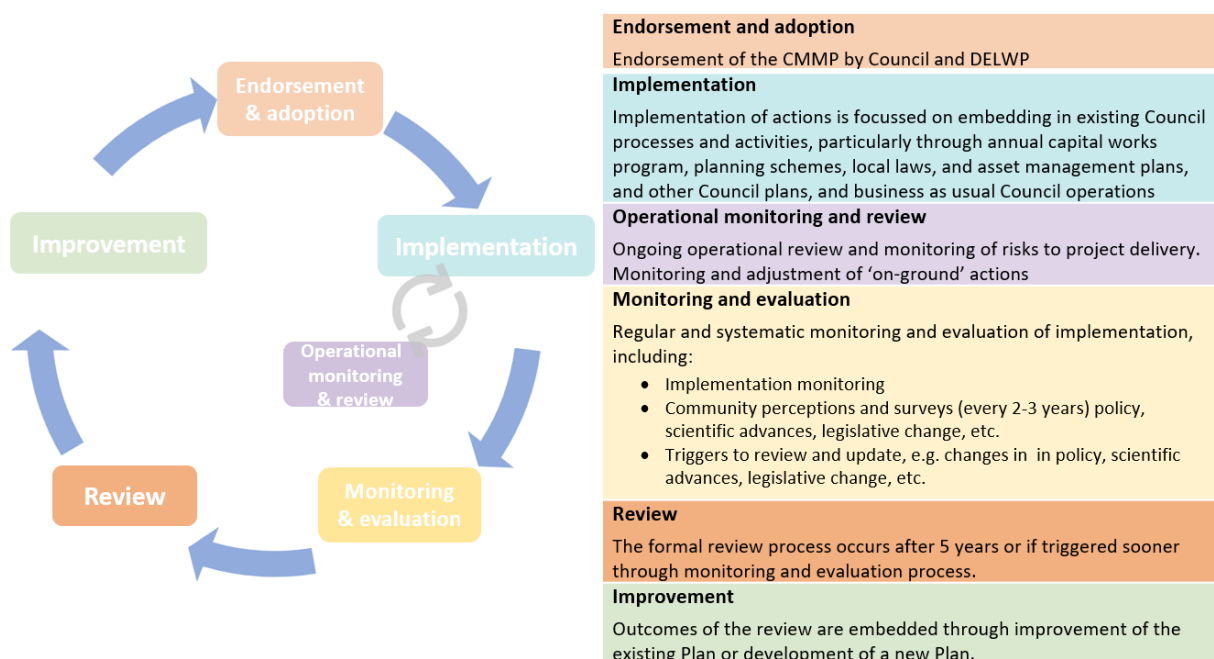


Figure 19. CMMP implementation and adaptive management framework.

Monitoring and evaluation

To enable Kingston's progress to be evaluated, and to facilitate adaptive management, monitoring and evaluation of the CMMP will be undertaken both through an adaptive approach and at formal milestones over the 5-year life of the plan. The monitoring, evaluation and review (MER) process focuses on being able to report on key outcomes relating to the delivery of management actions, such as impact and effectiveness of the actions, their efficiency and efficacy and their appropriateness/suitability. This understanding will aid the success of the Plan, providing improvement and increasing accountability. The MER process is intended to be integrated with other routine council processes for existing plans and strategies.

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



Ongoing actions being implemented in a 'business as usual' capacity for council need further consideration, to ensure they are incorporated into day-to-day workloads. Clearly defined work plans and routine reporting aim to generate accountability for delivering on these actions. Where appropriate, metrics will be developed as part of action implementation, to inform and demonstrate progress.

The review will also reflect on the action/project in line with some key monitoring and evaluation questions. These may include:

<p>Impact/effectiveness</p> <p>To what extent, and how well, have the programs contributed to achieving:</p> <ul style="list-style-type: none"> • marine and coastal policy objectives • vision of the CMMP • objectives of the CMMP • goals of the CMMP <p>Did the actions and projects deliver on goals/objectives/outputs as planned?</p> <p>How has the CMMP contributed to changes in Kingston's coastal and marine areas (i.e. environmental, social, economics conditions)?</p> <p>What, if any, unanticipated outcomes (positive or negative) have resulted from implementing the CMMP?</p> <p>Were stakeholders /delivery partners effective in working together?</p>	<p>Efficiency</p> <p>Have actions been integrated into Council plans and processes?</p> <p>Have actions been completed as per priority timelines within the plan?</p> <p>To what extent did the programs efficiently use resources, money and time?</p> <p>Have activities and delivery methods been effective?</p>	<p>Appropriateness</p> <p>Were the objectives suitable for achieving the vision of the CMMP?</p> <p>Were the actions suitable for achieving objectives/goals?</p> <p>Were the size, scale and approach of actions undertaken appropriate?</p> <p>Were Council staff / delivery partners appropriately tasked?</p>
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Data and evidence can also be used to quantify outcomes of the plan. Where possible, environmental and usage monitoring, both existing and newly identified monitoring programs for development, will be used to understand the baseline condition/health/status of areas and assets on our foreshore, and to track any change over time, identifying possible improvement or decline that may be attributed to action implementation.

Community and stakeholder feedback will also be used to support this process. A specific CMMP community survey will be undertaken every 2-3 years to gain perspectives on Council's approach to coastal and marine management, and the CMMP's implementation, and to what degree actions are contributing to the goals, objectives and vision. Similarly, key stakeholders and agencies will be asked to provide feedback on key programs that they have been involved in delivering.

Monitoring and evaluation milestones	
2022	- CMMP endorsement
Throughout	- Annual reporting, targeted stakeholder feedback, ongoing improvement
2024	- CMMP community survey - Review of actions based on survey outcomes
2026	- 5-year review as required under the Act - Update CMMP as required



Patterson River

6 References

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ACKNOWLEDGEMENT

We would like to thank everyone who has contributed to the development of this plan, including our Kingston community, representatives of our stakeholder agencies and interest groups and our Council staff.

A special thanks to the Bay Watch Committee, made up of community representatives, Councillors, local members of Parliament and relevant state agency staff. Specifically created to contribute to the development of Kingston's CMMP, this Committee has played an important role in shaping our Plan.



Mordialloc Pier

ATTACHMENT A

Engagement approach

Attachment A: Engagement approach

Summary

The development of Kingston's Coastal and Marine Management Plan (CMMP) has been shaped by a range of communication and engagement activities.

Communication and engagement plan

To support engagement activities associated with developing the CMMP, a communication and engagement plan has been developed. This live, stand-alone plan provides an easy-to-use visual of key engagement strategies and activities (and includes consideration of risks) for the life of the CMMP development process.

The plan:

- provides context for engagement with stakeholders including previous engagement activities
- outlines what successful engagement will look like and the engagement objectives outcomes and activities by Stage
- identifies key stakeholder groups and how and when engagement with these organisations will be implemented
- provides key evaluation questions for engagement monitoring and evaluation, along with risk management and mitigation strategies.

Throughout the CMMP development, engagement has aimed to:

- gain a shared understanding of Kingston's economic, ecological, social and cultural values associated with the local coastal and marine areas and their management
- obtain feedback from a diverse and relevant cross-section of the community
- identify key objectives for the CMMP based on protecting values.

Engagement activities

The early engagement activities focused on understanding perceived values, issues and opportunities for Kingston's coastal and marine areas. A range of activities carried out to help build background context, informing an Analysis Report that contextualises the current state of Kingston's coastline and its management, guiding the CMMP development. As the project progressed, discussions focused on objectives, goals, and possible management actions and opportunities, shaping the management options for the CMMP.

Communication and engagement activities to date are detailed in Table 5.

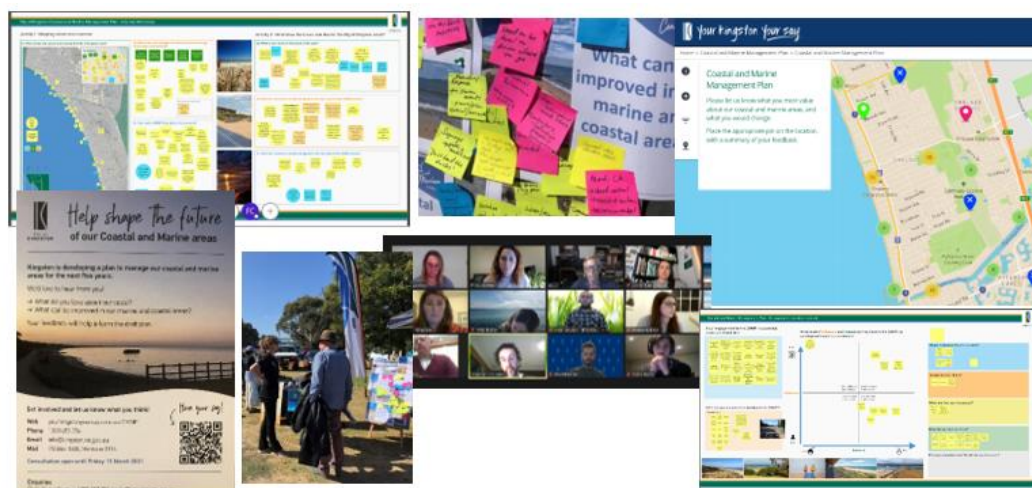


Table 5. Key engagement activities and events to date.

Date	Event/Activity	Key activities and outcomes	Comments
Jun 2020	Bay Watch Committee Meeting #1	Internal council meeting involving an introduction and project overview of the Coast and marine management plan	First Bay Watch Committee meeting prior to Alluvium joining the project team
Sep 2020	Bay Watch Committee Meeting #2 Online workshop – including “Mural” activities	Introduction to the Coastal and marine management plan, its intent and purpose Preliminary discussion on communication and engagement opportunities, sharing ideas and suggestions to inform planning for engagement approach for the project	Feedback informed the Communication and Engagement Plan
Sep 2020	Branding and website	Project webpage to communicate with the community about the project and opportunities to be involved Branding also used to generate recognisable look for all public-facing content	
Oct 2020	Preliminary discussions with Traditional Owner corporations	Preliminary discussions on collaboration opportunities for Council as part of the CMMP, helping to strengthen relationships with the Traditional Owners groups (including Bunurong Land Council) and Council	Ongoing activities, including further targeted discussions
Nov 2020	Internal (Council) stakeholder workshops and “Mural” activities	Identification and collation of key documents that will inform CMMP development Council-wide and precinct-specific values, issues and opportunities “Wish list” of what the CMMP should achieve and how it will contribute to addressing issues	Providing context for the analysis report and CMMP development
Dec 2020	External agencies (non-Council) stakeholder workshops and “Mural” activities	Identification and collation of key documents that will inform CMMP development Council wide and location-specific values, issues and opportunities ‘Wish list’ of what the CMMP should achieve and how it will contribute to addressing issues	Providing context for the analysis report and CMMP development
Dec 2020	Bay Watch Committee Meeting #3 Online workshop– including ‘Mural’ activities	Discussion on proposed engagement approach and the Communication and Engagement Plan Mural - Interactive mapping activity (values, concerns and ideas) - Council wide and location-specific feedback	Providing context for the analysis report and CMMP development
Dec 2020 to Mar 2021	Online ‘Your Say’ activities – via Council website	Interactive map (values, concerns and ideas) Open forum – sharing feedback Building background context for the CMMP	1,200 views, 72 contributions
Feb 2021	Bay Watch Committee Meeting #4 Online workshop	Preliminary vision, objectives and goals for CMMP Shaping CMMP to align with state marine and coastal context – Act, policy	Providing feedback for CMMP framework
Mar 2021	Pop-up community consultation, at farmers market, to inform development of a Coastal Marine Management Plan (CMMP)	Opportunity to discuss the project and community perspectives Feedback and contributions via the pinboard Encourage visitation to website	Discussions with ~40 people, contributions of ~25 individuals Providing context for the analysis report and CMMP development
Apr 2021	Bay Watch Committee Meeting #5 In-person workshop	Discussion on revised vision and long-term objectives Workshop activities around proposed priority actions and management objectives and themes	Providing feedback for CMMP framework, and goals and actions
Jun 2021	Further discussions with Bunurong Land Council following changes to RAP boundaries	Discussions with Bunurong Land Council to understand recent changes to RAP boundaries, extending to cover entire Kingston LGA, and how it will influence and shape Bunurong Traditional Owner engagement and collaboration opportunities for the CMMP and for broader council	
Jun 2021	Internal (Council) stakeholder workshop	Discussion on preliminary CMMP actions and goals including detail, timeframes and costs and alignment with other council projects, roles and responsible	Providing context for shaping and prioritising goal and actions in CMMP
Jul 2021	Bay Watch Committee Meeting #6 Online workshop	Discussion on preliminary CMMP document, include content, goals, actions (incl. detail, timeframes and costs) Workshop activities around refining details within the plan. Breakout rooms, polls	Providing feedback for the draft CMMP
Sep/Oct 2021	DRAFT CMMP open for public comment Online ‘Your Say’ activities – via Council website Email submissions from agency stakeholders	Survey prompted questions on the Draft CMMP Email submissions	Providing feedback to finalise the CMMP

Key communication and engagement outcomes


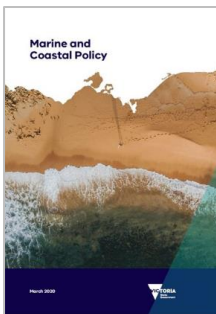
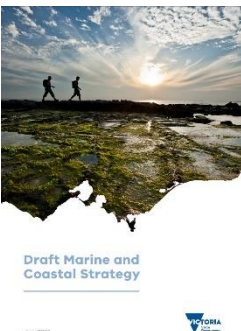
- **Communication and engagement plan:** Development and refinement of a live plan to guide approach to engagement. This plan will continue to evolve throughout the project.
- **Project branding and website:** Providing information on the CMMP project, its purpose and opportunities to be involved in shaping the Plan. Branding used to generate recognisable look for all public facing content, helping to create a connection to the project
- **Online feedback activities:** Interactive mapping tools, questions prompts and feedback forums.
- **Feedback from a diverse range of people:** Stakeholders, community and visitors of the Kingston coastline have had an opportunity to contribute to shaping the preliminary stages of this plan via a range of activities and forums. This has included:
 - internal Council staff – across the organisation
 - councillors
 - stakeholder agencies – DELWP, Melbourne Water, Parks Victoria, Life Saving Victoria, EPA, Boating Industry Association of Victoria
 - traditional Owner representatives from the Bunurong Land Council
 - Bay Watch Committee
 - broader community.
- **CMMP framework (program logic for the Plan – vision, objectives, goals):** Framework aligning with state’s marine and coastal policy and legislations. This framework has been revised and updated based on feedback.
- **Kingston context – values, concerns, opportunities:** Mapping activities, feedback forums and broader discussions as part of Stage 1 engagement has provided insight into the key aspects of the marine and coastal zone that the community value and the main challenges they perceive as impacting on these values. Using the CMMP framework, in particular the long-term objectives, all the feedback was collated and summarised under the five key themes – (See values, issues and opportunities tables – by CMMP objective). This provided the foundations to develop key goals and actions for the CMMP.
- **CMMP action development –** Workshop discussions helped to shape and refine our actions for our strategic approach to coastal and marine management across the Kingston region. This included action identification, exploring opportunities and benefits, suggested timeframes and determining costs.
- **Draft CMMP document –** Our stakeholders and community had the opportunity to provide feedback on the Draft Plan, to help refine our final document and approach.


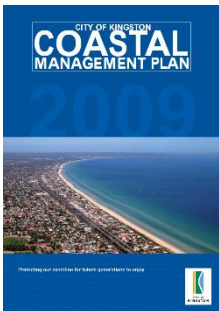




ATTACHMENT B


Statutory context for Kingston's marine and
coastal management


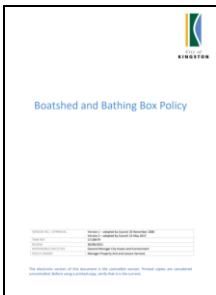
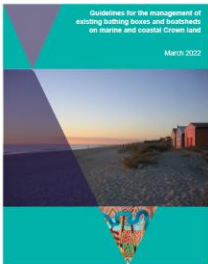
Attachment B: Statutory context for Kingston's marine and coastal management

Document	Summary of the document	Key/relevant objectives, goals or recommendations
<p><i>Marine & Coastal Act 2018</i></p> 	<p>The <i>Marine & Coastal Act 2018</i> aims to provide a coordinated, simpler and more integrated approach to planning and managing the marine and coastal environment. Under the new Act, Coastal & Marine Management Plans will be the primary management tool to guide coastal and marine management.</p>	<p>The Act established the Victorian Marine & Coastal Council (VMCC) to provide independent advice on marine and coastal issues. The Act requires the development of a Marine & Coastal Policy, including a Marine Spatial Planning Framework and Marine and Coastal Strategy.</p>
<p><i>Marine & Coastal Policy (2020)</i></p> 	<p>The Marine & Coastal policy was released in March 2020. The Policy also outlines a 'Planning & Decision Pathway' based on the objectives and guiding principles. Planning, management and decision making under the Act, including development of a CMMP, must apply the policies within the steps of this Planning & Decision Pathway.</p>	<p>Key principles from the Marine and Coastal Policy to be considered in the development of a Coastal and Marine Management Plan include:</p> <ul style="list-style-type: none"> • integrated coastal zone management • ecologically sustainable development • proportionate and risk-based • evidence-based decision making • ecosystem-based management • adaptive management • precautionary.
<p>Marine & Coastal Strategy (currently draft version, final version to be released 2022)</p> 	<p>The draft Marine & Coastal Strategy was release in July 2021 and is due to be finalised in 2022. The Strategy identifies how the vision (set out in the Policy) will be achieved. It is the first of three strategies that will outline priority actions to achieve the intended outcomes of the Policy. As the first strategy, it lays the foundations for the subsequent strategies.</p>	<p>The draft strategy details six main actions:</p> <ul style="list-style-type: none"> • Traditional Owners determine how their rights and obligations are embedded into planning and management of the marine and coastal environment. • Improve the condition and connectivity of habitats and respect and care for our marine and coastal areas • Support sustainable use and development of the marine and coastal environment • Adapt to impacts of climate change • Implement integrated planning of the marine environment • Identifying resource needs and funding for sustainable marine and coastal management

Document	Summary of the document	Key/relevant objectives, goals or recommendations
<p><i>Coastal Management Plan 2014</i></p> 	<p>The Kingston Coastal Management Plan (2014) is the most recent management plan produced for the Kingston Council. It sets out priority goals and actions to guide the future use, development and management for the Kingston foreshore.</p>	<p>Key goals identified in the Coastal Management Plan (2014) to be considered in the new Coastal & Marine Management Plan include:</p> <ul style="list-style-type: none"> • maintain and enhance the high-quality natural environment • adapt and respond to dynamic coastal processes • provide appropriate infrastructure to support the diverse uses of the foreshore • effectively manage the recreational uses and development of the foreshore in a sustainable manner • connected and accessible foreshore for all • recognition and respect of the foreshore history and heritage. • a protected and enhanced foreshore for future generations - by work together with the community. <p>A range of projects, Council-wide and at a precinct level were identified to help to achieve these goals.</p> <p><i>It is understood that while some of these recommended projects have since been completed, many are still outstanding. Potential barriers in funding, gaps in implementation planning, delegation of tasks, accountability, monitoring and review of progress.</i></p>
<p><i>Coastal Management Plan 2009</i></p> 	<p>Provides guidance on the future development and management of activities and infrastructure on the Kingston foreshore. The management plan identifies key coastal values which are to be protected and sets out priority goals and actions for achieving coastal management targets and beneficial use objectives for Kingston City Council.</p>	<p>Key recommendations from the Coastal Management Plan 2009 include:</p> <ul style="list-style-type: none"> • heritage character should be maintained during developed to ensure that any new development is complementary to the existing building styles • consult the recommendations outlined in the Mordialloc Bay to Rail Project when drafting the Foreshore Style Guide.
<p><i>Our Roadmap: Council Plan 2017-2021</i></p> 	<p>A 4-year road map focused on improving liveability in Kingston whilst maintaining the current character of the region through overarching goals and defined objectives. The plan aims on improving liveability, infrastructure, sustainability, green environments, access pathways, health and governance.</p> <p>Linked to the Annual Action Plan 2017-2021</p>	<p>Recognises the significant role of the foreshore for the community and visitors - open space, recreational opportunities, liveability, environment.</p> <p>Relevant strategies from <i>Our Roadmap Council Plan 2017-2021</i> include:</p> <p>“We will provide quality public open spaces and sports fields while protecting and enhancing our natural environment including our green wedge and foreshore. We will be responsible environmental managers and custodians for future generations.”</p> <p>Range of directions relating to achieving this commitment, around the following themes:</p> <ul style="list-style-type: none"> • environmental resilience and sustainability • greening Kingston and place making • activating and protecting the foreshore through strategic partnerships

Document	Summary of the document	Key/relevant objectives, goals or recommendations
		<ul style="list-style-type: none"> review and implement the Open Space Strategy to ensure high quality and increased capacity of the open space network provide for a variety of sport and recreation opportunities across Kingston through the Sport and Leisure Strategy.
<p>Annual Action Plan 2017-2021</p> 	<p>The Annual Action Plan is derived from the Council Plan and sets out the Council's priority projects.</p> <p>They comprise Priority Projects developed at the Council Plan workshop in February 2017 and during Council's annual business planning process.</p>	<p>A range of actions and projects to deliver on the Council Plan, including:</p> <ul style="list-style-type: none"> committing to planning, design and management for climate change, foreshore impacts of coastal hazards, growing population improving coastal/foreshore experience improving relationships relating to management of our foreshore developing a Climate Change Policy conservation and environment including natural habitat, bushland, urban forest/tree canopy weed control water quality and waste improvements.
<p>Open Space Strategy (2012)</p> 	<p>Part 1 of the Open Space Strategy reviews and updates the penultimate 2005 strategy. It guides local policy and decision making regarding open space provision, acquisition and management.</p> <p>Part 2 of the strategy provides an analysis of open spaces located within the local planning areas of Kingston City Council.</p>	<p>Relevant recommendations include:</p> <ul style="list-style-type: none"> foreshore access improvements to aid open space master planning for foreshore areas. <p>Finding planting and shared path opportunities within foreshore reserve.</p>
<p>Biodiversity Strategy 2018-2023</p> 	<p>Sets out goals and strategic objectives for protecting, preserving and improving biodiversity within Natural Resource Areas, includes an action plan to ensure goals and objectives are achieved.</p> <p>Identifies significant flora and fauna species around the region including within the coastal zone.</p>	<p>Recommendations:</p> <ul style="list-style-type: none"> include conservation of sensitive vegetation actions within foreshore reserve use of Indigenous plants. <p>Also identifies a range of Council programs, projects and actions that contribute to the achievement of biodiversity objectives (linkage with coastal community programs).</p> <p>Highlights Council's commitment to living links program, including the Port Phillip Bay Foreshore corridor.</p>

Document	Summary of the document	Key/relevant objectives, goals or recommendations
<p><i>Climate Change Strategy 2018–2025</i></p> 	<p>This document provides strategies for Kingston Council towards reducing carbon emissions and includes an adaptation plan to reduce the effects of climate change in the Kingston region.</p>	<p>Priorities include a focus of adaptation:</p> <ul style="list-style-type: none"> • embed climate change considerations into Council's operations, policies and plans • manage risks to Council built and natural assets and services from climate change <p>mitigate and adapt to the effects of climate change for future generations.</p>
<p>Climate and Ecological Emergency Response Plan 2021</p> 	<p>Council's Climate and Ecological Emergency Response Plan recognises that business as usual is not enough to address climate change. Targeted action is needed to reduce emissions quickly, and at scale. We also recognise the need to adapt to the impacts of climate change.</p> <p>The plan outlines the steps Kingston Council are taking in supporting local action and influencing the transition to a more sustainable future. It focuses on accelerating emissions reductions, strengthening protection of our natural environment and ramping up community support opportunities, to adapt to change, and their role in reducing impacts.</p>	<p>Key goals/objectives:</p> <ul style="list-style-type: none"> • Achieve net zero corporate emissions by 2025 • Aim for net zero community emissions by 2030 <p>Council's Climate and Ecological Emergency response will remain focused on the following priority areas:</p> <ul style="list-style-type: none"> • Support low carbon living • Future proof business and industry • Transition to sustainable transport • Draw down or capture carbon from the atmosphere • Adapt to the impacts of climate change • Transform Council operations
<p><i>Port Phillip Bay Environmental Management Plan (2017–2027)</i></p> 	<p>The Environmental Management Plan highlights the environmental, economic and social values of Port Phillip Bay, and builds on current investments and programs to create a management approach which protects the Bay's Health.</p> <p>With a vision of <i>A healthy Port Phillip Bay that is valued and cared for by all Victorians</i>, the EMP is frame around three central goals:</p> <ul style="list-style-type: none"> – Stewardship of the Bay is fostered across community, industry and government – Water quality is improved to ensure environmental health and community enjoyment of the Bay – The Bay's habitats and marine life are thriving 	<p>Priority areas and actions:</p> <ul style="list-style-type: none"> • connect and inspire - improve appreciation and understanding of Bay values and connections to catchment • empower action - improve collaboration and partnerships across community, industry and government • nutrients and pollutants - ensure nutrient and sediment loads do not exceed current levels and pollutant loads are reduced where practicable • litter – reduce litter loads to the Bay • pathogens (human health) - minimise risks to human health from pathogens • habitat and marine life - conserve and restore habitats and marine life • marine biosecurity - manage risks from marine pests.

Document	Summary of the document	Key/relevant objectives, goals or recommendations
<p><i>Siting and design guidelines for structures on Victorian Coast (2020)</i></p> 	<p>The guidelines provide best practice advice on the siting and design of structures on the Victorian coast.</p> <p>Provides a creative and innovative approach to development in the marine and coastal environment which consider the challenges</p>	<p>Guideline intent:</p> <ul style="list-style-type: none"> • The design of every structure is to be guided by 15 fundamental considerations. • To be used in conjunction with the MAC Policy which provides policy directions for use and development in the marine and coastal environment. • Examining and addressing each of these considerations forms the foundation for excellence in siting and design.
<p><i>City of Kingston Boatshed and Bathing Box Policy (2021)</i></p> 	<p>This policy provides guiding principles that enable the maintenance and management of boatsheds and bathing boxes in line with the Council's Corporate Plan and DELWPs Draft Guidelines.</p> <p>The policy intends to maximise the use of community assets and manage facilities responsibly by clearly defining the roles and responsibilities of boatshed and bathing box permit holders/licencees and Council.</p>	<p>Key objectives/principles:</p> <ul style="list-style-type: none"> • preservation and appropriate use of boatshed and bathing boxes in accordance with the provisions of this policy • control the use, maintenance, permit/licences, transfers and fees of pre-existing structures • assisting in the assessment of applications from permit holders/licencees for alterations or reconstruction and maintenance requirements of boatsheds and bathing boxes.
<p><i>Guidelines for the management of existing bathing boxes and boatsheds on marine and coastal Crown land (2022)</i></p> 	<p>This policy supports the implementation of the Marine and Coastal Policy 2020 by providing direction to land managers and decision-makers in managing and maintaining existing bathing boxes and boatsheds on marine and coastal Crown land.</p> <p>With approximately 2000 boatsheds and bathing boxes on Crown land in Victoria, this guidance aims to ensure that Crown land is managed carefully for current and future generations.</p>	<p>Guideline intent:</p> <p>The guidelines</p> <ul style="list-style-type: none"> • provide direction in managing and maintaining existing bathing boxes and boatsheds on marine and coastal Crown land • are a tool to support marine and coastal land managers <p>The Marine and Coastal Policy 2020 (Policy) remains the primary policy document for assessing proposals on the coast.</p>

ATTACHMENT C

Implementation plan

Kingston CMMP - Implementation plan for Council-wide actions

Location/ Precinct	Objective	Action ID	Council-wide action	Timeframe (to start implementing by)	Indicative cost	Action lead	Supporting partners	How to be implemented / mechanism	Funding opportunities	Relevant/potential approvals	Potential measure/deliverable/progress
Council-wide	Objective 1: Acknowledge and act on our Traditional Owners' rights, aspirations and knowledge	1a	Guided by the Bunurong Traditional Owners, examine and implement ways to manage and protect cultural values and heritage sites.	Ongoing	\$\$	KCC	Bunurong Land Council Aboriginal Corporation, other Traditional Owners	Discussions held with Traditional Owner Groups (BLCAC) and Heritage Vic. Record/document known sensitive areas within KCC Planning Scheme and other methods (disclosing only to appropriate level of detail)	Joint stakeholder funding applications (State, Federal)		
Council-wide	Objective 1: Acknowledge and act on our Traditional Owners' rights, aspirations and knowledge	1b	Work with the Bunurong Traditional Owners to investigate opportunities to establish and develop partnerships (incl. possible secondment, training program).	Ongoing	\$\$	KCC	Bunurong Land Council Aboriginal Corporation, other Traditional Owners	Targeted meetings and projects to form and nurture partnerships, and seek joint projects and funding opportunities	Council budget Joint stakeholder funding applications (State, Federal)		A formalised process and communication channels for working together in the care of land and sea areas
Council-wide	Objective 1: Acknowledge and act on our Traditional Owners' rights, aspirations and knowledge	1c	Recognise and promote important cultural values and experiences of Kingston's coastal and marine areas, through meaningful and considered communication and appropriate activities.	Ongoing	\$\$	KCC	Bunurong Land Council Aboriginal Corporation, other Traditional Owners	Development of a cultural engagement strategy to guide communications, events, and activities. Includes targeted discussions and review, to develop and shape interpretive content - with Traditional Owner Groups (BLCAC), KCC internal Indigenous Portfolio Officers and KCC communication	Council budget Joint stakeholder funding applications (State, Federal)		
Council-wide	Objective 1: Acknowledge and act on our Traditional Owners' rights, aspirations and knowledge	1d	Collaborate with relevant stakeholders (including the Bunurong Traditional Owners, community groups, heritage organisations) to design and install a suite of interpretive signage, artwork/sculptures to increase awareness, acknowledge and celebrate natural, cultural and heritage values of coastal and marine areas.	2-3 years	\$\$	KCC	Bunurong Land Council Aboriginal Corporation, other Traditional Owners, DELWP	Development of a signage style guide, strategic planning of locations, and implementation. Includes targeted discussions and review, to develop and shape interpretive content	Council budget Joint stakeholder funding applications (State, Federal)	MACA consent	<ul style="list-style-type: none">· A signage guide/template and specifications· X number of signs, including content
Council-wide	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	2a	Continue vegetation management and habitat enhancement, integrating best-practice methods into current approaches. This includes consideration of ecological vegetation classes (EVCs), sensitive/rare species, indigenous species, and diversity along with definition of clear performance indicators (i.e. weed/pest control, native cover, number/presence of species).	Ongoing	**	KCC		As part of existing foreshore management, Council to review and enhance vegetation management, embedding objectives and goals of the CMMP.	Council budget	MACA consent (activity dependent)	
Council-wide	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	2b	Protect and enhance our dunes through minimising dune disturbance and establishing and maintaining structurally diverse native vegetation.	Ongoing	\$	KCC		As part of existing foreshore management, Council to review and enhance dune management, embedding objectives and goals of the CMMP.	Council budget	MACA consent (activity dependent)	
Council-wide	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	2c	Explore habitat restoration opportunities (including saltmarsh and seagrass), and potential collaborative partnerships (i.e. research institutions).	Ongoing	\$	KCC	DELWP, Victorian Fisheries, Universities, and other environmental groups (e.g. Nature Conservancy)	Targeted discussions to form and nurture partnerships and seek joint projects and funding opportunities, and setting clear project objectives in design scope and expectations.	Council budget Joint stakeholder funding applications (State, Federal) Industry and academic funding partners	MACA consent	<ul style="list-style-type: none">· X number of innovative/habitat restoration measures in management initiatives
Council-wide	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	2d	Explore urban cooling opportunities in coastal areas, including vegetation-based shade management, pervious surfaces.	Ongoing	\$	KCC	DELWP, Melbourne Water	Implementation and advocacy for urban cooling opportunities in all KCC developments and land use. Led Via Council's Urban Cooling Strategy	Council budget Joint stakeholder funding applications	MACA consent (within coastal areas)	<ul style="list-style-type: none">· X no. of urban cooling initiatives· X m² coverage of urban cooling measures· X reduction in temperature
Council-wide	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	2e	Review and implement water quality improvement opportunities in line with integrated water management (including stormwater) and other Council plans. Includes review and prioritisation of foreshore stormwater drains for maintenance and improvement, to benefit and protect marine environment.	Ongoing	\$\$\$ to \$\$\$\$	KCC	DELWP, Melbourne Water, South East Water, Parks Victoria	Implementation and advocacy for water quality improvement opportunities in all KCC upgrades, developments, and land use.	Council budget Joint stakeholder funding applications	MACA consent (within coastal areas)	
Council-wide	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	2f	Continue to support and advocate for a coordinated approach towards marine pest management and control (including exploring collaboration opportunities).	Ongoing	**	KCC	DELWP, Parks Vic, Neighbouring Councils, and environmental groups	Targeted discussions to form and nurture partnerships and defining process to enable rapid mobilisation and event resposne and to seek joint projects and funding opportunities.	Council budget Joint stakeholder funding applications		<ul style="list-style-type: none">· A defined and coordiated approach to manage and respond to pest outbreak
Council-wide	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	2g	Continue to provide a one metre vegetation buffer along property boundaries upon request, removing shrubs and trees to reduce potential fire likelihood/risk.	Ongoing	\$	KCC	Foreshore adjacent property owners	Targeted discussions to form and nurture partnerships and communicate opportunities for buffer creation.	Council budget	MACA consent	<ul style="list-style-type: none">· Reduction in illegal clearing· No/Low no. of fire events· Service uptake (X no. of clearing requests)
Council-wide	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	2h	Support and advocate the tree vandalism policy approach as per Council's Street and Park Tree Management Strategy.	2-3 years	**	KCC	Foreshore adjacent property owners, community	Ongoing communications, engagement and collaboration with stakeholders, fostering productive relationships	Council budget	MACA consent	<ul style="list-style-type: none">· Reduction in tree vandalism events· Behaviour change
Council-wide	Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate	3a	Review Council's asset management process to incorporate the CMMP, ensuring consideration of changing conditions and State policy.	Ongoing	\$\$	KCC		Council to review and update framework asset management plans based on best available understanding and evidence on coastal hazard risk and mitigation options and embed into asset management planning	Council budget	With consideration to MACA consent process	<ul style="list-style-type: none">· Review undertaken· Recommendations integrated in Council process, including asset management
Council-wide	Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate	3b	Review land use management, planning schemes, zoning and decision making to incorporate latest State policy, regional coastal hazards outcomes and Victoria's adaptation approach.	Ongoing	\$\$	KCC	DELWP	Council to include updated coastal hazard information and adaptation responses within future planning scheme revisions and to incorporate consideration within ongoing planning decisions. Planning scheme amendment, Special Building Overlay and LSIO updates	Council budget	Guided by MAC Act, Policy and Strategy	<ul style="list-style-type: none">· An updated planning scheme and associated overlays
Council-wide	Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate	3c	Ensure foreshore infrastructure is effectively monitored, maintained, upgraded, or removed/replaced. Consider potential impacts of infrastructure changes on surrounding areas and investigate feasibility of alternate adaptation measures (incl. nature-based solutions) in line with State policy and the pathways approach.	Ongoing	\$\$\$ to \$\$\$\$	KCC	DELWP, Melbourne Water, Parks Victoria	Council to update asset management and maintenance and CAPEX program development and delivery, aligned with CMMP intent and objectives. Includes targeted discussions to form and nurture partnerships and seek joint projects and funding opportunities, and setting clear project objectives in design scope and expectations.	Council budget State Government Joint stakeholder or Industry and academic funding partners	MACA consent	<ul style="list-style-type: none">· Progress reporting of CAPEX delivery program
Council-wide	Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate	3d	Work with DELWP to review priority renourishment locations within the LGA, for inclusion in bay and state-wide renourishment programs demonstrating the environmental and community benefit of renourishment.	Ongoing	\$\$	KCC	DELWP	Includes targeted discussions to seek KCC projects and funding opportunities	State Government	MACA consent	<ul style="list-style-type: none">· List of potential renourishment locations· X number of KCC renourishments implemented
Council-wide	Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate	3e	In line with Victoria's coastal adaptation approach being developed as part of Victoria's Resilient Coast – Adapting for 2100+, and using PPBCHA outcomes, undertake adaptation planning to assess current and future coastal and marine vulnerability and risk (environmental, social, and economic). Includes development of an economic rationale for action, and exploration and assessment of adaptation options, responses and pathways for identified "hotspot" locations, as per MAC policy's adaptation action hierarchy.	2-3 years	\$\$\$	KCC	DELWP Other asset and land managers	New initiative – commission study. Council to develop the Kingston Coastal and Marine Adaptation Plan/s, consistent with State requirements.	TBC at a state level Council budget State Government Joint stakeholder funding applications	Guided by MAC Act, Policy and Strategy MACA consent	<ul style="list-style-type: none">· Kingston Coastal and Marine Adaptation Plan (endorsed)

Kingston CMMP - Implementation plan for Council-wide actions

Location/ Precinct	Objective	Action ID	Council-wide action	Timeframe (to start implementing by)	Indicative cost	Action lead	Supporting partners	How to be implemented / mechanism	Funding opportunities	Relevant/potential approvals	Potential measure/deliverable/progress
Council-wide	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	4a	Continue to maintain and upgrade the shared trails (including the Bay Trail) and associated facilities to improve connectivity and safety and enhance user experience. Review usage and suitability of foreshore shared trail networks.	Ongoing	\$\$\$	KCC		Initiative delivered through Integrated Transport Strategy with support from foreshore team	Council budget	MACA consent	· Reduction in incident/complaints
Council-wide	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	4b	Investigate opportunities to improve public access and connectivity along the coastline, while recognising and protecting culturally and environmentally sensitive areas, and addressing illegal private access controls and measures.	Ongoing	\$	KCC	DELWP	Linked to supporting actions within the Integrated Transport Strategy with support from foreshore team	Council budget	MACA consent	· Reduction in no. of private/illegal accesses
Council-wide	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	4c	Review and revise Council's litter management approach in coastal and catchment areas, exploring possible improvement opportunities and strengthening community engagement to generate behavioural change.	Ongoing	\$\$	KCC		Council to review and update litter management, to enhance marine and coastal environment in line with the CMMP objectives. To support the Integrated Waste Management Plan	Council budget		· Reduction in litter/pollution events · Behaviour change
Council-wide	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	4d	Continue to include complementary facilities (such as seating, planting, landscaping, surfacing, and line marking) as part of all major foreshore projects.	Ongoing	\$\$	KCC	DELWP	As per forshore operations	Council budget	MACA consent	
Council-wide	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	4e	Support and contribute to review of existing lease conditions and the commercial use of public space guidelines, incorporating objectives of the CMMP and MAC Policy, and ensuring broader community benefit.	Ongoing	\$	KCC		Action to be delivered via the Open Space Strategy, embedding objectives of the CMMP public space guidelines, with regard to commercial use	Council budget	With consideration to MACA consent process	· Updated guidelines · Review of coastal zone commercial leases undertaken
Council-wide	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	4f	Support foreshore lighting approach as per Council's Public Lighting Policy and guidelines. Proximity to habitat areas and wildlife impacts to be considered.	Ongoing	\$	KCC		Review lighting necessity inforeshore ares as per Public Lighting Policy and guidelines	Council budget		
Council-wide	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	4g	Support the Integrated Transport Strategy and audit of on-land transport facilities in coastal zones (including car/cycling/pedestrian thoroughfares, parking) and prioritise for maintenance or improvement. Includes exploring opportunities to improve/support transport alternatives (reduce car usage, electric vehicle (EV) facilities).	Ongoing	\$	KCC		Linked to supporting actions within the Integrated Transport Strategy	Council budget		
Council-wide	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	4h	Advocate and work with Parks Victoria to monitor, review and update (if necessary due to marine safety concerns) recreational watercraft zoning, improving promotion, communication and enforcement of zoning regulations. Includes enforcement support from Parks Victoria (PV), Maritime Safety Victoria (MSV) and Victorian Water Police Squad (WPS).	Ongoing	\$	KCC	Parks Victoria, Maritime Safety Victoria, Victoria Water Police	Updated, publicly available zoning map Review signage messaging, compliance with standards, consistency, style, location, and condition Upgrade/install as required.	Council budget State Government		
Council-wide	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	4i	Review dog off leash management approach for foreshore areas, to ensure balance and retain and protect broader coastal values.	2-3 years	\$ to \$\$	KCC		Targeted discussions and activities to communicate opportunities to improve promotion, communication and enforcement of zoning regulations. Updated, publicly available zoning maps/signs Review signage messaging, compliance with standards, consistency, style, location, and condition Upgrade/install as required.	Council budget		· Reduction in infringements/fines · Behaviour change
Council-wide	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	4j	Work with relevant stakeholders to explore opportunities for foreshore improvements to meet demand and/or adapt to changing climate: - trails and boardwalks - boat ramp configuration - water and wind soort infrastructure	3-5 years	\$\$\$\$	KCC	DELWP, Parks Victoria , Better Boating Victoria, Life Saving Victoria	New initiative – commission study/s, linked to existing or planned Council projects (i.e. open space improvements) where possible, including implementation of study recommendations in alignment with CMMP objectives	Council budget		
Council-wide	Objective 5: Engage, enable and collaborate with our community in the care of our coastline	5a	Partner with neighbouring Councils, Melbourne Water, and Association of Bayside Municipalities to implement broader scale: - marine and coastal climate adaptation - water quality improvement measures.	Ongoing	**	KCC	Frankston and Bayside Councils, Association of Bayside Municipalities, Melbourne Water.	Implementation of adaptation and water quality improvement measures including supporting implementation of the Bay Blueprint 2070 (ABM) and Healthy Waterways Strategy (MW).	Council budget Joint stakeholder funding applications		· X number of collaborative activities/projects
Council-wide	Objective 5: Engage, enable and collaborate with our community in the care of our coastline	5b	Promote and contribute to environmental monitoring opportunities, collaborating with community groups. May include water quality, litter, stormwater monitoring, marine pest control.	Ongoing	\$	KCC	DELWP, Melbourne Water, Community groups	New initiative – approach and program to be developed Includes: -Identifying existing forums, new meetings/forums -designing the delivery of education activities, tools and events -collaboration with key agencies and stakeholders in the development/design, funding and delivery	Council budget Joint stakeholder funding applications (State, Federal) Community grants Industry and academic funding partners		
Council-wide	Objective 5: Engage, enable and collaborate with our community in the care of our coastline	5c	Strengthen partnerships and advocacy with other stakeholders to raise awareness, promote and support shared care for coastal and marine areas.	Ongoing	\$	KCC	All other land managers, including DELWP, Parks Victoria, Melbourne Water, etc.	Ongoing communications, engagement and collaboration with stakeholders, fostering productive relationships	Council budget		· X number of collaborative activities/events/programs
Council-wide	Objective 5: Engage, enable and collaborate with our community in the care of our coastline	5d	Strengthen understanding and communication regarding obtaining approvals and consents (processes, requirements, considerations) for works and activities within marine and coastal zones.	Ongoing	\$	KCC	DELWP	Targeted internal discussions and activities to promote and communicate the CMMP and the MACA and policy and appraisal process. Including where to find information.	Council budget		
Council-wide	Objective 5: Engage, enable and collaborate with our community in the care of our coastline	5e	Strengthen engagement with foreshore fronting homeowners and bathing box and boatshed owners, to ensure impacts to Crown Land are minimised, and align with council and state management guidelines and policies.	Ongoing	\$	KCC		Ongoing communications, engagement and collaboration with stakeholders, fostering productive relationships	Council budget		
Council-wide	Objective 5: Engage, enable and collaborate with our community in the care of our coastline	5f	Define, confirm and communicate roles and responsibilities for Kingston's marine and coastal zone.	0-2 years	\$	KCC	All land and water managers	Ongoing communications, engagement and collaboration with stakeholders, fostering productive working relationships	Council budget		
Council-wide	Objective 5: Engage, enable and collaborate with our community in the care of our coastline	5g	Generate interest and awareness of marine and coastal environments, hazards, and adaptation by strategic investment in resources (staff, funding, tools, programs) for: - community stewardship programs and partnerships - knowledge sharing and education programs.	2-3 years	\$\$	KCC	DELWP	New initiative - collaboration between Strategic Communications and Engagement and Open Space and Foreshore teams to develop a communication and engagement approach for coastal and marine context (both current and future, e.g. PPBCHA) May be able to link to from State based materials and programs	Council budget		· X number of materials/tools · X number of activities/events/programs · X number of community participants
Council-wide	Objective 5: Engage, enable and collaborate with our community in the care of our coastline	5h	Develop a marine and coastal citizen science monitoring program, including monitoring and reporting of coastal and marine changes (including DELWP Victorian Coastal Monitoring Program (VCMP), CoastSnap, Snap send solve, KCC complaints, litter/plant/wildlife surveys, estuary watch).	2-3 years	\$\$	KCC	Universities/research (incl. Deakin University Marine Mapping Group, Melbourne Uni) DELWP, community groups, community individuals	New initiative for council. Link to other existing KCC community programs. Include the development of a process or platform to collate and share monitored data/information. May be opportunities to link with other existing procedures (external to council).	Council budget Joint stakeholder funding applications (State, Federal) Community grants Industry and academic funding partners		· No. of citizens enrolled · No. of activities/events · No. of sites/locations/programs · No. of community contributions

Kingston CMMP - Implementation plan for Precinct actions

Location/ Precinct	Objective	Action ID	Action	Timeframe (to start implementing by)	Indicative cost	Action lead	Supporting partners	How to be implemented / mechanism	Funding opportunities	Relevant/potential approvals	Potential measure/deliverable/progress
Precinct 1 - Mentone and Parkdale											
Precinct 1 - Mentone and Parkdale	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	P1.1	Continue seaweed management programs. Review current process, including improvement opportunities. Install educational signage in hotspots areas, including information on natural processes and Council’s management approach.	Ongoing	\$ to \$\$	KCC		•Via Council’s foreshore management operations •Includes ongoing engagement and collaboration with stakeholders/ community	Council budget	MACA consent (activity dependent)	• Frequency of clean-up activities • Disposal volumes • No. of complaints
Precinct 1 - Mentone and Parkdale	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	P1.2	Undertake nominated stormwater improvements/upgrades: - Naples Road drain.	0-2 years	\$\$\$\$	KCC		•Implementation via planned CAPEX program, informed by asset management outcomes and reporting •Linked to Council’s stormwater management operations and Integrated Water Cycle Strategy.	Council budget Joint stakeholder funding applications	MACA consent	•% reduction in pollutant/nutrient events • Reduction in outlet maintenance • Reduction coastal processes impact (sediment transport)
Precinct 1 - Mentone and Parkdale	Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate	P1.3	Advocate and work with DELWP for condition assessments (fit for purpose) of existing hazard protection and coastal structures, including seawalls and rock revetments, to inform options for strengthening resilience to climate change.Consider potential impacts of infrastructure changes on surrounding areas and investigate feasibility of alternate adaptation measures (including nature-based solutions) in line with State policy.	3-5 years	\$\$\$	KCC	DELWP	•Via Council’s foreshore asset management program •Ongoing engagement and collaboration with stakeholders	Council budget Joint stakeholder funding applications	MACA consent	•Assesment of asset condition and necessary maintenance •X m of structure improvements, X m ³ area improvements •\$ reduction in hazard event clean up damages , service/road closure • visitation/usage numbers
Precinct 1 - Mentone and Parkdale	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P1.4	Undertake nominated carpark improvements/upgrades: - Parkdale Yacht Club - Mentone LSC.	2-3 years	\$\$\$\$	KCC		•Implementation via planned CAPEX program, informed by asset management outcomes and reporting •Linked Integrated Transport Strategy	Council budget	MACA consent	•X no. carpark improvements •visitation/usage numbers
Precinct 1 - Mentone and Parkdale	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P1.5	Undertake nominated public building and open space improvements/upgrades: - Mentone LSC precinct - Mentone foreshore playground /picnic area. Design principles to be used to strengthen structure resilience to sea level rise and coastal hazards and improve emergency response capacity.	2-3 years	\$\$\$\$	KCC	DELWP, Life Saving Victoria	•Implementation via planned CAPEX program, in partnership with LSV	Council budget Joint stakeholder funding applications	MACA consent	•X no. building improvements •visitation/usage numbers •\$ reduction in hazard event clean up damages
Precinct 1 - Mentone and Parkdale	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P1.6	Undertake nominated access improvements/upgrades in line with DDA audit outcomes: - Bay St car park - Rennison St car park - Parkdale Yacht Club. - Parkdale Kiosk and War Memorial precinct - Antibes St car park - Dixon St.	3-5 years	\$ \$ to \$\$\$	KCC		•Implementation via planned CAPEX program, informed by DDA audit and asset management outcomes and reporting	Council budget	MACA consent	•X no. access improvements •visitation/usage numbers •achieved compliance status
Precinct 2 - Mordialloc											
Precinct 2 - Mordialloc	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	P2.1	Support water quality improvements in upstream catchments and within Mordialloc Creek - bank stabilisation, channel naturalisation, gross pollutant traps (GPTs), water sensitive urban design (WSUD).	Ongoing	\$\$\$	KCC	Melbourne Water, DELWP	•Via Council’s IWM/stormwater management operations and linked to Integrated Water Cycle Strategy. •Ongoing communications, engagement and collaboration with stakeholders, fostering productive relationships, and seeking joint funding opportunities •To consider community stewardship opportunities	Council budget Joint stakeholder funding applications Community grants	MACA consent (within coastal areas)	•Prioritised list of water quality improvement locations •List of potential upgrade/improvement options •X number of upgrades/improvements implemented
Precinct 2 - Mordialloc	Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate	P2.2	Advocate for condition assessment of Mordialloc Creek training walls/retaining walls, to inform options for increasing resilience to climate change.	Ongoing	\$ \$	KCC	Parks Victoria, DELWP	•Via Council’s foreshore asset management program •Ongoing engagement and collaboration with stakeholders	Council budget Joint stakeholder funding applications	MACA consent	•Assesment of asset condition and necessary maintenance
Precinct 2 - Mordialloc	Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate	P2.3	Advocate and work with DELWP for condition assessments (fit for purpose) of existing hazard protection and coastal structures, including rock revetments, geobag walls and seawalls, to inform adaptation/resilience options. Consider potential impacts of infrastructure changes on surrounding areas and investigate feasibility of alternate adaptation measures (incl. nature-based solutions) in line with State policy.	3-5 years	\$\$\$	KCC	DELWP	•Via Council’s foreshore asset management program •Ongoing engagement and collaboration with stakeholders	Council budget Joint stakeholder funding applications	MACA consent	•Assesment of asset condition and necessary maintenance •X m of structure improvements, X m ² area improvements •\$ reduction in hazard event clean up damages , service/road closure • visitation/usage numbers
Precinct 2 - Mordialloc	Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate	P2.4	Work with Parks Victoria (PV) to monitor, review and revise dredging operations at Mordialloc Creek entrance, in line with Parks Victoria’s dredging operations Environmental Management Plan (EMP), including method suitability and longevity, onshore material placement and potential impacts on surrounding environments.	3-5 years	\$ \$	KCC	Parks Victoria, DELWP	•Ongoing communications, engagement and collaboration with stakeholders, fostering productive relationships, and seeking joint funding opportunities	Council budget Joint stakeholder funding applications	MACA consent	•Review and update of plan (if required)
Precinct 2 - Mordialloc	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P2.5	Support and review the finalisation and delivery of the Peter Scullin Reserve Park Plan, in line with CMMP and MAC Policy objectives.	Ongoing	**	KCC		•Implementation via the Open Space Strategy •Ongoing engagement and collaboration with stakeholders •Work to include updated CMMP information and outcomes in council process	Council budget		
Precinct 2 - Mordialloc	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P2.6	Work with DELWP and other relevant stakeholders (PV and MW) to develop a management plan for Mordialloc Creek, with consideration for defining roles and responsibilities, provision and condition of facilities, entrance management, hazard impacts, access, and environmental and cultural values.	Ongoing	\$	KCC	DELWP, Parks Victoria, Melbourne Water	•Ongoing engagement and collaboration with stakeholders •Targeted communication and engagement campaigns	Council budget State Government Joint stakeholder funding partners	Guided by MAC Act, Policy and Strategy MACA consent (activity dependent)	•Working relationship with all stakehodlers •Plan and implementation of improvements
Precinct 2 - Mordialloc	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P2.7	Undertake nominated carpark improvements/upgrades: - Governor Road Boat Ramp.	0-2 years	\$ \$	KCC	Better Boating Victoria	•Implementation via planned CAPEX program, informed by asset management outcomes and reporting	Council budget Joint stakeholder funding applications	MACA consent	•Community satisfaction surveys
Precinct 2 - Mordialloc	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P2.8	Review, promote and improve litter management through educational signage, on-land fishing facilities, disposal bins, and in key locations along Mordialloc Creek.	2-3 years	\$	KCC	Better Boating Victoria	•ngoing engagement and collaboration with stakeholders •Targeted communication and engagement campaigns	Council budget Joint stakeholder funding applications	MACA consent (activity dependent)	• Frequency of clean-up activities • Litter disposal volumes • No. of complaints • Behavioural change (number of fines or offences)
Precinct 2 - Mordialloc	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P2.9	Undertake nominated open space improvements/upgrades – including promenade wall/lights, renewal of landscaping, lighting, and play space.	3-5 years	\$\$\$ to \$\$\$\$	KCC		•Implementation via planned CAPEX program, informed by asset management outcomes and reporting	Council budget	MACA consent	

Kingston CMMF - Implementation plan for Precinct actions

Location/ Precinct	Objective	Action ID	Action	Timeframe (to start implementing by)	Indicative cost	Action lead	Supporting partners	How to be implemented / mechanism	Funding opportunities	Relevant/potential approvals	Potential measure/deliverable/progress
Precinct 3 - Aspendale and Edithvale											
Precinct 3 - Aspendale and Edithvale	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	P3.1	Educate and encourage foreshore-adjacent residents to plant indigenous plants and remove environmental weeds from their gardens.	2-3 years	\$	KCC		•Ongoing engagement and collaboration with stakeholders •Targeted communication and engagement campaigns	Council budget		•% reduction in weed outbreaks •behavioural change
Precinct 3 - Aspendale and Edithvale	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	P3.2	Undertake nominated stormwater improvements/upgrades: - Wilson Grove bioswale.	2-3 years	\$\$	KCC		•Implementation via planned CAPEX program, informed by asset management outcomes and reporting •Linked to Council's stormwater management operations and Integrated Water Cycle Strategy.	Council budget	MACA consent	•% reduction in pollutant/nutrient events •Reduction in outlet maintenance
Precinct 3 - Aspendale and Edithvale	Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate	P3.3	Advocate and work with DELWP for condition assessments (fit for purpose) of existing hazard protection and coastal structures, including rock seawalls and geobag seawall, to inform adaptation/resilience options. Consider potential impacts of infrastructure changes on surrounding areas and investigate feasibility of alternate adaptation measures (including nature-based solutions) in line with State policy.	3-5 years	\$\$\$	KCC	DELWP	•Via Council's foreshore asset management program •Ongoing engagement and collaboration with stakeholders	Council budget State Government	MACA consent	•Assesment of asset condition and necessary maintenance •X m of structure improvements, X m ² area improvements •\$ reduction in hazard event clean up damages , service/road closure • visitation/usage numbers
Precinct 3 - Aspendale and Edithvale	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P3.4	Work with the Level Crossing Removal Authority to help to facilitate enhanced linkages from public transport (Edithvale station) to key parts of the Kingston foreshore. Ensure minimal impacts to dunes, vegetation, habitat and sensitive areas.	Ongoing	\$	KCC	LXRA	•In partnership with LXRA and Council's Foreshore management operations and Traffic & Transport •Ongoing engagement and collaboration with stakeholders •Linked to Council Plan Action Plans	Council budget State Government Joint stakeholder funding partners	MACA consent (activity dependent)	
Precinct 3 - Aspendale and Edithvale	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P3.5	Undertake nominated public building and open space improvements/upgrades: - Aspendale Life Saving Club. Design principles to be used to strengthen structure resilience to sea level rise and coastal hazards and improve emergency response capacity.	0-2 years	\$\$\$\$	KCC	DELWP, Life Saving Victoria	•Implementation via planned CAPEX program, in partnership with LSV	Council budget Joint stakeholder funding applications	MACA consent	•X no. building improvements •visitation/usage numbers
Precinct 3 - Aspendale and Edithvale	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P3.6	Investigate opportunities to improve public access and connectivity - prevent private access control. Ensure minimal impacts to dunes, vegetation, habitat and sensitive areas.		\$	KCC		•Via Council's foreshore operations	Council budget	MACA consent (activity dependent)	•Prioritised list of access improvement locations •X number of upgrades/improvements implemented
Precinct 4 - Chelsea											
Precinct 4 - Chelsea	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	P4.1	Educate and encourage foreshore-adjacent residents to plant indigenous plants and remove environmental weeds from their gardens.	2-3 years	\$	KCC		•Ongoing engagement and collaboration with stakeholders •Targeted communication and engagement campaigns	Council budget		•% reduction in weed outbreaks •behavioural change
Precinct 4 - Chelsea	Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate	P4.2	Advocate and work with DELWP for condition assessments (fit for purpose) of existing hazard protection and coastal structures, including seawalls, to inform adaptation/resilience options. Consider potential impacts of infrastructure changes on surrounding areas and investigate feasibility of alternate adaptation measures (including nature-based solutions) in line with State policy.	3-5 years	\$\$\$	KCC	DELWP	•Via Council's foreshore asset management program •Ongoing engagement and collaboration with stakeholders	Council budget State Government	MACA consent	•Assesment of asset condition and necessary maintenance •X m of structure improvements, X m2 area improvements •\$ reduction in hazard event clean up damages , service/road closure • visitation/usage numbers
Precinct 4 - Chelsea	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P4.3	Undertake nominated public building and open space improvements/upgrades at Chelsea Yacht Club. Design principles to be used to strengthen structure resilience to sea level rise and coastal hazards and improve emergency response capacity	0-2 years	\$\$\$\$	KCC	DELWP	•Implementation via planned CAPEX program	Council budget Joint stakeholder funding applications	MACA consent	•X no. building improvements •visitation/usage numbers •\$ reduction in hazard event clean up damages
Precinct 4 - Chelsea	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P4.4	Undertake condition assessment of Chelsea pier to inform feasibility of possible design and renewal/replacement modifications.	2-3 years	\$\$\$ to \$\$\$\$	KCC	DELWP	•Implementation via planned CAPEX program, informed by asset management outcomes and reporting	Council budget Joint stakeholder funding applications	MACA consent	
Precinct 4 - Chelsea	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P4.5	Advocate and work with Parks Victoria to monitor, review and update zoning (watercraft including jet skis), improving promotion, communication and enforcement of zoning regulations. Includes enforcement support from Parks Victoria, Maritime Safety Victoria (MSV) and Victorian Water Police Squad (WPS).	2-3 years	**	KCC	Parks Victoria, Maritime Safety Victoria, Victoria Water Police	•Targeted and ongoing engagement and collaboration with stakeholders	Council budget Joint stakeholder funding applications		• Community satisfaction surveys • Behavioural change (number of fines or offences)
Precinct 4 - Chelsea	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P4.6	Undertake comprehensive review to inform nominated public building and open space improvements/upgrades at Chelsea Longbeach Surf Life Saving Club. Design principles to be used to strengthen structure resilience to sea level rise and coastal hazard, improve emergency response capacity.	3-5 years	\$\$\$\$	KCC	DELWP, Life Saving Victoria	•Targeted and ongoing engagement and collaboration with stakeholders •Potential to seek partnership and funding opportunities	Council budget Joint stakeholder funding applications	MACA consent	•X no. building improvements •visitation/usage numbers •\$ reduction in hazard event clean up damages

Kingston CMMP - Implementation plan for Precinct actions

Location/ Precinct	Objective	Action ID	Action	Timeframe (to start implementing by)	Indicative cost	Action lead	Supporting partners	How to be implemented / mechanism	Funding opportunities	Relevant/potential approvals	Potential measure/deliverable/progress
Precinct 5 - Bonbeach and Carrum											
Precinct 5 - Bonbeach and Carrum	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	P5.1	Support water quality improvements in upstream catchments and within Patterson River - bank stabilisation, channel naturalisation, gross pollutant traps (GPTs), water sensitive urban design (WSUD).	Ongoing	\$\$	KCC	Melbourne Water, DELWP	•Via Council's IWM/stormwater management operations and linked to Integrated Water Cycle Strategy. •Ongoing communications, engagement and collaboration with stakeholders, fostering productive relationships, and seeking joint funding opportunities •To consider community stewardship opportunities	Council budget Joint stakeholder funding applications Community grants	MACA consent (within coastal areas)	•Prioritised list of water quality improvement locations •List of potential upgrade/improvement options •X number of upgrades/improvements implemented
Precinct 5 - Bonbeach and Carrum	Objective 2: Protect and enhance the environment, from our catchments through to the Bay	P5.2	Educate and encourage foreshore-adjacent residents to plant indigenous plants and remove environmental weeds from their gardens.	Ongoing	\$	KCC		•Ongoing engagement and collaboration with stakeholders •Targeted communication and engagement campaigns	 Council budget		•% reduction in weed outbreaks •behavioural change
Precinct 5 - Bonbeach and Carrum	Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate	P5.3	Advocate for condition assessment of Patterson River training walls to inform options for strengthening resilience to climate change.	Ongoing	\$\$	KCC	Parks Victoria	•Ongoing engagement and collaboration with stakeholders	Council budget State Government Joint stakeholder funding partners	MACA consent	•Assesment of asset condition and necessary maintenance
Precinct 5 - Bonbeach and Carrum	Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate	P5.4	Advocate and work with DELWP for condition assessments (fit for purpose) of existing hazard protection and coastal structures, including rock revetments and seawalls, to inform adaptation/resilience options. Consider potential impacts of infrastructure changes on surrounding areas and investigate feasibility of alternate adaptation measures (including nature-based solutions) in line with the State policy.	3-5 years	\$\$\$	KCC	DELWP	•Via Council's foreshore asset management program •Ongoing engagement and collaboration with stakeholders	Council budget State Government	MACA consent	•Assesment of asset condition and necessary maintenance •X m of structure improvements, X m2 area improvements •\$ reduction in hazard event clean up damages , service/road closure • visitation/usage numbers
Precinct 5 - Bonbeach and Carrum	Objective 3: Respect the natural environment and proactively strengthen our resilience to changing climate	p5.5	Work with Parks Victoria (PV) to monitor, review and revise dredging operations at Patterson River entrance, in line with Parks Victoria's dredging operations Environmental Management Plan (EMP), including method suitability and longevity, onshore material placement and potential impacts on surrounding environments.	3-5 years	\$\$	KCC	Parks Victoria, DELWP	•Targeted discussions and ongoing engagement and collaboration with stakeholders •Work to include updated CMMP and adaptation information and outcomes in council process	Council budget Joint stakeholder funding applications	MACA consent	
Precinct 5 - Bonbeach and Carrum	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P5.6	Support the development of Beauty Spot Park Plan, in line with CMMP and MAC Policy objectives.	Ongoing	\$	KCC		•Implementation via the Open Space Stratgy •Ongoing engagement and collaboration with stakeholders •Work to include updated CMMP information and outcomes in council process	Council budget	MACA consent (activity dependent)	
Precinct 5 - Bonbeach and Carrum	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P5.7	Work with the Level Crossing Removal Authority to facilitate enhanced linkages from public transport (Bonbeach station) to key parts of the Kingston foreshore. Ensure minimal impacts to dune system, vegetation, habitat and sensitive areas.	Ongoing	\$	KCC	LXRA	•In partnership with LXRA and Council's Foreshore management operations and Traffic & Transport •Ongoing engagement and collaboration with stakeholders •Linked to Council Plan Action Plans	Council budget State Government Joint stakeholder funding partners	MACA consent (activity dependent)	
Precinct 5 - Bonbeach and Carrum	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P5.8	Advocate and work with Parks Victoria to monitor, review and update zoning (swimming/fishing/watercraft) at Patterson River, improving promotion, communication and enforcement of zoning regulations. Includes enforcement support from Parks Victoria, Maritime Safety Victoria (MSV), and Victorian Water Police Squad (WPS).	Ongoing	**	KCC	Parks Victoria, Maritime Safety Victoria, Victoria Water Police	•Targeted meetings to form partnerships, and seek joint projects and funding opportunities	Council budget Joint stakeholder funding applications		• Community satisfaction surveys • Behavioural change (number of fines or offences)
Precinct 5 - Bonbeach and Carrum	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P5.9	Undertake nominated public building and open space improvements: - Carrum Surf Life Saving Club extension. Designs principles to be used to strengthen structure resilience to sea level rise and coastal hazards and improve emergency response capacity.	0-2 years	\$\$\$	KCC	DELWP, Life Saving Victoria	•Implementation via planned CAPEX program, in partnership with LSV	Council budget Joint stakeholder funding applications	MACA consent	•X no. building improvements •visitation/usage numbers •\$ reduction in hazard event clean up damages
Precinct 5 - Bonbeach and Carrum	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P5.10	Work with relevant stakeholders to undertake northern extension of Carrum boardwalk to Patterson River (including viewing platform, seating and interpretive signage).	0-2 years	\$\$\$\$	KCC	DELWP	•New initiative – commission project into boardwalk extension, including concept and detail design, and its construction •Implementation via planned CAPEX program	Council budget Joint stakeholder funding applications	MACA consent	- Study/assessment and options development
Precinct 5 - Bonbeach and Carrum	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P5.11	Review, promote and improve litter management through educational signage, on-land facilities, disposal bins and in key locations within the Patterson River system.	2-3 years	\$	KCC	Better Boating Victoria	•Ongoing engagement and collaboration with stakeholders •Targeted communication and engagement campaigns	Council budget Joint stakeholder funding applications	MACA consent (activity dependent)	• Frequency of clean-up activities • Litter disposal volumes • No. of complaints • Behavioural change (number of fines or offences)
Precinct 5 - Bonbeach and Carrum	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P5.12	Work with DELWP, Parks Victoria, Melbourne Water and other relevant stakeholders to progress master plans for Patterson River and Launching Way, with consideration for defining roles and responsibilities, provision and condition of facilities, entrance management, hazard impacts, access, and environmental and cultural values.	2-3 years	\$\$	KCC	DELWP, Parks Victoria, Melbourne Water, Better Boating Victoria, and other stakeholders	•Ongoing engagement and collaboration with stakeholders •Targeted meetings to form partnerships, and seek joint projects and funding opportunities	Council budget State Government Joint stakeholder funding partners	Guided by MAC Act, Policy and Strategy MACA consent (activity dependent)	•Working relationship with all stakehodlers •Plan and implementation of improvements
Precinct 5 - Bonbeach and Carrum	Objective 4: Promote wise and sustainable use of our coastal and marine areas, to enjoy now and into the future	P5.13	Undertake nominated carpark improvements/upgrades.	2-3 years	\$\$	KCC		•Implementation via planned CAPEX program, informed by asset management outcomes and reporting •Linked Integrated Transport Strategy	Council budget	MACA consent	•X no. carpark improvements •visitation/usage numbers

ATTACHMENT D

Spatial data inventory

Attachment D: Spatial data inventory

Figure	Name	Layer name	Source	Link
Figure 4. Public land management arrangements along the Kingston coastline.	LGA and suburb boundary	VMADMIN_LGA_POLYGON	VicMap Admin (DELWP)	https://discover.data.vic.gov.au/dataset/local-government-area-boundaries-property-polygon-vicmap-admin
	Public land management layer	PLM25	DELWP	https://discover.data.vic.gov.au/dataset/public-land-management-plm25
	Land use	LANDUSE_2017	DELWP	https://discover.data.vic.gov.au/dataset/victorian-land-use-information-system-2016-2017
Figure 5. Areas of Cultural Heritage Sensitivity.	LGA and suburb boundary	VMADMIN_LGA_POLYGON	VicMap Admin (DELWP)	https://discover.data.vic.gov.au/dataset/local-government-area-boundaries-property-polygon-vicmap-admin
	Waterways	HY_WATERCOURSE	VicMap Hydro (DELWP)	https://discover.data.vic.gov.au/dataset/watercourse-network-1-25000-vicmap-hydro
	Wetlands and waterbodies (Note: merged dataset)	WETLAND_CURRENT	Victorian Wetland Inventory (DELWP)	https://discover.data.vic.gov.au/dataset/victorian-wetland-inventory-current
		Wetland and Lake Assets	Melbourne Water Corporation	https://discover.data.vic.gov.au/dataset/wetland-and-lake-assets
	Areas of cultural heritage	SENSITIVITY_PUBLIC_Clipped	City of Kingston	n/a – Council supplied
Figure 6 Ecosystems, habitats.	Registered Aboriginal Parties	RAP	DELWP	https://discover.data.vic.gov.au/dataset/registered-aboriginal-parties-rap-appointed-boundaries
	LGA and suburb boundary	VMADMIN_LGA_POLYGON	VicMap Admin (DELWP)	https://discover.data.vic.gov.au/dataset/local-government-area-boundaries-property-polygon-vicmap-admin
	Waterways	HY_WATERCOURSE	VicMap Hydro (DELWP)	https://discover.data.vic.gov.au/dataset/watercourse-network-1-25000-vicmap-hydro
	Saltmarsh	Seamap Australia National Benthic Habitat Layer	Seamap Australia	https://seamapaaustralia.org/map/
	Infralittoral rock and other hard substrata	Seamap Australia National Benthic Habitat Layer	Seamap Australia	https://seamapaaustralia.org/map/
	Coastal scrubs Grasslands and Woodlands	NV2005_EVCBCS	DELWP	https://discover.data.vic.gov.au/dataset/native-vegetation-modelled-2005-ecological-vegetation-classes-with-bioregional-conservation-sta
	Heathy woodlands	NV2005_EVCBCS	DELWP	https://discover.data.vic.gov.au/dataset/native-vegetation-modelled-2005-ecological-vegetation-classes-with-bioregional-conservation-sta
	Herb-rich Woodlands	NV2005_EVCBCS	DELWP	https://discover.data.vic.gov.au/dataset/native-vegetation-modelled-2005-ecological-vegetation-classes-with-bioregional-conservation-sta
	Lower Slopes of Hills Woodlands	NV2005_EVCBCS	DELWP	https://discover.data.vic.gov.au/dataset/native-vegetation-modelled-2005-ecological-vegetation-classes-with-bioregional-conservation-sta
	Plains Woodlands or Forests	NV2005_EVCBCS	DELWP	https://discover.data.vic.gov.au/dataset/native-vegetation-modelled-2005-ecological-vegetation-classes-with-bioregional-conservation-sta
	Riparian Scrubs or Swampy Scrubs and woodlands	NV2005_EVCBCS	DELWP	https://discover.data.vic.gov.au/dataset/native-vegetation-modelled-2005-ecological-vegetation-classes-with-bioregional-conservation-sta
	Riverine Grassy Woodlands or Forests	NV2005_EVCBCS	DELWP	https://discover.data.vic.gov.au/dataset/native-vegetation-modelled-2005-ecological-vegetation-classes-with-bioregional-conservation-sta
	Wetlands and waterbodies (Note: merged dataset)	WETLAND_CURRENT	Victorian Wetland Inventory (DELWP)	https://discover.data.vic.gov.au/dataset/victorian-wetland-inventory-current
		Wetland and Lake Assets	Melbourne Water Corporation	https://discover.data.vic.gov.au/dataset/wetland-and-lake-assets
	Ramsar site	RAMSAR25	DELWP	https://discover.data.vic.gov.au/dataset/ramsar-wetland-areas-in-victoria-at-1-25-000
Figure 7 Coastal infrastructure.	LGA and suburb boundary	VMADMIN_LGA_POLYGON	VicMap Admin (DELWP)	https://discover.data.vic.gov.au/dataset/local-government-area-boundaries-property-polygon-vicmap-admin
	Waterways	HY_WATERCOURSE	VicMap Hydro (DELWP)	https://discover.data.vic.gov.au/dataset/watercourse-network-1-25000-vicmap-hydro
	Beach and boat access point	BOAT_ACCESS_POINTS	DELWP	https://discover.data.vic.gov.au/dataset/coastal-boat-access-points-boat-ramps-boat-launches-boat-slipways
	Boat mooring points	VIC_BOAT_MOORING_POINTS	DELWP	https://discover.data.vic.gov.au/dataset/boat-moorings-along-the-victorian-coast

Figure	Name	Layer name	Source	Link
Figure 8 Available coastal hazard overlays.	Coastal engineering (Note: merged dataset)	Foreshore_Assets COAST_PROTECTION_STRUCTURE_LINE	City of Kingston DELWP	n/a – Council supplied https://discover.data.vic.gov.au/dataset/coastal-protection-structures
	Drainage network	MelbWaterDrainageNetwork	City of Kingston	n/a – Council supplied
	Stormwater and drainage pipes	Stormwater_DrainagePIPES	City of Kingston	n/a – Council supplied
	LGA and suburb boundary	VMADMIN_LGA_POLYGON	VicMap Admin (DELWP)	https://discover.data.vic.gov.au/dataset/local-government-area-boundaries-property-polygon-vicmap-admin
	Waterways	HY_WATERCOURSE	VicMap Hydro (DELWP)	https://discover.data.vic.gov.au/dataset/watercourse-network-1-25000-vicmap-hydro
	Shoreline classification (Smartline)	Geomorphology Smartline Geopackage	Geoscience Australia	https://data.gov.au/dataset/ds-ga-2b970ac0-7f3b-49c0-8301-fa9dda659ad/details?q=smartline
	Sea level rise (SLR) 0.82 m for 2100	SLR82cm_2100	City of Kingston (originally source from Spatial Datamart)	https://discover.data.vic.gov.au/dataset/victorian-coastal-inundation-sea-level-rise-2100
	SLR 0.82 m for 2100 + Storm tide (1% AEP)	SLR82cm_ST_2100	City of Kingston (originally source from Spatial Datamart)	https://discover.data.vic.gov.au/dataset/victorian-coastal-inundation-sea-level-rise-2100
Figure 9 Transport infrastructure.	LGA and suburb boundary	VMADMIN_LGA_POLYGON	VicMap Admin (DELWP)	https://discover.data.vic.gov.au/dataset/local-government-area-boundaries-property-polygon-vicmap-admin
	Railway stations	TR_RAIL_INFRASTRUCTURE	VicMap Transport (DELWP)	https://discover.data.vic.gov.au/dataset/rail-infrastructure-vicmap-transport
	Bicycle and shared path	Transport_Bicycle_Path	City of Kingston	n/a – Council supplied
	Major roads	TR_ROAD	VicMap Transport (DELWP)	n/a – Council supplied
	Railway	TR_RAIL	VicMap Transport (DELWP)	https://discover.data.vic.gov.au/dataset/rail-network-vicmap-transport
	Paths within reserves	ra_pathswithinreserves	City of Kingston	n/a – Council supplied
	Carparks	V_ra_carparks	City of Kingston	n/a – Council supplied
Figure 10 Kingston Planning Scheme.	LGA and suburb boundary	VMADMIN_LGA_POLYGON	VicMap Admin (DELWP)	https://discover.data.vic.gov.au/dataset/local-government-area-boundaries-property-polygon-vicmap-admin
	Zoning	PLAN_ZONE	City of Kingston	n/a – Council supplied
	Land subject to inundation	PLAN_OVERLAY	City of Kingston	n/a – Council supplied
Figure 11 Recreational infrastructure and areas.	LGA and suburb boundary	VMADMIN_LGA_POLYGON	VicMap Admin (DELWP)	https://discover.data.vic.gov.au/dataset/local-government-area-boundaries-property-polygon-vicmap-admin
	All abilities access	Community facilities	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as “Community facilities”
	Boat mooring points	VIC_BOAT_MOORING_POINTS	DELWP	https://discover.data.vic.gov.au/dataset/boat-moorings-along-the-victorian-coast
	Key observation site	Community facilities	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as “Community facilities”
	Dog off lease areas (all year round and with seasonal and time restrictions)	dog off leash areas	City of Kingston	n/a – Council supplied
	Beach	Foreshore_Reserves	City of Kingston	n/a – Council supplied
	Foreshore reserve	Foreshore_Reserves	City of Kingston	n/a – Council supplied
	Sportsground	v_ha_sportsgrounds	City of Kingston	n/a – Council supplied
	Playgrounds	v_ha_Playgrounds	City of Kingston	n/a – Council supplied
	Reserves	HansenAssets_RESERVES	City of Kingston	n/a – Council supplied
	Surf Life Saving and Yacht Clubs	V_HansenAssets_Buildings	City of Kingston	n/a – Council supplied
	Activity Centres	Activity Centres	Digitised from Activity Centres Streetscape Suite (2013)	Provided to council as “Activity Centres”
Figure 14 Precinct 1 - Mentone and	Suburb boundaries	VMADMIN_LOCALITY_POLYGON	VicMap Admin (DELWP)	https://discover.data.vic.gov.au/dataset/locality-boundaries-property-polygon-vicmap-admin
	Beach and boat access point	BOAT_ACCESS_POINTS	DELWP	https://discover.data.vic.gov.au/dataset/coastal-boat-access-points-boat-ramps-boat-launches-boat-slipways

Figure	Name	Layer name	Source	Link
Parkdale, with precinct actions shown on map.	Coastal infrastructure	COAST_PROTECTION_STRUCTURE_LINE	DELWP	https://discover.data.vic.gov.au/dataset/coastal-protection-structures
	Dog off lease areas (all year round and with seasonal and time restrictions)	dog off leash areas	City of Kingston	n/a – Council supplied
	Surf Life Saving and Yacht Clubs	V_HansenAssets_Buildings	City of Kingston	n/a – Council supplied
	Sportsgrounds	v_ha_sportsgrounds	City of Kingston	n/a – Council supplied
	Playgrounds	v_ha_Playgrounds	City of Kingston	n/a – Council supplied
	Reserves	HansenAssets_RESERVES	City of Kingston	n/a – Council supplied
	Neighbourhood foreshore activity node	Activity nodes	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as “Activity nodes”
	Major foreshore activity node	Activity nodes	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as “Activity nodes”
	Primary foreshore activity node	Activity nodes	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as “Activity nodes”
	Key observation site	Community facilities	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as “Community facilities”
	Public toilets	Community facilities	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as “Community facilities”
	Railway stations	TR_RAIL_INFRASTRUCTURE	VicMap Transport (DELWP)	https://discover.data.vic.gov.au/dataset/rail-infrastructure-vicmap-transport
	Bicycle and shared path	Transport_Bicycle_Path	City of Kingston	n/a – Council supplied
	Railway	TR_RAIL	VicMap Transport (DELWP)	https://discover.data.vic.gov.au/dataset/rail-network-vicmap-transport
	Activity Centres	Activity Centres	Digitised from Activity Centres Streetscape Suite (2013)	Provided to council as “Activity Centres”
Figure 15 Precinct 2 - Mordialloc, with precinct actions shown on map.	Suburb boundaries	VMADMIN_LOCALITY_POLYGON	VicMap Admin (DELWP)	https://discover.data.vic.gov.au/dataset/locality-boundaries-property-polygon-vicmap-admin
	Beach and boat access point	BOAT_ACCESS_POINTS	DELWP	https://discover.data.vic.gov.au/dataset/coastal-boat-access-points-boat-ramps-boat-launches-boat-slipways
	Boat mooring points	VIC_BOAT_MOORING_POINTS	DELWP	https://discover.data.vic.gov.au/dataset/boat-moorings-along-the-victorian-coast
	All abilities access	Community facilities	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as “Community facilities”
	Boat mooring	COAST_PROTECTION_STRUCTURE_LINE	DELWP	https://discover.data.vic.gov.au/dataset/coastal-protection-structures
	Coastal infrastructure	COAST_PROTECTION_STRUCTURE_LINE	DELWP	https://discover.data.vic.gov.au/dataset/coastal-protection-structures
	Dog off lease areas (with seasonal/time restrictions)	dog off leash areas	City of Kingston	n/a – Council supplied
	Surf Life Saving and Yacht Clubs	V_HansenAssets_Buildings	City of Kingston	n/a – Council supplied
	Playgrounds	v_ha_Playgrounds	City of Kingston	n/a – Council supplied
	Reserves	HansenAssets_RESERVES	City of Kingston	n/a – Council supplied
	Primary foreshore activity node	Activity nodes	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as “Activity nodes”
	Key observation site	Community facilities	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as “Community facilities”
	Public toilets	Community facilities	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as “Community facilities”
	Railway stations	TR_RAIL_INFRASTRUCTURE	VicMap Transport (DELWP)	https://discover.data.vic.gov.au/dataset/rail-infrastructure-vicmap-transport
	Bicycle and shared path	Transport_Bicycle_Path	City of Kingston	n/a – Council supplied
	Railway	TR_RAIL	VicMap Transport (DELWP)	https://discover.data.vic.gov.au/dataset/rail-network-vicmap-transport
	Waterways	HY_WATERCOURSE	VicMap Hydro (DELWP)	https://discover.data.vic.gov.au/dataset/watercourse-network-1-25000-vicmap-hydro

Figure	Name	Layer name	Source	Link
	Waterbodies	Wetland and Lake Assets	Melbourne Water Corporation	https://discover.data.vic.gov.au/dataset/wetland-and-lake-assets
	Activity Centres	Activity Centres	Digitised from Activity Centres Streetscape Suite (2013)	Provided to council as "Activity Centres"
Figure 16 Precinct 3 – Aspendale and Edithvale, with precinct actions shown on map.	Suburb boundaries	VMADMIN_LOCALITY_POLYGON	VicMap Admin (DELWP)	https://discover.data.vic.gov.au/dataset/locality-boundaries-property-polygon-vicmap-admin
	Beach and boat access point	BOAT_ACCESS_POINTS	DELWP	https://discover.data.vic.gov.au/dataset/coastal-boat-access-points-boat-ramps-boat-launches-boat-slipways
	All abilities access	Community facilities	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as "Community facilities"
	Coastal infrastructure	COAST_PROTECTION_STRUCTURE_LINE	DELWP	https://discover.data.vic.gov.au/dataset/coastal-protection-structures
	Dog off lease areas (all year round and with seasonal/time restrictions)	dog off leash areas	City of Kingston	n/a – Council supplied
	Surf Life Saving and Yacht Clubs	V_HansenAssets_Buildings	City of Kingston	n/a – Council supplied
	Sportsground	v_ha_sportsgrounds	City of Kingston	n/a – Council supplied
	Playgrounds	v_ha_Playgrounds	City of Kingston	n/a – Council supplied
	Reserves	HansenAssets_RESERVES	City of Kingston	n/a – Council supplied
	Neighbourhood foreshore activity node	Activity nodes	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as "Activity nodes"
	Key observation site	Community facilities	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as "Community facilities"
	Public toilets	Community facilities	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as "Community facilities"
	Railway stations	TR_RAIL_INFRASTRUCTURE	VicMap Transport (DELWP)	https://discover.data.vic.gov.au/dataset/rail-infrastructure-vicmap-transport
	Bicycle and shared path	Transport_Bicycle_Path	City of Kingston	n/a – Council supplied
	Railway	TR_RAIL	VicMap Transport (DELWP)	https://discover.data.vic.gov.au/dataset/rail-network-vicmap-transport
	Waterways	HY_WATERCOURSE	VicMap Hydro (DELWP)	https://discover.data.vic.gov.au/dataset/watercourse-network-1-25000-vicmap-hydro
	Wetlands and waterbodies (Note: merged dataset)	WETLAND_CURRENT	Victorian Wetland Inventory (DELWP)	https://discover.data.vic.gov.au/dataset/victorian-wetland-inventory-current
		Wetland and Lake Assets	Melbourne Water Corporation	https://discover.data.vic.gov.au/dataset/wetland-and-lake-assets
	Activity Centres	Activity Centres	Digitised from Activity Centres Streetscape Suite (2013)	Provided to council as "Activity Centres"
Figure 17 Precinct 4 – Chelsea, with precinct actions shown on map.	Suburb boundaries	VMADMIN_LOCALITY_POLYGON	VicMap Admin (DELWP)	https://discover.data.vic.gov.au/dataset/locality-boundaries-property-polygon-vicmap-admin
	Beach and boat access point	BOAT_ACCESS_POINTS	DELWP	https://discover.data.vic.gov.au/dataset/coastal-boat-access-points-boat-ramps-boat-launches-boat-slipways
	Coastal infrastructure	COAST_PROTECTION_STRUCTURE_LINE	DELWP	https://discover.data.vic.gov.au/dataset/coastal-protection-structures
	Dog off lease areas (with seasonal/time restrictions)	dog off leash areas	City of Kingston	n/a – Council supplied
	Surf Life Saving and Yacht Clubs	V_HansenAssets_Buildings	City of Kingston	n/a – Council supplied
	Playgrounds	v_ha_Playgrounds	City of Kingston	n/a – Council supplied
	Reserves	HansenAssets_RESERVES	City of Kingston	n/a – Council supplied
	Neighbourhood foreshore activity node	Activity nodes	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as "Activity nodes"
	Major foreshore activity node	Activity nodes	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as "Activity nodes"

Figure	Name	Layer name	Source	Link
	Primary foreshore activity node	Activity nodes	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as "Activity nodes"
	Key observation site	Community facilities	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as "Community facilities"
	Public toilets	Community facilities	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as "Community facilities"
	Railway stations	TR_RAIL_INFRASTRUCTURE	VicMap Transport (DELWP)	https://discover.data.vic.gov.au/dataset/rail-infrastructure-vicmap-transport
	Bicycle and shared path	Transport_Bicycle_Path	City of Kingston	n/a – Council supplied
	Railway	TR_RAIL	VicMap Transport (DELWP)	https://discover.data.vic.gov.au/dataset/rail-network-vicmap-transport
	Activity Centres	Activity Centres	Digitised from Activity Centres Streetscape Suite (2013)	Provided to council as "Activity Centres"
Figure 18 Precinct 5 – Bonbeach and Carrum, with precinct actions shown on map.	Suburb boundaries	VMADMIN_LOCALITY_POLYGON	VicMap Admin (DELWP)	https://discover.data.vic.gov.au/dataset/locality-boundaries-property-polygon-vicmap-admin
	Beach and boat access point	BOAT_ACCESS_POINTS	DELWP	https://discover.data.vic.gov.au/dataset/coastal-boat-access-points-boat-ramps-boat-launches-boat-slipways
	Boat mooring points	VIC_BOAT_MOORING_POINTS	DELWP	https://discover.data.vic.gov.au/dataset/boat-moorings-along-the-victorian-coast
	All abilities access	Community facilities	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as "Community facilities"
	Boat mooring	COAST_PROTECTION_STRUCTURE_LINE	DELWP	https://discover.data.vic.gov.au/dataset/coastal-protection-structures
	Coastal infrastructure	COAST_PROTECTION_STRUCTURE_LINE	DELWP	https://discover.data.vic.gov.au/dataset/coastal-protection-structures
	Dog off lease areas (all year round and with seasonal/time restrictions)	dog off leash areas	City of Kingston	n/a – Council supplied
	Surf Life Saving and Yacht Clubs	V_HansenAssets_Buildings	City of Kingston	n/a – Council supplied
	Sportsground	v_ha_sportsgrounds	City of Kingston	n/a – Council supplied
	Playgrounds	v_ha_Playgrounds	City of Kingston	n/a – Council supplied
	Reserves	HansenAssets_RESERVES	City of Kingston	n/a – Council supplied
	Saltmarsh	Seamap Australia National Benthic Habitat Layer	Seamap Australia	https://seamapaustralia.org/map/
	Neighbourhood foreshore activity node	Activity nodes	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as "Activity nodes"
	Major foreshore activity node	Activity nodes	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as "Activity nodes"
	Key observation site	Community facilities	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as "Community facilities"
	Public toilets	Community facilities	Digitised from Kingston Coastal Management Plan (2014)	Provided to council as "Community facilities"
	Railway stations	TR_RAIL_INFRASTRUCTURE	VicMap Transport (DELWP)	https://discover.data.vic.gov.au/dataset/rail-infrastructure-vicmap-transport
	Bicycle and shared path	Transport_Bicycle_Path	City of Kingston	n/a – Council supplied
	Railway	TR_RAIL	VicMap Transport (DELWP)	https://discover.data.vic.gov.au/dataset/rail-network-vicmap-transport
	Waterways	HY_WATERCOURSE	VicMap Hydro (DELWP)	https://discover.data.vic.gov.au/dataset/watercourse-network-1-25000-vicmap-hydro
	Wetlands and waterbodies (Note: merged dataset)	WETLAND_CURRENT	Victorian Wetland Inventory (DELWP)	https://discover.data.vic.gov.au/dataset/victorian-wetland-inventory-current
		Wetland and Lake Assets	Melbourne Water Corporation	https://discover.data.vic.gov.au/dataset/wetland-and-lake-assets
	Activity Centres	Activity Centres	Digitised from Activity Centres Streetscape Suite (2013)	Provided to council as "Activity Centres"