

Moolap Coastal Strategic Framework Plan

August 2019



Aboriginal Acknowledgement

The State Government proudly acknowledges the Wadawurrung people as the traditional custodians of the land within the Moolap Coastal Strategic Framework Plan study area. We pay our respects to their ancestors and Elders, past and present.

We recognise and respect their unique cultural heritage, beliefs and relationship to their traditional lands, which continue to be important to them today.

We recognise the intrinsic connection of Wadawurrung people to their traditional lands and value the contribution their Caring for Country makes to the management of the land, coastlines, seas and its waterways.

We support the need for genuine and lasting partnerships with the Wadawurrung people to understand their culture and connections to Country in the way we plan for, and manage the region.

We embrace the spirit of reconciliation, working towards equity of outcomes and ensuring an equal voice for Australia's first people.



© The State of Victoria Department of Environment, Land, Water and Planning 2019

Photo Acknowledgements

Front cover: David Tytherleigh (left), David Lock and Associates (centre), Alcoa of Australia (right)

Photos are provided by the Department of Environment, Land, Water and Planning (DELWP) unless otherwise identified:

Source: Victorian UAS Imaging (**VUI**)

Source: Donna Squire - Deakin University Photography (**DS-DUP**)

Source: iStock (www.istockphoto.com) under copyright (**IST**)

Source: Shutterstock (www.shutterstock.com) under copyright (**SHU**)

Source: Alcoa of Australia (**AOA**)

Source: Heritage Victoria (**HV**)

Source: City of Greater Geelong (**COGG**)

Source: Victorian Planning Authority (**VPA**)

Source: State Library Victoria (**SLV**)

Source: David Lock and Associates (**DLA**)



This work is licensed under a Creative Commons Attribution 4.0 International licence. You are free to re-use the work under that licence, on the condition that you credit the State of Victoria as author. The licence does not apply to any images, photographs or branding, including the Victorian Coat of Arms, the Victorian Government logo and the Department of Environment, Land, Water and Planning (DELWP) logo. To view a copy of this licence, visit creativecommons.org/licenses/by/4.0/

ISBN 978-1-76077-098-3 (print)

ISBN 978-1-76077-099-0 (pdf)

Disclaimer










This publication may be of assistance to you, but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore, disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

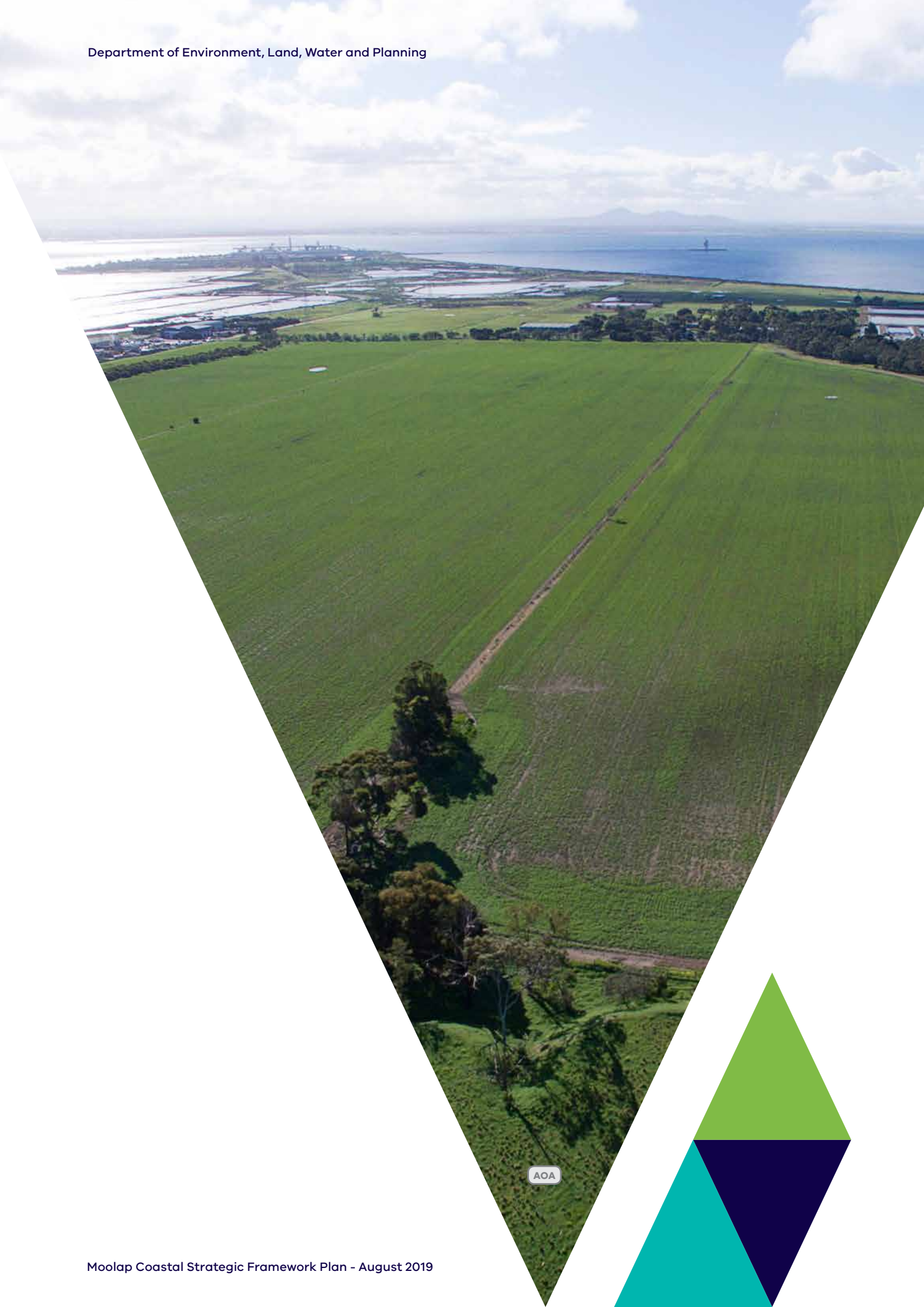
The Moolap Plan identifies preferred future use of the land, but confers no rights to landowners. Implementation of the Moolap Plan may include Planning Scheme Amendments to change the planning policy and controls (i.e. zones and overlays) and planning permits for development approval, these are to be considered on their merits.

Accessibility

If you would like to receive this publication in an alternative format, telephone the DELWP Customer Service Centre on 136186, email customer.service@delwp.vic.gov.au or via the National Relay Service on 133 677 www.relayservice.com.au. This document is also available on the internet at www.delwp.vic.gov.au

Content

	Foreword	1
	Executive summary	2
	Background and context	4
	Preparation of the Moolap Plan	4
	Community and stakeholder engagement and feedback	5
	Policy, legislation and research	6
	Growth of Geelong	6
	Locality context	7
	Historical context	8
	Previous and current land use	10
	Land ownership	12
	Environmental assets and constraints	13
	Site attributes	15
	Precinct attributes	16
	Strategic framework	20
	Vision	21
	Principles	21
	At a glance	22
	Precinct direction – Point Henry Precinct	24
	Precinct direction – Wetlands and Former Saltworks Precinct	32
	Precinct direction – Southern Precinct	38
	Precinct direction – Moolap East Precinct	44
	Implementation strategy	51



AOA



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



Hon Richard Wynne MP
Minister for Planning

Foreword

Geelong's future has never appeared brighter than it does today. The city is experiencing unprecedented growth as it transitions from its reliance on traditional manufacturing industries into a hub for clever and creative businesses.

Geelong has established a pathway to a prosperous future following the growth of booming sectors such as insurance, government services, health, education and tourism alongside exciting new industries like carbon fibre manufacturing and app development.

The transition of the economy has presented Geelong with some unique opportunities, including urban renewal of large former industrial sites. The closure of Alcoa's Point Henry plant and the Cheetham Saltworks at Moolap have delivered the city a fantastic 1,200-hectare opportunity with 270-degree coastal views, located just seven kilometres from central Geelong.

The Moolap-Point Henry site is two and a half times bigger than Fishermans Bend, which is currently the largest urban renewal site in Australia. It could one day be home to 12,000 residents, the site of significant tourist attractions and a major environmental asset, providing shelter for thousands of migratory birds that stop at Moolap every year.

Over the last four years, the government has listened to the community and stakeholders, considered the options and potential of the site and developed the Moolap Plan to maximise long-term benefits for the Geelong community, economy and environment.

The Moolap Plan is a guide to delivering the Victorian State Government's vision for the site, creating the appropriate setting for something new and unique that celebrates Geelong, its environment, its location and its history. The Moolap Plan supports residential development, tourism, environmental parkland, and the continuation of industrial businesses. It sets the scene for the potential for outstanding tourist attractions and accommodation, retail, commercial, entertainment, cultural and recreational activities to meet the needs of residents and visitors.

The Moolap Plan does not approve development or rezone land. That will come about through implementation steps that will include detailed assessment and design, impact analysis and regulatory approvals.

The preparation of a management master plan for the wetlands and former saltworks will need to be an initial step in consultation with land owners, community, environmental groups and other stakeholders. For precincts that are subject to development, detailed design and infrastructure planning will need to be prepared, with land owners and key industrial businesses to inform timing.

These are the initial stages of a blueprint that will shape the evolution of the Moolap-Point Henry site over the next 100 years.

This is good long-term planning. The diverse interests and objectives of stakeholders have been taken into account in setting the course for the future opportunities of this significant terrain. The Moolap Plan establishes the framework to deliver Geelong an asset that will contribute to the future liveability and prosperity of the region.

Executive summary

The Moolap Plan study area, which includes northern Moolap and Point Henry has a significant place in Geelong's historic landscape. The area has undergone change from being the early landing place for large ships coming to Geelong, to the establishment of the Cheetham Saltworks in the 1890s and the location of the Alcoa of Australia (Alcoa) aluminium smelter and rolling mill.

The closure of Alcoa's operations has been a catalyst for identifying the strategic direction for the study area. The Victorian State Government has prepared the Moolap Coastal Strategic Framework Plan (Moolap Plan) through its Department of Environment, Land, Water and Planning (DELWP) following extensive public consultation.

The study area has been divided into four distinct but integrated precincts. Urban renewal will occur at Point Henry and in the Moolap East precincts, on current industrial and rural land. Both of these precincts include elevated land (approximately 80 hectares and 350 hectares respectively) with extensive northern views of Corio Bay. Point Henry Precinct will see medium to high density residential development (up to 2,000 residents) with tourism attractions and accommodation, while the Moolap East Precinct will be a sustainable residential development (up to 10,000 residents) with community facilities. Both areas will include public open space, access to the foreshore and public transport links.

The study area has 10km of coastal foreshore and large areas of wetlands, which include environmental, cultural and heritage values. These areas are significant but also vulnerable and predicted to be further impacted by climate change and sea level rise. Urban development in these sensitive areas is to be avoided and the environment will be prioritised.

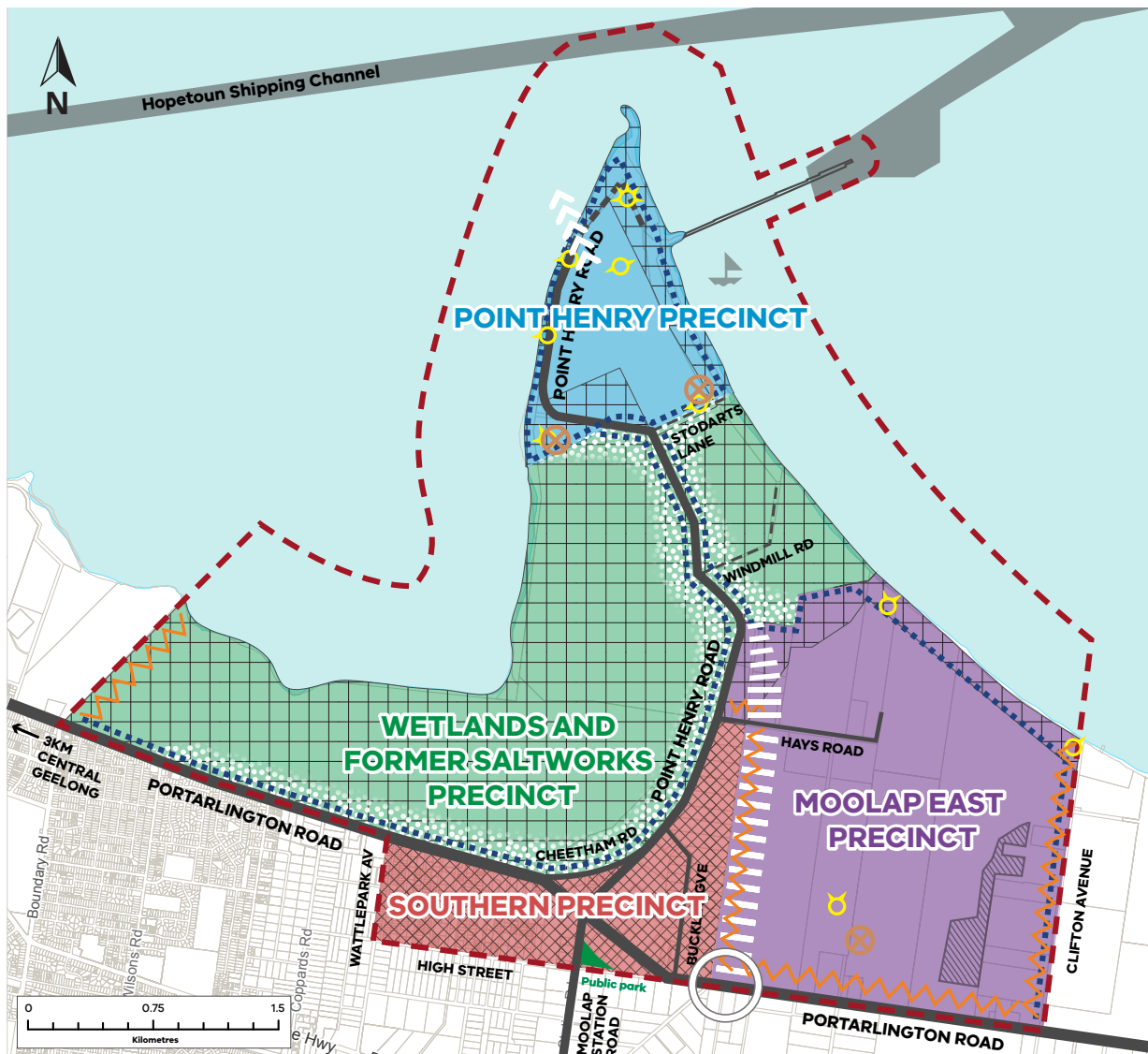
Over 140 hectares of existing industrial land will be retained in the south of the study area to continue providing important local jobs and services.

The implementation of the Moolap Plan will take several years due to decommissioning and site remediation of areas subject to urban renewal. Additionally, the Moolap Plan supports the retention of Dow Chemicals as an important employer within Geelong and only when they are ready to leave will the potential for urban renewal in the Moolap East Precinct be realised.

A Management Master Plan will be required for the Wetlands and Former Saltworks Precinct (approximately 550 hectares) to guide improvement and adaptation in this precinct. An infrastructure assets analysis will be required to provide necessary information on the provision of utility services and key infrastructure throughout the study area. Additionally, a Precinct Structure Plan (PSP) will be required for the urban renewal areas to guide development.



The Moolap Plan's strategic direction for the study area is summarised in the Strategic Framework Map:



LEGEND

<p>Residential and Tourism (subject to remediation of the land), includes medium-high density development, permanent residential and temporary accommodation, tourist facilities as well as commercial and community facilities to meet the needs of residents and visitors.</p>	<p>Environmental including bird habitats, public open space, stormwater management, environmental, historical and cultural values and complementary infrastructure and facilities.</p>	<p>Industrial including light and medium industry and commercial businesses to provide local services and employment while avoiding off-site impact on residential neighbours.</p>	<p>Residential (subject to Dow Chemical deciding to relocate and remediation of the land), includes a range of residential densities, with community, retail and commercial facilities to meet the needs of the study area.</p>
<p>Study area boundary</p> <p>Existing Roads</p> <p>Potential connection to Bellarine Link (indicative)</p> <p>Protect a long-term strategic road alignment (indicative)</p> <p>Potential intersection upgrade associated with the potential connection with Bellarine Link (indicative)</p>	<p>Provide trails and pedestrian connections (indicative)</p> <p>Marine infrastructure and facilities</p> <p>Provide an appropriate interface</p> <p>Rehabilitate previous land fill prior to a new sensitive use</p> <p>Respond to predicted sea level rise including coastal retreat and protection measures (while maintaining a public owned foreshore)</p>	<p>Retain and support public access to key views</p> <p>Investigate improvements to stormwater management and connection to reticulated sewer</p> <p>Potential area for infrastructure/ utilities, and where it complements environmental management and conditions, facilities and buildings for tourism, research and culture/heritage (excluding residential).</p> <p>Manage the Moolapio grasslands</p>	

Background and context

Preparation of the Moolap Plan

Origins

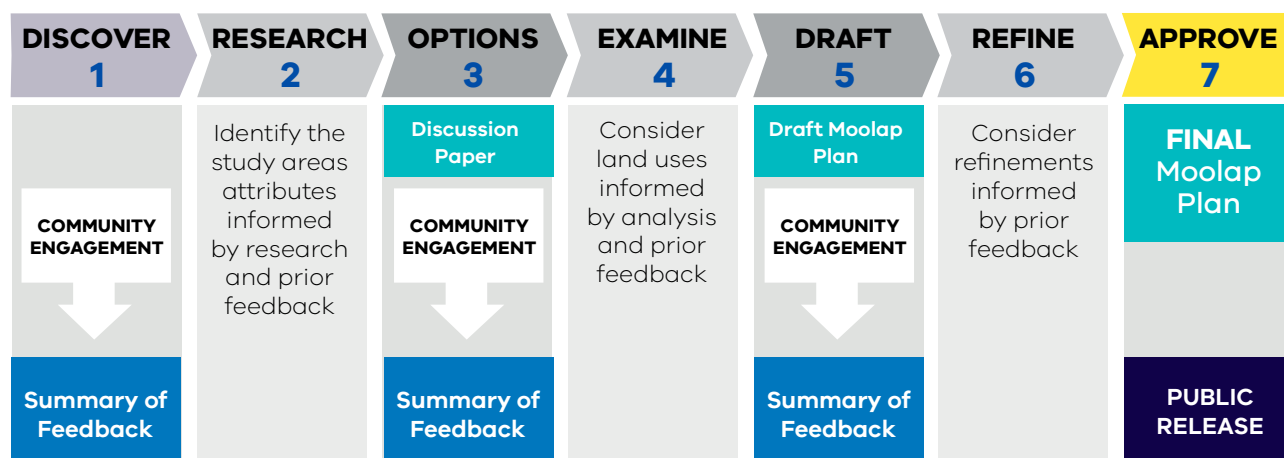
The closure of Alcoa's operations has been a catalyst for identifying the strategic direction for the study area. The Victorian State Government has prepared the Moolap Coastal Strategic Framework Plan (Moolap Plan) through its Department of Environment, Land, Water and Planning (DELWP) with input from other government agencies and stakeholders.

Considerations

The Moolap Plan has considered the following over seven project stages:

- community and stakeholder engagement and feedback
- policy, legislation and research
- growth of Geelong
- locality context
- historical context
- previous and current land use
- land ownership
- site attributes
- environmental assets and constraints.

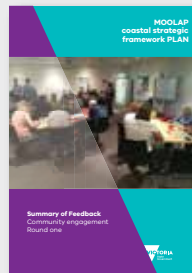
PROJECT STAGES



A summary of previous community feedback and project documents and reports are available at www.delwp.vic.gov.au/moolap

Community and stakeholder engagement and feedback

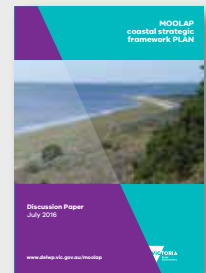
The process of preparing the Moolap Plan has included three rounds of engagement with members of the community and stakeholders represented by landowners, organisations, businesses and the general public. Summary of Feedback reports have been prepared following each round of consultation. In total, the consultation has included:



Summary of Feedback – Round One



Background Report



Discussion Paper



Summary of Feedback – Round Two



Draft Moolap Plan



Summary of Feedback – Round Three

411

people attended public workshops and open houses

287

people attended launch events and group briefings/meetings

833

people completed surveys

197

people submitted written submissions

Policy, legislation and research

The preparation of the Moolap Plan has considered relevant policies, legislation and research. This includes but is not limited to:

State and Regional

- Planning and Environment Act 1987
- Heritage Act 2017
- Aboriginal Heritage Act 2006
- Environment Protection and Biodiversity Conservation Act 1999
- Environment Protection Act 1970
- Victorian Coastal Strategy 2014

Regional and Local

- City of Greater Geelong 2015 Inundation Report Bellarine Peninsula-Corio Bay Local Coastal Hazard Assessment December 2015
- G21 Regional Growth Plan 2013
- The City of Greater Geelong Settlement Strategy October 2018
- Corangamite Regional Catchment Strategy 2013-2019
- Point Henry Foreshore Management Plan 2006
- Geelong Wetlands Strategy 2006
- Greater Geelong Planning Scheme

Independent Research

- Deakin University Case Study Analysis Research

Growth of Geelong

Geelong's proximity to Melbourne, its liveability and price advantages continue to place it in an ideal position to attract new residents and investment. Geelong is one of the fastest growing areas in Victoria. In the last five years Geelong's population has grown from 216,000 to 239,000 people. During this time, the growth rate increased from 1.5 to 2.7 per cent.

It is anticipated that Greater Geelong will continue to experience strong growth and demand for housing over a sustained period.

Victoria in Future 2018 estimates that population for the Geelong Local Government Area will increase by 63,011 people over the next 15 years and reach almost 500,000 people by 2051.

Geelong's previous industry strengths in manufacturing have transitioned in recent years to a much broader industry base. The major industries are now in health and allied services, education and research, advanced manufacturing, tourism, agribusiness, construction and professional services.

Locality context

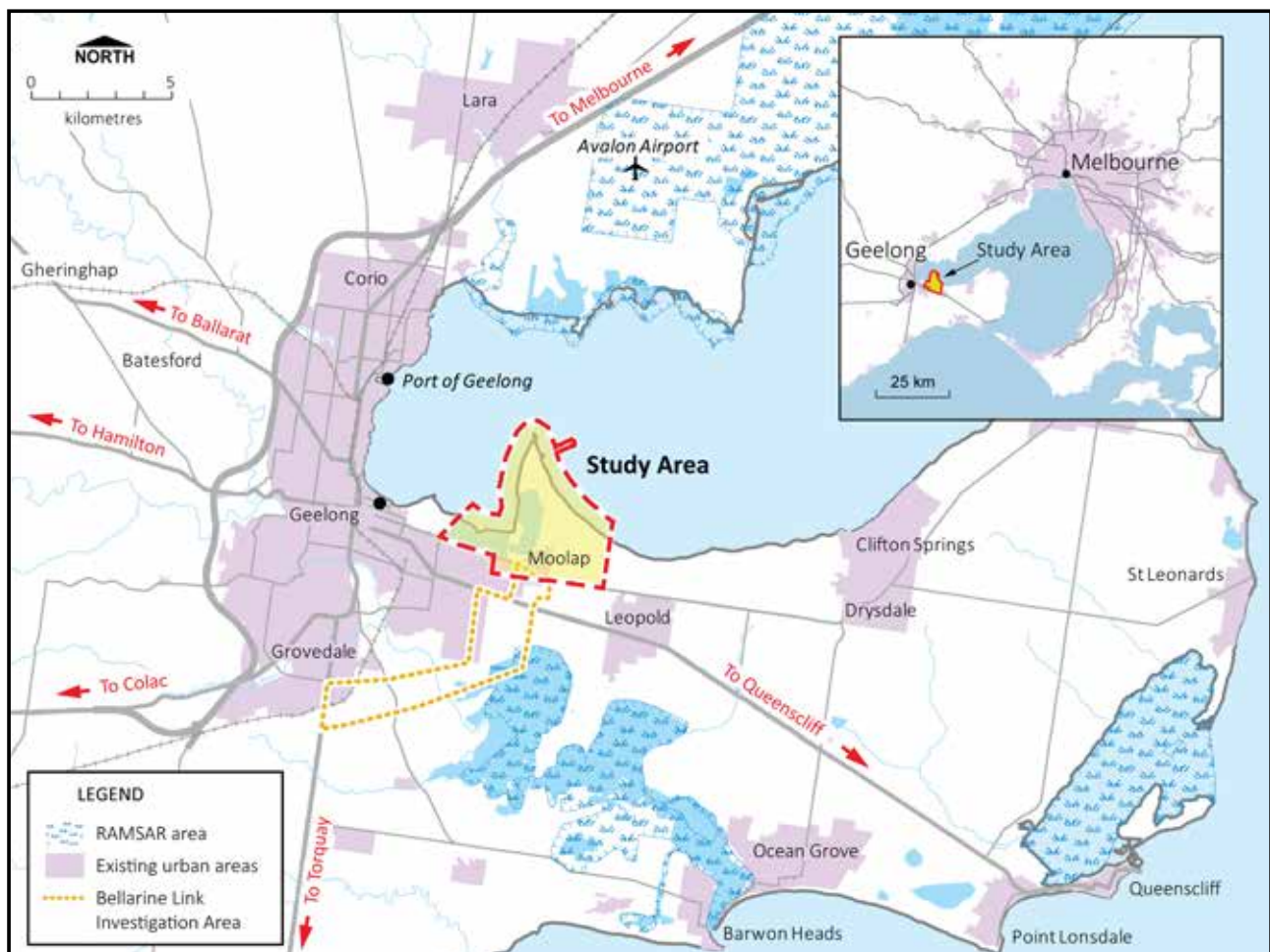
Study area

The study area is in the northern part of the suburb of Moolap and includes the Point Henry peninsula. It is accessible from central Geelong via Portarlington Road which is the major arterial road linking Geelong to the Bellarine Peninsula. The western boundary of the study area is under three kilometres from central Geelong with the eastern boundary of the study area being eight kilometres from central Geelong. At the northern end of the study area is the tip of the Point Henry peninsula and Corio Bay.

Surrounding areas

Geelong is Victoria's second largest city with well established road and rail links to Melbourne, 75 kilometres north-east of Geelong. Avalon Airport is a domestic and international airport located on the northern side of Corio Bay, approximately 25 kilometres away via the road network. The Port of Geelong is located on the western shores of Corio Bay and is one of the most important and busiest bulk commodity ports in Australia.

Surrounding the study area, land uses include the Commonwealth Scientific and Industrial Research Organisation (CSIRO) Australian Animal Health Laboratory (AAHL), which is immediately to the west of the former saltworks. Rural living and farming areas are south east of the study area, while residential land lies in the south-west.





SLV

Historical context

Aboriginal heritage

The Wadawurrung people are the traditional owners of the land on which the study area is situated and made use of the natural environment – coastal areas, grasslands and wetlands – for hunting and fishing. There are known areas of Aboriginal cultural heritage sensitivity throughout the study area.

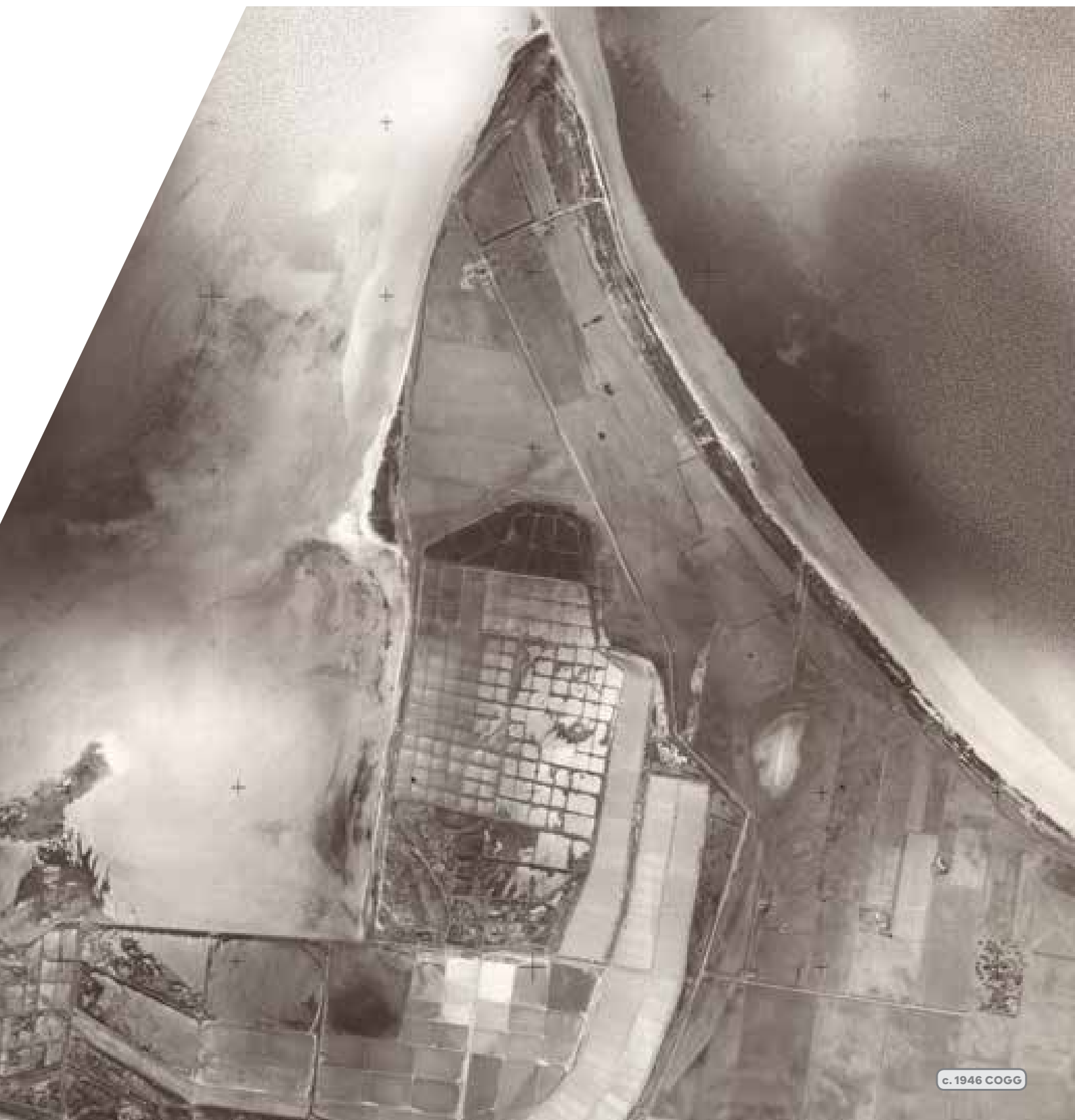
There are numerous heritage sites throughout the Moolap study area including areas where early jetties, tea gardens and the notable homesteads of James Harrison and Thomas Wentworth Wills were originally located.

European heritage

European settlement of the area dates from the 1840's with the land initially used for farming and grazing. In April 1836, Port Henry was the site of the first landing of the Francis Feeling, a sheep carrying vessel. As the main entry point to Geelong, the Western Goldfields and the western farming district, Point Henry was often described as 'a sea of masts', as much larger vessels were unable to enter the inner port of Corio Bay until 1883 when the bay channel was cut. There are numerous heritage sites throughout the Moolap study area including areas where early jetties, tea gardens and the notable homesteads of James Harrison and Thomas Wentworth Wills were originally located.

Richard Cheetham realised the potential for producing salt on large flat areas of the Victorian coastline, using solar evaporation of seawater, and in 1888 leased 263 hectares of land at Point Henry. Salt was produced within the study area until it ceased operations in 2007. As an early and extensive industrial site and the first successful solar saltworks established in Victoria, the former saltworks can be found on the Victorian Heritage Register.

COGG



c. 1946 COGG



Previous and current land use

Alcoa at Point Henry

The former Alcoa aluminium smelter and rolling mill covers approximately 81 hectares and is owned by Alcoa. It opened at Point Henry in 1963 and after 51 years of operation the smelter closed on 1 August 2014 and the rolling mill closed on 19 December 2014. The area is currently being decommissioned and rehabilitated in line with the Environment Protection Authority (EPA) requirements. Alcoa have removed the majority of their buildings and infrastructure from Point Henry as part of their decommissioning works.

Alcoa-owned land at Point Henry is elevated eight metres above sea level and has 270-degree views of Geelong, Corio Bay, the You Yangs Regional Park and the Bellarine Peninsula. Point Henry also has a large coastal foreshore area (39 hectares) and wetland area which is vulnerable to sea level rise.

There are significant services accessing the Alcoa site including a 250 millimetre gas pipeline and 300 millimetre AC Water Mains. The Alcoa transmission line infrastructure and the 220 kilovolts electricity terminal line have been removed. There is also an existing pier at Point Henry which was custom built for Alcoa operations and a shipping channel which is a branch off the main shipping channel through Corio Bay. Alcoa's infrastructure, which included a conveyor belt, has already been removed from the pier.

The former saltworks

The former Cheetham Saltworks covers over 420 hectares and is partly owned by the Victorian State Government and the Moolap Land Development Corporation Pty Ltd including Ridley Corporation. Ridley Corporation leases the government-owned land. The saltworks are interconnected, shallow evaporation and crystallisation ponds separated by bunds, with inflows of water managed by a sluice system and sea wall. The ponds and sea wall have some physical heritage significance.

The inflows of water into the saltworks leaves extensive areas of shallow ponds of varying salinity, which has created an important wetland system used by a large number of migratory birds.

The saltworks is a modification of the original coastline, which has minimal elevation above sea level and is therefore periodically inundated by storm surge. Planned sea level rise of no less than 0.8 metres by the year 2100 would result in practically all of the saltworks being permanently under water.

Existing industrial activities

Over 1,500 people are employed in the industrial areas of Moolap. The majority of these jobs (over 1,000) are in the 58 hectares of industrial land located to the south of Portarlinton Road. This area contains 300 separate businesses with a range of small and generally light or service industrial activities such as engineering services, cabinet makers and mechanics.

This area is susceptible to stormwater flooding due to a lack of capacity and gradient of the drains which flow out through the saltworks to Corio Bay. This flooding can cause contamination of the ground water in the industrial area due to the use of on-site effluent disposal systems by each industry operator.

A separate industrial area lies to the north of Portarlinton Road, generally to the east of Point Henry Road and south of Hays Road. It is approximately 85 hectares in size and its uses include medium and higher impact industries including manufacturing, fabrication, processing and concrete batching.

The industrial areas to the north and south of Portarlinton Road have a generally poor visual appearance due to a combination of small lot sizes, mixed industrial uses and lack of landscaping.

The north-eastern industrial operators are located north of Hays Road on 108 hectares of industry land. These include Winchester Australia, a company that manufacture and store ammunition, and Dow Chemical, a chemical engineering manufacturer. This area also includes large areas of waste stabilisation ponds for waste-water treatment. In December 2018, Winchester Australia announced it will cease its manufacturing operations in Moolap in 2019 while expanding import and distribution.

Within the industrial areas of the study area are industrial uses that have potential off site impacts to the health, safety and amenity of sensitive uses, i.e. residential areas. These impacts may be the result of dust, noise, explosive events and hazardous air pollutants. Separation and

segregation distances are regulated by the *EPA Recommended Buffer Distances for Industrial Residual Air Emissions (Publication Number 1518 March 2013)* as well as WorkCover under the *Victorian Dangerous Goods (explosives) Regulations 2011 and the Australian Standard AS 2187.1-1998 'Explosives – Storage, transport and use'*. These distances are to protect the industries from residential encroachment and vice-a-versa. The following separation and segregation distances apply:

- chemical produce manufacture (Dow) 2,000 metres
- commercial ammunition manufacturer and distributor (Winchester Australia) 1,000 metres
- an asphalt plant 500 metres
- materials recycling (case by case)
- concrete manufacturing 100 metres

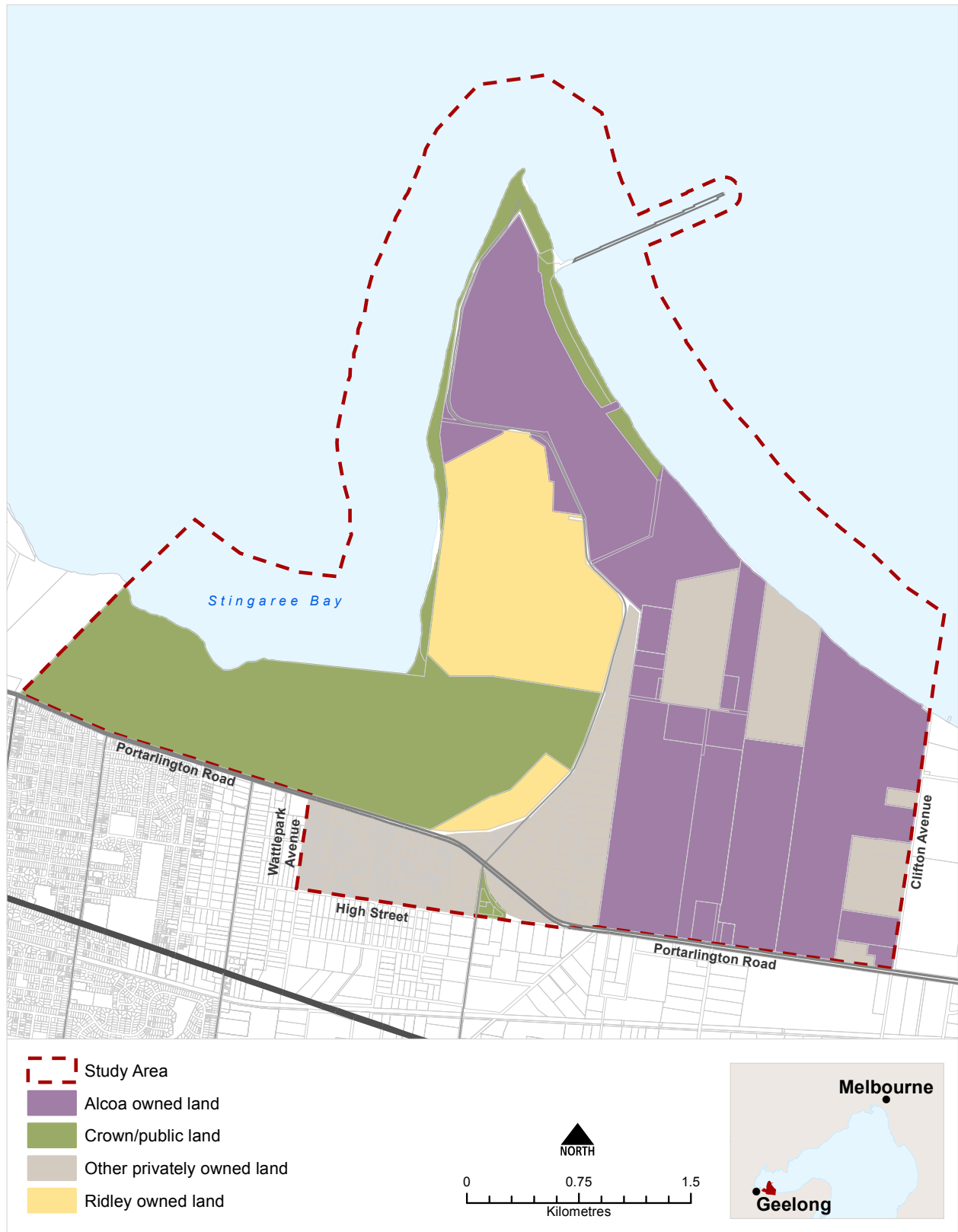
Rural land

The eastern part of the study area comprises over 300 hectares of rural land. The majority of this land is owned by Alcoa for the previous purpose of providing a buffer to the Alcoa Point Henry operations though the land also includes an Alcoa landfill site. The primary land use within the rural land is farming, however there is also an equestrian centre, some farm/rural houses, a replanted 'wildlife corridor' and replanted native grassland reserve (known as Moolapio).

The rural land is elevated up to 24 metres above sea level making it some of the most resistant land in the study area to risks of climate change and sea level rise. The land falls away to its northern foreshore and to Point Henry Road to the west.

Land ownership

There are three major landholders within the study area owning 80 per cent of the land, collectively: Victorian State Government, Alcoa and the Moolap Land Development Corporation Pty Ltd (referred to as Ridley). The remaining land is owned by Dow Chemical, Winchester Australia, the City of Greater Geelong and individual industrial and rural land owners.



Environmental assets and constraints

Contamination and landfills

There are three landfills on Alcoa land, all of them capped. Two landfills are located to the south of Alcoa's former buildings and plant at Point Henry and a third site is within the rural land near Portarlington Road. The first landfill was used from 1961 to 1980 for general waste, asbestos and processed waste. The other two landfills were constructed in the mid 1980's and used for processed waste. A number of Audit reports have been identified within the study area by the EPA and include land owned by Alcoa and other industrial operators. A spoil ground from the dredging of the Hopetoun Channel is located in Stingaree Bay, west of the peninsula.

Acid sulfate soils

The CSIRO has identified potential risk areas of potential acid sulfate soils and this includes areas in and around Point Henry.

Coastal foreshore

Large sections of the coastal foreshore are in private ownership or under private lease and therefore inaccessible to the public. Areas of the coastal foreshore open to the public are used for recreational purposes like dog walking, duck shooting and fishing. Kite surfing occurs off the Point Henry peninsula and Point Henry pier continues to be used for minor port purposes.

The coastal foreshore is a location for wetlands and saltmarsh vegetation, providing fauna habitats for protected bird species while supporting several threatened plant species. The foreshore also provides stormwater retarding and assists in the filtering of surface water before entering Corio Bay.

Corio Bay

Corio Bay surrounds the Point Henry peninsula and is up to three metres deep within the Moolap Plan study area. Immediately adjacent to the Point Henry peninsula, the depth is generally less than one metre. It has some of the most extensive seagrass meadows in Port Phillip which are critical to environmental and fishery health.

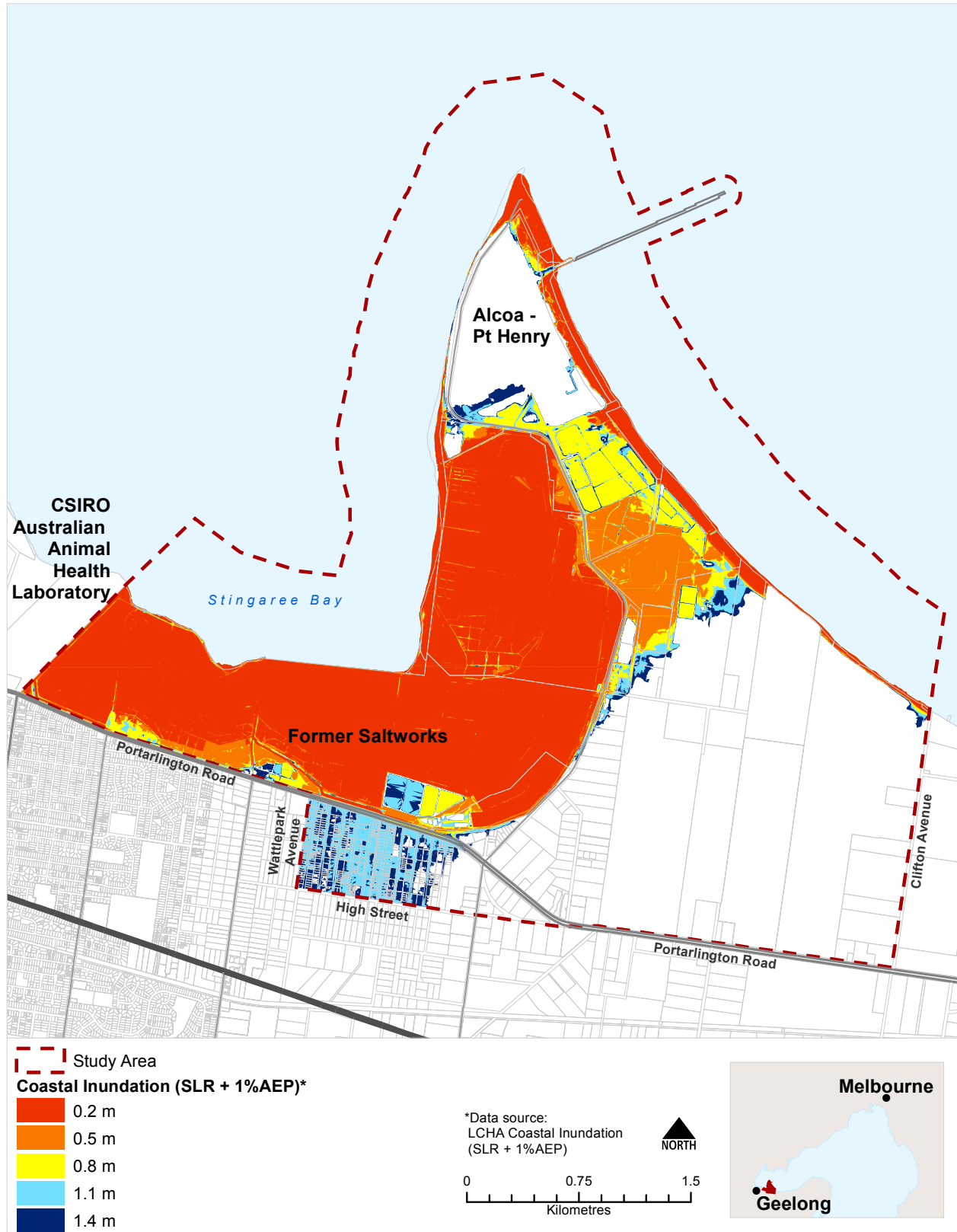
Wetland network

The former Cheetham Saltworks form part of a broader Geelong wetlands network in association with Reedy Lake, Lake Connewarre and Swan Bay. The latter three wetlands are declared Ramsar Wetlands. The saltworks has been a nationally and internationally important site for shorebirds, with protected bird species roosting upon the bunds and vegetation and enjoying the sites' relative isolation. Over 35 bird species that are common to the site are listed by the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act), protected by the JAMBA, CAMBA or ROKAMBA International Treaties, or are listed in the *Flora and Fauna Guarantee Act 1988* (FFG Act).

Following the closure of the saltworks, the area has continued to provide food and shelter for a wide range of marine communities. The wetlands at the Point Henry Precinct also provide a variety of other ecosystem functions including filtering surface water before entering Corio Bay, capturing and storing excess carbon within its vegetation and stabilising the coastline.

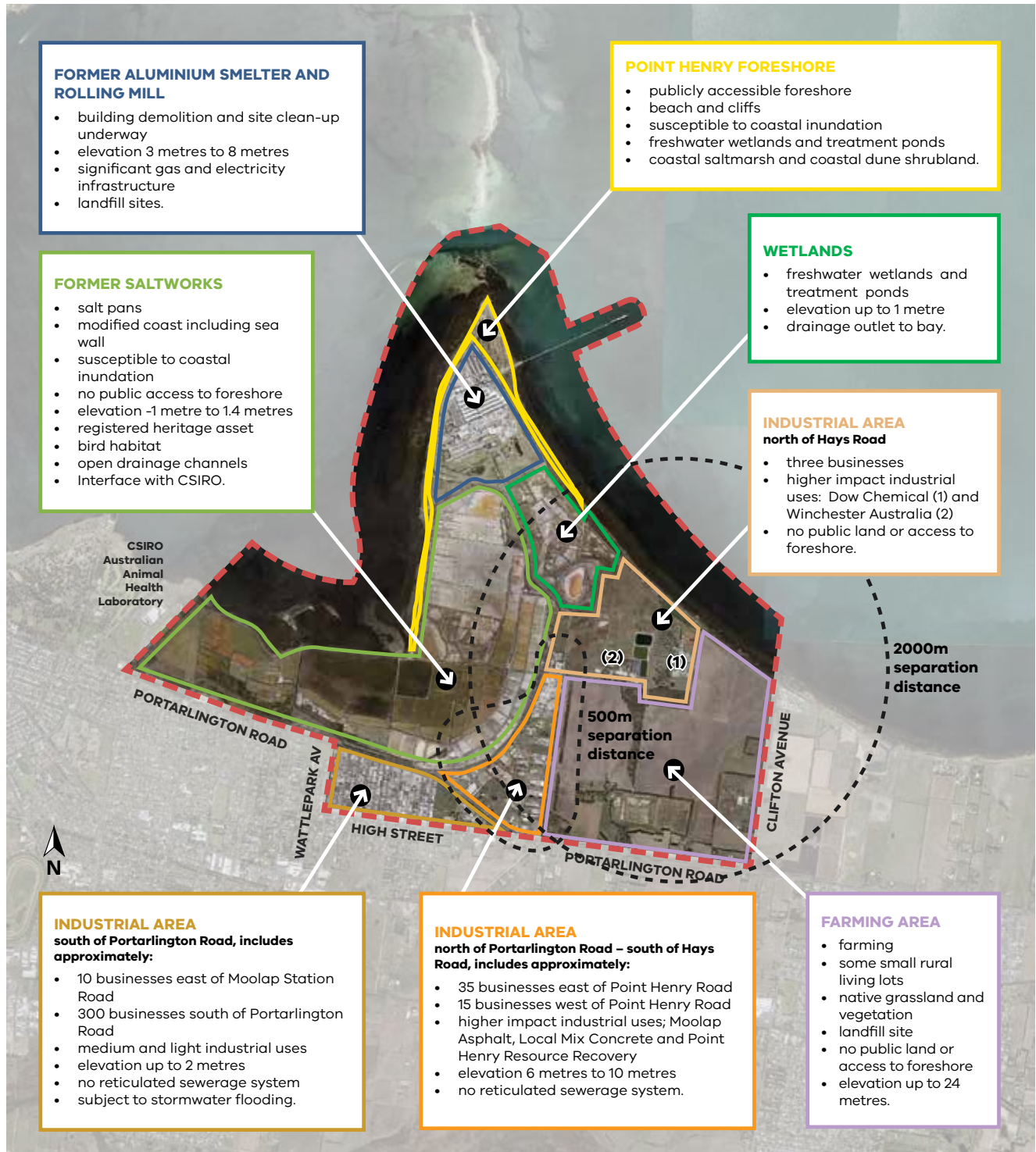
Sea level rise

The saltworks and wetlands on the eastern and western side of Point Henry Road and the north-eastern foreshore of Point Henry are predicted to be inundated by planned sea level rise of no less than 0.8 metres by 2100.



Site attributes

The site attributes have a key role in informing the future possibilities for the study area. These are summarised in the map below.



Separation distances between existing higher impact industries and sensitive uses (such as residential areas).

Precinct attributes

The study area is made up of four distinct but integrated precincts.

Point Henry Precinct



120 hectares surrounded by Crown coastal foreshore with expansive 270 degree views.

Elevated views to central Geelong, Corio Bay, the You Yangs Regional Park and the Bellarine Peninsula.

Shallow bay depth 1-3 metres.

Seagrass meadows surround the peninsula.

- 1** Public recreation reserve and wetlands predicted to be inundated by sea level rise by the year 2100.
- 2** Point Henry pier, custom built for aluminium production operations, is owned by Geelong Port and has shipping channel access.
- 3** A series of fresh and marine wetlands capture runoff from industrial plant and buildings. They are subject to inundation by storm surge.
- 4** Former smelter and rolling mill plant and buildings, located up to eight metres above sea level, predominantly demolished.
- 5** Land fill sites. Alcoa is currently undertaking an assessment of any contamination that may pose an unacceptable risk to the environment in accordance with EPA guidelines.
- 6** Point Henry signal station is owned by Alcoa.



Wetlands and Former Saltworks Precinct



The former saltworks are interconnected, shallow evaporation and crystallisation ponds separated by bunds with inflows of water managed by a sluice system and sea wall.

Salt pans are used as a feeding location for many nationally and internationally protected bird species that roost upon the bunds and vegetation and enjoy the site's relative isolation.

Salt pans act like wetlands and filter surface water entering the bay, capture and store excess carbon, stabilise the coastline and provide food and nutrients for a wide range of marine communities.

There's a need for effective water management to maintain bird habitat.

The saltworks are listed in the Victorian Heritage Register and are significant to the establishment of Geelong and the heritage of Victoria.

With minimal elevation above sea level, the saltworks are inundated by coastal storm surge.

With a predicted sea level rise of no less than 0.8 metres by the year 2100, saltworks would be permanently inundated and Point Henry Road and Portarlington Road would be over washed.

Three open drainage outlets convey stormwater through the saltworks to Stingaree Bay.

Seagrass meadows lie adjacent to coast.

Shallow bay depths less than 1 metre in this area.

- 1** Private land: marine and freshwater wetlands and treatment ponds 100 hectares.
- 2** Private land: former saltworks 176 hectares (see land ownership map).
- 3** Interface with CSIRO.
- 4** Modified coast including seawall. Restricted public access to foreshore. Drainage outlet to bay (see land ownership map).
- 5** Crown land: former saltworks 289 hectares (see land ownership map).



Southern Precinct



Existing land zoned Industrial 1, provides for manufacturing industry, the storage and distribution of goods, and associated uses in a manner that does not affect the safety and amenity of local communities.

No reticulated sewerage system.

Far from freeways and rail freight lines.

Point Henry Road area

- 1 Variety of industries including concrete batching plant, landscaping suppliers, recycling, metal fabrication and storage.

South of Portarlington Road area

- 2 Local service industries including engineering, cabinet-making and mechanics on over 300 separate lots with more than half being less than 0.1 hectares. Infrastructure available includes potable water and gas. No reticulated sewer. Elevation of one to two metres above sea level; area susceptible to stormwater flooding due to lack of capacity and gradient in drain. Flooding can cause contamination of groundwater because of the use of on-site effluent disposal systems. Open drainage channels flow through former saltworks to the north.
- 3 Moolap Reserve has tennis courts and club rooms.
- 4 Interface with existing residential areas.



Moolap East Precinct



150 hectares of industrial land.

300 hectares of rural land with ancillary farming uses.

No reticulated sewerage system.

Land elevated up to 24 metres above sea level.

- 1** Winchester Australia (ammunition manufacturer).
- 2** Dow Chemical (chemical manufacturer).
- 3** Seagrass meadows. Shallow bay depths 1-3 metre.
- 4** Replanted native vegetation: 'wildlife corridor'.
- 5** Replanted native vegetation: Moolapio grasslands.
- 6** Alcoa landfill site.



Strategic framework

The study area of northern Moolap and Point Henry provides an unparalleled opportunity for urban renewal and environmental protection on the doorstep of Geelong. The strategic framework includes a vision and principles for the area that will provide the basis for decision-making. Together with the precinct objectives and strategies this framework will help transition the study area over time.

The strategic framework includes:

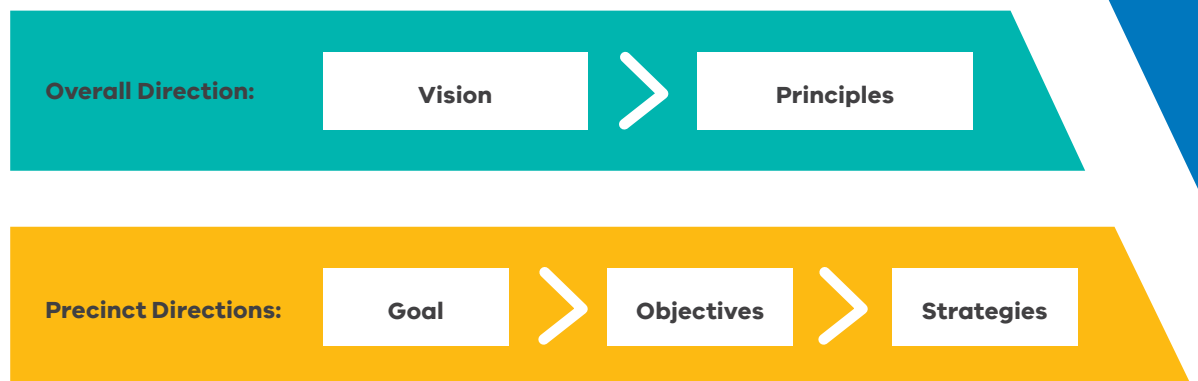


Photo of Point Henry c. 2016



Vision

The future of the Moolap study area will benefit the Geelong economy, environment and community by taking advantage of its assets and opportunities while acknowledging its significant industrial, heritage, cultural and environmental values.

Principles

- 1 Plan for a safe, sustainable, integrated and prosperous community.
- 2 Be aspirational and feasible, respond to long-term needs and opportunities.
- 3 Plan for a future that reflects Geelong's changing economy.
- 4 Prioritise uses that take advantage of the coastal location.
- 5 Facilitate increased public access to the coastal foreshore.
- 6 Plan for sea level rise of no less than 0.8 metres by the year 2100.
- 7 Complement Geelong and its role as Victoria's second largest city.
- 8 Create a unique and attractive destination.
- 9 Create a connected and accessible place.
- 10 Recognise and respond to areas of heritage, cultural and environmental value.
- 11 Avoid land use conflicts.
- 12 Coordinate implementation of change including the transitioning of existing uses.



At a glance

The Moolap Plan is a guide for a sustainable future, where urban renewal complements environmental values, and supports Geelong to evolve and grow.

A new coastal community with tourist facilities and open spaces will allow more people to enjoy the area's unique views of and from the coastal peninsula. Through landmark art and architecture, the area will create its own character while celebrating its natural beauty and history.

This area will offer something new for Geelong, and complement and connect with Central Geelong. As a result of the Moolap Plan each precinct will be integrated though have a specific goal:

- The Point Henry Precinct will transform into a high amenity and sustainable coastal residential community with tourism attractions and accommodation. Complementary commercial, and water-based activities will be provided; new facilities, connections and infrastructure will meet the needs of residents and visitors. Enhanced environmental outcomes will be achieved by responding to and designing for existing values and risks.
- The Wetlands and Former Saltworks Precinct will be managed and coordinated to prioritise environmental outcomes and respond to existing values and risks. Bird habitat areas, public open space, stormwater management and existing heritage, cultural and environmental values will be complemented by connections, infrastructure and limited tourist and commercial facilities where they support the environmental priorities.
- The Southern Precinct will remain a location for medium and light industry and employment opportunities. Improved infrastructure, streetscapes and landscapes will support the amenity, business attraction and environmental outcomes of the precinct.
- The Moolap East Precinct will retain Dow Chemical until they want to leave. Only after they have left will the precinct transform into a future sustainable residential community with new facilities, connections and infrastructure to meet the needs of residents while supporting other precincts. Enhanced environmental outcomes will be achieved by responding to existing values and risks.



It is expected the four integrated precincts will:

- provide homes to at least 12,000 residents.
- create 10,000 construction jobs and 1,000 ongoing jobs.
- attract thousands of tourists drawn to the area's environment, history and recreation opportunities and its coastal setting.
- result in all 10,000 metres of coastal foreshore being publicly owned.
- retain and support over 300 existing industrial businesses (and 1,000 existing jobs) through improved services and infrastructure.

Artist's impression of the future of the Moolap Plan study area

Indicative only



Precinct direction

– Point Henry Precinct

Precinct goal

The Point Henry Precinct will transform into a high amenity and sustainable coastal residential community with tourism attractions and accommodation. Complementary commercial and water-based activities will be provided; new facilities, connections and infrastructure will meet the needs of residents and visitors. Enhanced environmental outcomes will be achieved by responding to and designing for existing values and risks.

As a new coastal community, Point Henry will include medium-high density housing to take advantage of its unique location. It will be a walkable community village focused on a local activity centre that includes cafes, restaurants, boat clubs, and retail.

The precinct will include tourist attractions and facilities to share with visitors, as well as hotels and resort style accommodation. This will celebrate the areas' history, the surrounding environmental assets and provide opportunities for people to connect with the water.

Water based recreation activities will complement the publicly accessible waterfront and marina, while minimising impacts on the environmental and coastal values. Point Henry pier will remain a significant asset within the precinct and could support a range of uses, including complementary water-based transport as well as recreational activities such as fishing and boating.

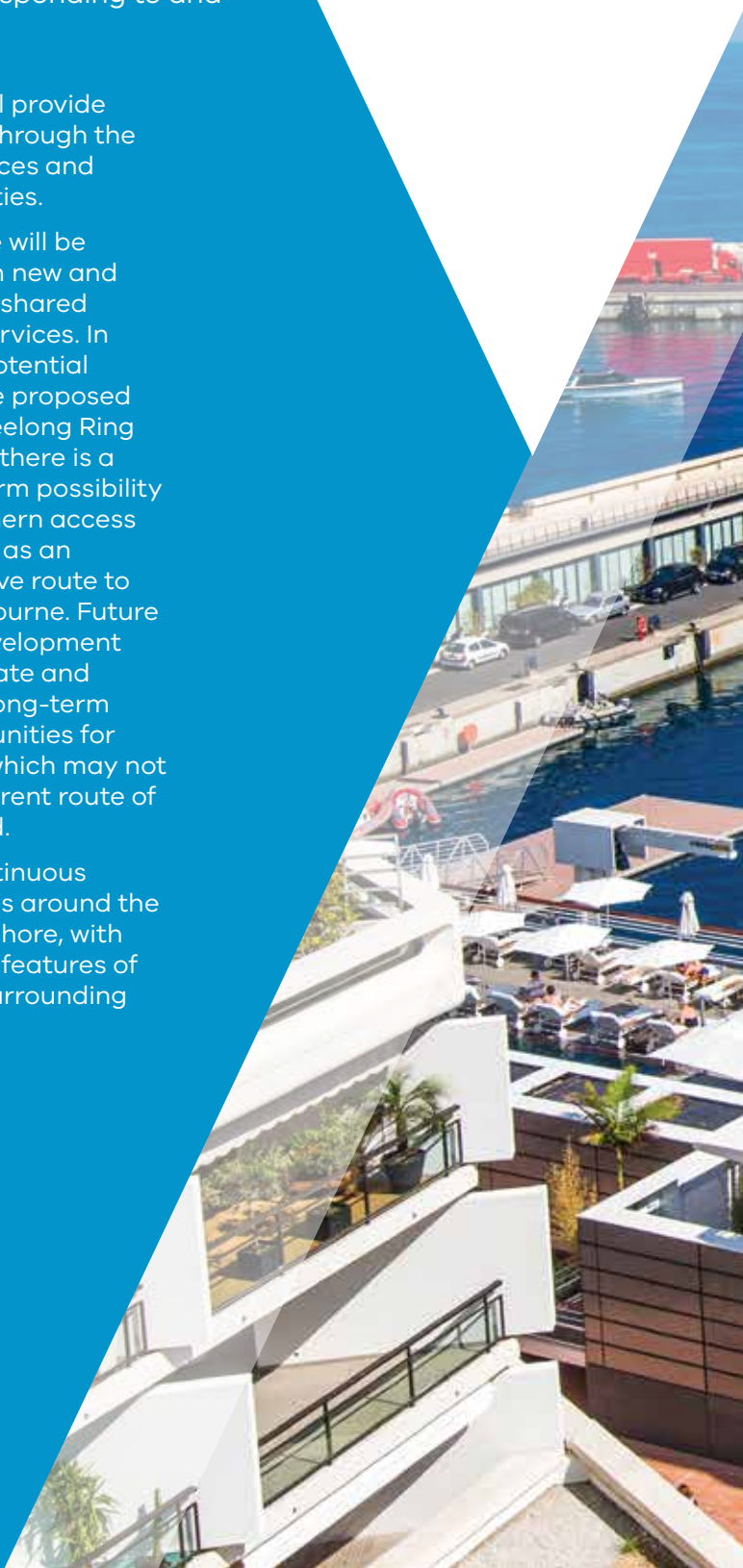
This combination of activities will create a vibrant community and be a unique offering to Geelong.

The Point Henry Precinct will be within close proximity of the other urban renewal area in the Moolap East Precinct.

Together they will provide shared benefits through the provision of services and community facilities.

Access to the site will be achieved through new and upgraded roads, shared paths and bus services. In addition to the potential connection to the proposed Bellarine Link (Geelong Ring Road extension), there is a strategic long-term possibility for a future northern access across Corio Bay as an eastern alternative route to Avalon and Melbourne. Future planning and development should contemplate and not exclude the long-term strategic opportunities for this connection which may not align with the current route of Point Henry Road.

There will be continuous pedestrian access around the Point Henry foreshore, with paths linking key features of the precinct to surrounding areas.



Rationale

With its elevated coastal location and views, the Point Henry Precinct is best suited for residential development while also providing a range of tourism facilities, accommodation and attractions.

This outcome would capitalise on the precinct's unique coastal location, improve public access, enable clean-up of former industrial land uses and create a new destination and landmark for Geelong. Industrial or future land based port uses at the Point Henry Precinct would not achieve these outcomes. In addition, the re-establishment of these uses at Point Henry would not be compatible with the commercial needs of modern industrial and port businesses, in particular a lack of direct access to a major road or rail transport network.



Precinct objectives

Objective 1: Plan for future residential and tourism development

Strategies:

- 1.1 Ensure that former landfill sites and other potentially contaminated land are suitable and safe for their intended use and managed to avoid risk.
- 1.2 Prior to residential and tourism development, support interim land use and development consistent with the zoning of the land, if these do not prejudice the ultimate transition to residential with tourism land uses.
- 1.3 Acknowledge the ownership of Port Henry Pier by Geelong Port, and its continual use if it does not impact the amenity of residents at Port Henry.



Objective 2: Create a high amenity and sustainable coastal residential community

Strategies:

- 2.1 Encourage a diverse range of housing types with medium to high densities.
- 2.2 Encourage urban and building design excellence, including landmark art and architecture that responds to the coastal setting and establishes a unique character.
- 2.3 Ensure environmentally sustainable development principles are followed, including aiming for carbon neutrality and encouraging water and energy efficient designs that go beyond a six-star rating.
- 2.4 Support community scale renewable energy technologies in association with development.



Objective 3: Encourage complementary commercial, tourism and water-based activities

Strategies:

- 3.1 Support tourist attractions, accommodation, installations and facilities that respond to the coastal setting, contribute to the character and attract people to Point Henry.
- 3.2 Encourage cafes and restaurants, entertainment facilities, retail outlets and other commercial development for residents and visitors.
- 3.3 Explore the future use of the Point Henry pier in the context of tourism, recreation and boating uses as well as complementary water-based transport.
- 3.4 In areas of environmental sensitivity or constraints, including existing wetlands and coastal areas, consider appropriate commercial, recreational and tourism facilities which minimise environmental impacts and provide opportunities for people to connect to the environment.
- 3.5 Support water-based operations and facilities, including activities for boating, transport, sporting and leisure.
- 3.6 Manage, promote and enhance areas and places of cultural, maritime and industrial heritage, including by providing information, installations and facilities to attract people and create a sense of place.
- 3.7 Retain the Point Henry Signal Station and support the reuse of industrial buildings (where and if appropriate).



Objective 4: Provide facilities, connections and infrastructure to meet the need of residents and visitors

Strategies:

- 4.1 Create a network of streets and paths that is convenient and safe for pedestrians and cyclists, and connects to the Moolap East Precinct, Geelong and surrounding areas.
- 4.2 Support sustainable transport options through the timely provision of infrastructure and services, including public transport.
- 4.3 Ensure a range of recreation and open space facilities, including public open space at the elevated headland of Point Henry to enable unimpeded public views over Corio Bay.
- 4.4 Support waterfront and marine infrastructure and facilities that enhance the coastal character and increase access.
- 4.5 Ensure continuous public access along the coastal foreshore with links to the environmental assets of the precinct to create a connected open space network.
- 4.6 Identify and protect the long-term strategic alignment of a potential road north beyond the Point Henry Precinct.
- 4.7 Ensure a range of community facilities to support the needs of residents and visitors in conjunction with facilities in the Moolap East Precinct.

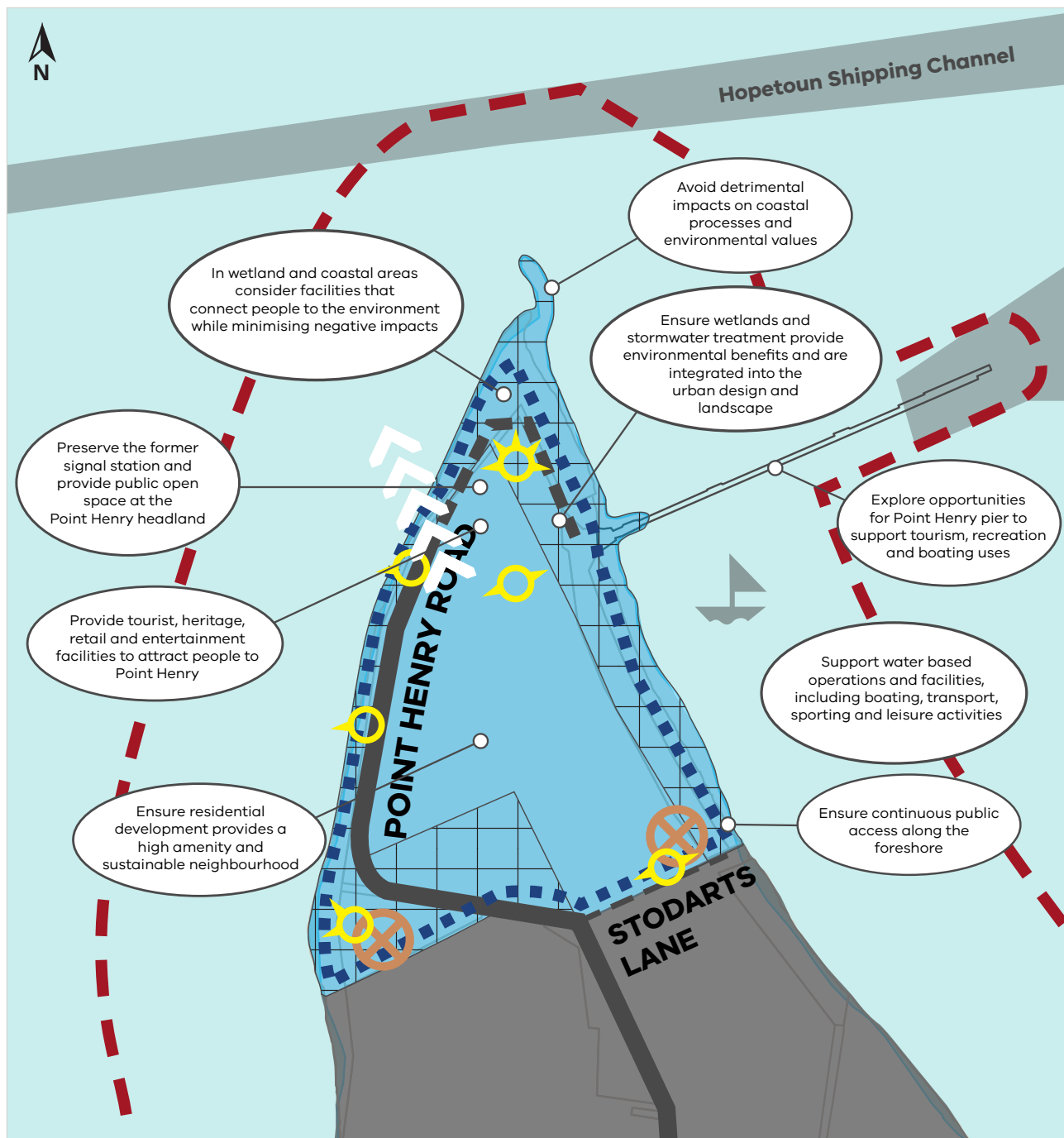


Objective 5: Achieve enhanced environmental outcomes and respond to existing values and risks

Strategies:

- 5.1 Facilitate the conservation and improvement of ecological values.
- 5.2 Ensure a public foreshore is maintained including in response to planned sea level rise of no less than 0.8 metres by 2100.
- 5.3 Ensure the location and design of buildings, infrastructure and coastal facilities consider and respond to impacts associated with climate change (including the individual and combined effects of planned sea level rise of no less than 0.8 metres by the year 2100, tidal and storm surges, coastal processes and local conditions).
- 5.4 Ensure wetlands and best practice stormwater treatment provides environmental benefits and are integrated into the future urban design and landscape of the precinct.
- 5.5 Ensure development, infrastructure and any coastal protection works avoid detrimental impacts on coastal processes and on environmental values of this precinct and adjacent areas.
- 5.6 Prevent inappropriate development in areas affected by groundwater salinity, acid sulfate soils and erosion.
- 5.7 Ensure uses and activities in the study area do not undermine the amenity of residential and tourism uses in the Point Henry Precinct.
- 5.8 Ensure EPA's recommended separation distances (*EPA Recommended Buffer Distances for Industrial Residual Air Emissions (Publication Number 1518 March 2013)*) between sensitive land uses and higher impact industrial land uses are maintained unless the risks and impacts are demonstrated to be acceptable to the satisfaction of the EPA and relevant authorities.
- 5.9 Recognise the value that people place on the foreshore and beach as a natural and recreational public asset.





LEGEND

Residential and Tourism (subject to remediation of the land), includes medium-high density development, permanent residential and temporary accommodation, tourist facilities as well as commercial and community facilities to meet the needs of residents and visitors.

Study area boundary

Existing roads

Protect a long-term strategic road alignment (indicative)

Provide trails and pedestrian connections (indicative)

Marine infrastructure and facilities

Rehabilitate previous land fill prior to a new sensitive use

Respond to predicted sea level rise including coastal retreat and protection measures (while maintaining a public owned foreshore)

Retain and support public access to key views



Photo of Point
Henry c. 2016
(prior to Alcoa's
decommissioning)

AOA

Precinct direction

– Wetlands and Former Saltworks Precinct

Precinct goal

The Wetlands and Former Saltworks Precinct will be managed and coordinated to prioritise environmental outcomes and respond to existing values and risks. Areas for bird habitats, public open space, stormwater management and existing heritage, cultural and environmental values will be complemented by connections, infrastructure and limited tourist and commercial facilities, where they support the environmental priorities.

Areas for bird habitats will be supported and prioritised by maintaining suitable hydrology and water quality within the wetlands. Focusing on the wetlands and bird habitats will strengthen the coordinated management of the network of nearby Ramsar wetlands (including Swan Bay and the Lake Connewarre Wetlands) as set out in the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site Management Plan (DELWP 2018).

Existing heritage, cultural and environmental values will be reasonably protected from development. However, additional coastal protection measures will be secondary to allowing natural coastal processes to take place (coastal retreat). Coastal protection measures, where required, will be considered closer to existing roads to protect key infrastructure, services and built assets. This will reduce the cost of intervention and ongoing maintenance, and will allow biodiversity values to change and adapt to the dynamic coast. This approach also minimises risk to life, property and liability.

Public open space and the provision of infrastructure will complement the coordination and management of the precinct. There is significant scope to make modifications to the existing drainage outlets and stormwater management system to enable improvements to biodiversity values in other precincts particularly to the Southern Precinct.

Limited tourist and commercial facilities will be considered within the precinct adjacent to Point Henry Road, Cheetham Road and Portarlington Road where access, risks and impacts are easier to manage. These tourist and commercial uses must be complementary and provide opportunities for improved management of the existing values of the entire Wetlands and Former Saltworks Precinct.

Rationale

With numerous environmental assets requiring protection within the Wetlands and Former Saltworks Precinct and several constraints such as its low elevation, flooding and sea level rise, which precludes significant urban development, there are rich opportunities for conservation and complementary tourism.



Precinct objectives

Objective 6: Coordinate a well-managed environment

Strategies:

- 6.1 Facilitate public access through recreation and passive enjoyment of the environment, while managing access in conservation areas.
- 6.2 Facilitate the conservation and improvement of ecological values.
- 6.3 Manage, promote and enhance habitat for migratory birds and other significant flora and fauna.
- 6.4 Ensure uses undermining the overall future management and improvement of environmental values, including residential uses, are not supported within the precinct.
- 6.5 Manage, promote and enhance areas of historical and cultural significance.
- 6.6 Improve stormwater management treatment.
- 6.7 Respond to coastal inundation through coastal retreat and infrastructure protection where needed.
- 6.8 Recognise the value people place on the foreshore as a natural and recreational public asset.
- 6.9 Manage the interface and potential impacts and risks from adjacent uses.



Objective 7: Prioritise environmental outcomes by responding to existing values and risks

Strategies:

- 7.1 Ensure the location and design of buildings, infrastructure and coastal facilities respond to impacts associated with climate change (including the individual and combined effects of planned sea level rise of no less than 0.8 metres by the year 2100, tidal and storm surges, coastal processes and local conditions).
- 7.2 Prioritise adoption of natural processes (including the strategy of coastal retreat) in response to impacts associated with climate change.
- 7.3 Ensure development, infrastructure and any coastal protection works avoid detrimental impacts on coastal processes and on significant environmental values of this precinct and adjacent areas.
- 7.4 Ensure wetlands and best practice stormwater treatment enhance environmental values while managing risk from inundation and flooding.
- 7.5 Work to re-establish links between isolated habitat remnants that contain high value biodiversity.
- 7.6 Prevent inappropriate development in areas affected by contaminated groundwater, salinity, acid sulfate soils and erosion.
- 7.7 Ensure that potentially contaminated land is suitable and safe for its intended use and managed to avoid risk.
- 7.8 Avoid and manage the risks from domestic and feral animals entering conservation areas.
- 7.9 Consider any potential impacts and coordinate the management of offshore sea grass meadows.
- 7.10 Manage public access and visitor numbers to minimise impacts on significant flora and fauna, cultural, heritage and environmental values.
- 7.11 Ensure environmentally sustainable development principles are followed.

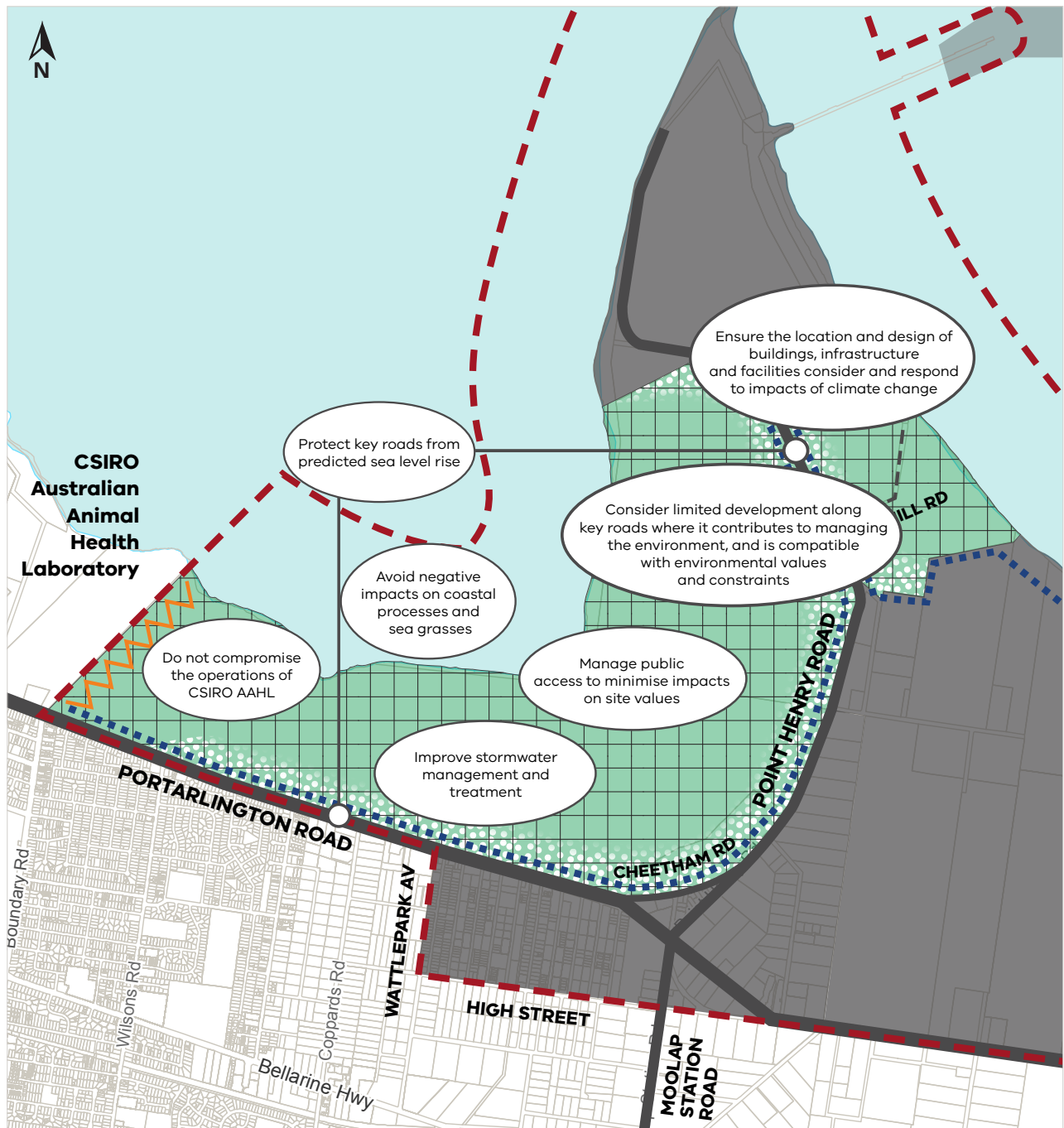


Objective 8: Enable required infrastructure and service utilities, and where it complements environmental management and conditions, encourage ancillary activities including tourism

Strategies:

- 8.1 Encourage establishment of facilities related to environmental research, science, culture and heritage to attract people and inform visitors.
- 8.2 Allow for tourism and complementary commercial uses, including cafés and restaurants, especially where they connect people with nature.
- 8.3 Provide for infrastructure and service utilities to support adjacent precincts and areas.
- 8.4 Direct any buildings and significant facilities, utility services and infrastructure to be in close proximity to Portarlington Road, Cheetham Road and Point Henry Road in order to minimise impacts and risks while providing convenient access.
- 8.5 Avoid boating and marine infrastructure where it would undermine ecological values.
- 8.6 Ensure a range of recreation and open space facilities including a convenient and safe path network for pedestrians.
- 8.7 Ensure public access links to a connected open space network within and beyond the precinct.
- 8.8 Coastal protection works may be considered where they avoid detrimental impacts on coastal processes and protect infrastructure, utility services and buildings adjacent to Portarlington Road, Cheetham Road and Point Henry Road.
- 8.9 Ensure Point Henry, Cheetham and Portarlington Roads are protected from planned sea level rise of no less than 0.8 metres by 2100.
- 8.10 Encourage ancillary activities to contribute resources to the enhancement and ongoing management and maintenance of environmental values.
- 8.11 Support community scale renewable energy technologies in association with new facilities.





Precinct direction

– Southern Precinct

Precinct goal

The Southern Precinct will remain a location for medium and light industry and employment opportunities. Improved infrastructure, streetscapes and landscapes will benefit the amenity, business attraction and environmental outcomes of the precinct.

The Southern Precinct requires an improvement in drainage infrastructure to lessen the impacts from flooding on the businesses and adjacent areas. This will attract more warehouse type industries currently reluctant to locate here due to flooding and potential for destruction of stock. The improved drainage and the provision of a reticulated sewer will also help reduce the impacts of untreated stormwater on Corio Bay and the marine environment and would allow water-based industries to establish in the precinct. An infrastructure assets analysis (see Implementation Strategy) will help to understand and facilitate these changes.

Better landscaping, built form and screening along the interface of the entire Southern Precinct will improve its presentation and assist with its popularity.

The Southern Precinct will remain as a location for medium, light and service industry. Improved drainage and sewer infrastructure, streetscape and landscape outcomes will increase the amenity and attraction of the precinct and improve environmental outcomes.

Rationale

The Southern Precinct is currently home to 300+ industrial businesses providing more than 1,000 jobs and local services. The retention of generally low to medium impact industries in this precinct does not limit the potential for land use change in the surrounding area.

Currently, water based or heavy waste producing industries cannot locate in the Southern Precinct due to the lack of sewer reticulation. Improved infrastructure and streetscapes will help promote the precinct and be the catalyst for investment and infill growth. The urban renewal opportunities in the Point Henry Precinct and the Moolap East Precinct will require reticulated sewer, which may provide an opportunity to connect the Southern Precinct to a wider system.



Precinct objectives

Objective 9: Retain the area for medium and light industry and employment opportunities

Strategies:

- 9.1 Support the area as a location for industrial businesses that provide employment and services.
- 9.2 Encourage infill development with new and innovative light industry, warehouses and small-scale manufacturing and service operators.
- 9.3 Seek to attract new, innovative and diverse employment generating industries consistent with an industrial zoning.



IST



SHU

Objective 10: Improve infrastructure, streetscapes and landscapes to bolster amenity, business attraction and environmental outcomes

Strategies:

- 10.1 Encourage high quality and site responsive building design and landscaping for new development.
- 10.2 Improve the streetscape, visual amenity and interface throughout the Southern Precinct.
- 10.3 Support the connection of reticulated sewer and improved stormwater management to attract new business operators.
- 10.4 Investigate industrial stormwater treatment options to improve the environmental conditions of groundwater and wetlands in the Wetlands and Former Saltworks Precinct and Corio Bay.
- 10.5 Improve environmental conditions of the precinct through improved infrastructure, including connection to a reticulated sewer system.
- 10.6 Retain the facilities provided in the Moolap Recreation Reserve for the local community.



IST

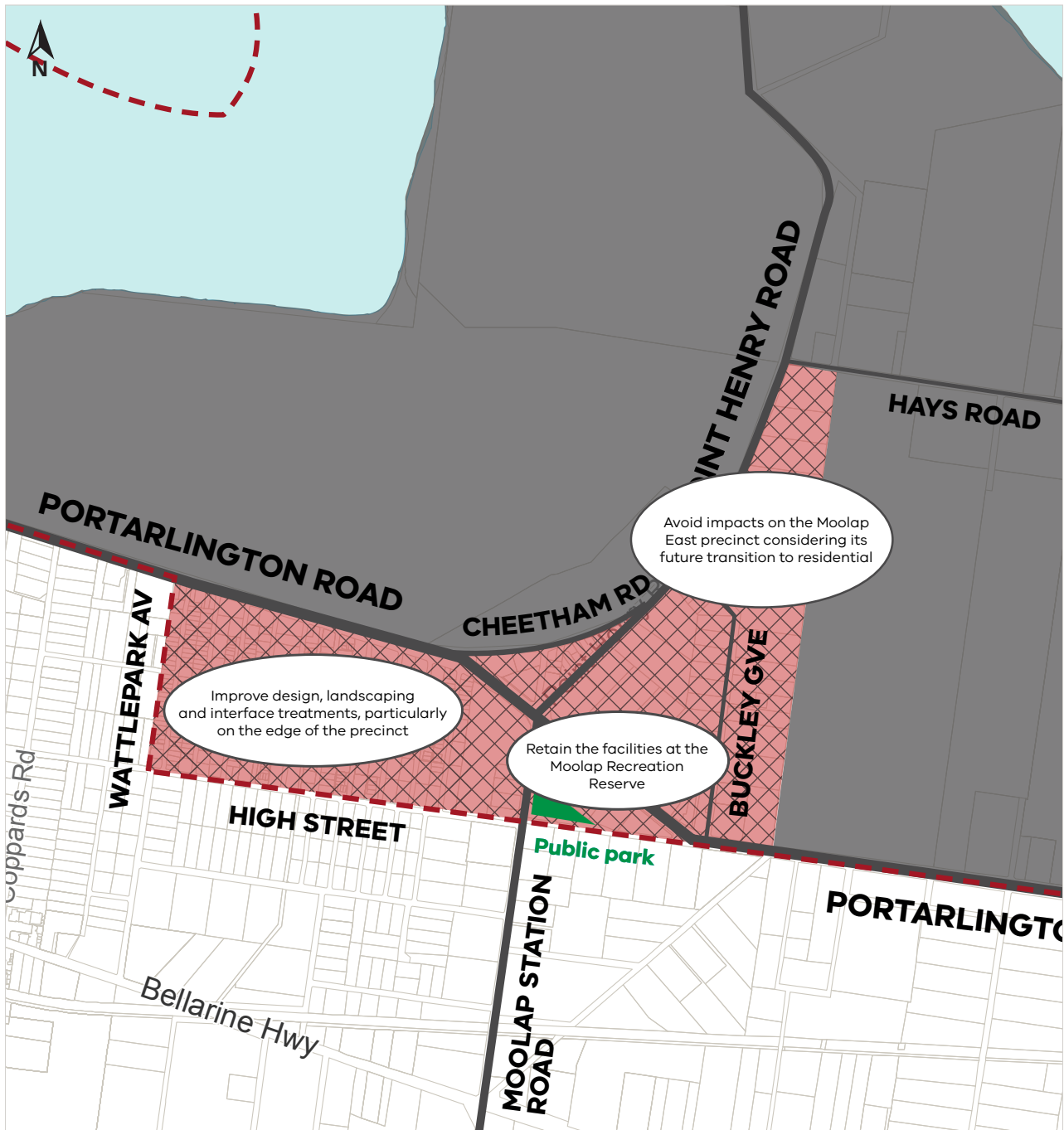


Objective 11: Avoid land use conflict with uses in the study area and adjacent areas

Strategies:

- 11.1 Support land use and development consistent with an industrial zoning of the land while avoiding impacts on residential areas, areas of significant environmental values and the Moolap East Precinct, considering its future transition to residential.





LEGEND

Industrial including light and medium industry and commercial businesses to provide local services and employment while avoiding off-site impact on residential neighbours.

Study area boundary

Existing roads

Investigate improvements to stormwater management and connection to reticulated sewer



COGG

Precinct direction

– Moolap East Precinct

Precinct goal

The Moolap East Precinct will retain Dow Chemical until they want to leave. Only after they have left will the precinct transform into a future sustainable residential community with new facilities, connections and infrastructure to meet the need of residents while supporting other precincts. Enhanced environmental outcomes will be achieved by responding to existing values and risks.

The Moolap East Precinct has capacity for up to 10,000 residents and as an integrated community will include a primary school, early childhood and community services, active and passive open space, walking, cycling and public transport links. It will also provide retail and commercial areas to cater for the needs of the local catchment and provide local employment opportunities. The Moolap East Precinct will provide a significant future urban renewal area for Geelong. It will complement other areas of urban infill and growth and assist relieving development pressure on the Bellarine Peninsula which is an objective of the City of Greater Geelong.

Amenity and sustainability will be achieved through a walkable residential community based around an activity centre while incorporating renewable technologies, recycled water schemes, carbon neutral designs, public transport and active transportation.

The Moolapio grasslands, the 'wildlife corridor' and coastal foreshore will need to be integrated into any urban development by being part of an overall public open space network connecting the Moolap East Precinct to the rest of the Moolap Plan study area.

The industries north of Hays Road include Dow Chemical that has a large separation distance that extends to Portarlington Road. This will prevent residential development in the Moolap East Precinct while Dow remain on site as a viable and significant industrial business. Only when Dow chooses to depart the site, will land in the Moolap East Precinct be able to transition to residential.



Rationale

The retention of Dow Chemical with its large industrial buffer in the Moolap East Precinct supports its existence as a viable manufacturer and employer.

A future decision by Dow Chemical to leave the site will unlock the precinct's ultimate potential for a residential community and help relieve the high demand for coastal living on the Bellarine Peninsula. This precinct will also capitalise on the coastal location, improve public access, enable cleanup of former industrial land uses and create a new residential offering for Geelong. Continued industrial uses, following the voluntary exit of Dow Chemical, will ultimately not achieve these outcomes.



Precinct objectives

Objective 12: Plan for the transition to residential development following a decision by Dow Chemical to relocate

Strategies:

- 12.1 Support the retention of Dow Chemical until they choose to leave their current site.
- 12.2 Ensure consultation with existing industry and land owners on the timing of a future land use transition from industrial to residential.
- 12.3 Prior to Dow Chemical leaving their current site, avoid new sensitive land uses in the Moolap East Precinct, where this may result in land use conflict with Dow Chemical, informed by the 2,000 metres separation distance surrounding Dow Chemical, according to the EPA Recommended Buffer Distances for Industrial Residual Air Emissions (Publication Number 1518 March 2013).
- 12.4 Prior to Dow Chemical leaving their current site, support interim land use and development consistent with the zoning of the land, if these do not prejudice the ultimate transition to residential.



Objective 13: Create a sustainable residential community

Strategies:

- 13.1 Encourage a diverse range of housing types and densities including affordable housing and aged care accommodation, which respond to both need and demand for housing in this location.
- 13.2 Encourage standard residential densities with higher density living around key activities and facilities.
- 13.3 Encourage urban and building design excellence that establishes a unique character.
- 13.4 Ensure precinct planning creates a convenient and safe street network for pedestrians with appropriate links to nearby major roads.
- 13.5 Support community scale renewable energy technologies in association with development.
- 13.6 Ensure environmentally sustainable development principles are followed, including aiming for carbon neutrality and encouraging water and energy efficient designs that go beyond a six-star rating.
- 13.7 Ensure there is a range of community facilities to meet the need of residents.
- 13.8 Encourage retail and commercial uses that are compatible with and support residential uses and respond to demand across all precincts in the study area, while broadening the economic diversity of the precinct and providing local employment opportunities.
- 13.9 Consider the ultimate re-use of current industrial land, including for residential and/or compatible non-residential land uses, informed by potential land contamination and suitable urban structure.
- 13.10 Provide an appropriate interface with Portarlington Road and Clifton Avenue, including through generous landscaping, provision of trails and avoiding rear fences, to improve visual, access and amenity outcomes.
- 13.11 Manage the interface with industry in the Southern Precinct, through landscaping and the provision of infrastructure and compatible non-residential land uses along the linear edge.



Objective 14: Provide for facilities, connections and infrastructure to meet the needs of residents

Strategies:

- 14.1 Create a safe and convenient network of streets and paths for pedestrians and cyclists, connecting to Portarlington Road and Point Henry Road.
- 14.2 Ensure continuous public access along the coastal foreshore to create a connected open space network.
- 14.3 Support sustainable transport options through the timely provision of infrastructure and services, including public transport.
- 14.4 Ensure a range of recreation and open space facilities and infrastructure.
- 14.5 Plan for road connections and intersection upgrades to enable the efficient movement of people including between Moolap East Precinct and the Geelong Ring Road – Bellarine Link.
- 14.6 Ensure road connections from the Moolap East to the Point Henry and Southern Precincts are protected from coastal inundation.



Objective 15: Achieve enhanced environmental outcomes and respond to existing values and risks

Strategies:

- 15.1 Facilitate the conservation and improvement of ecological values, including appropriate interfaces and connections.
- 15.2 Manage the 'wildlife corridor' and recent plantings under the Moolapio project.
- 15.3 Ensure former landfill sites and other potentially contaminated land is safe and suitable for its intended use and managed to avoid risk.
- 15.4 Ensure a public foreshore is maintained including in response to predicted sea level rising.
- 15.5 Ensure the location and design of buildings, infrastructure and coastal facilities consider and respond to impacts associated with climate change (including the individual and combined effects of planned sea level rise of no less than 0.8 metres by the year 2100, tidal and storm surges, coastal processes and local conditions).
- 15.6 Ensure wetlands and best practice stormwater treatment provide environmental benefits and are integrated into the future urban design and landscape of the precinct.
- 15.7 Ensure development, infrastructure and any coastal protection works avoid detrimental impacts on coastal processes and environmental values of this precinct and adjacent areas.
- 15.8 Prevent inappropriate development in areas affected by groundwater salinity, acid sulfate soils and erosion.
- 15.9 Recognise the value that people place on the foreshore and beach as a natural and recreational public asset.
- 15.10 Ensure EPA's recommended separation distances *EPA Recommended Buffer Distances for Industrial Residual Air Emissions (Publication Number 1518 March 2013)* between sensitive land uses and higher impact industrial land uses are maintained, unless the risks and impacts are demonstrated to be acceptable to the satisfaction of the EPA and relevant authorities.





LEGEND

Residential (subject to Dow Chemical deciding to relocate and remediation of the land), including a range a residential densities, with community, retail and commercial facilities to meet the needs of the study area.

Study area boundary

Existing roads

Potential connection to Bellarine Link (indicative)

Potential intersection upgrade associated with the potential connection with Bellarine Link (indicative)

Provide trails and pedestrian connections (indicative)

Provide an appropriate interface

Rehabilitate previous land fill prior to a new sensitive use

Respond to predicted sea level rise including coastal retreat and protection measures (while maintaining a public owned foreshore)

Retain and support public access to key views

Manage the Moolapio grasslands



Implementation strategy

The study area is undergoing change. The Moolap Plan has responded to this by providing a Strategic Framework to guide change throughout each precinct.

The Moolap Plan itself does not approve development or rezone land. The implementation strategy (as outlined below) includes additional steps required for the Moolap Plan to start making an impact and influence decisions.

Policy implementation

Responsibility: Victorian State Government

Action: Prepare, adopt and approve a Planning Scheme Amendment to give policy effect to the Moolap Plan.

Include a new policy or add to existing policies in the Greater Geelong Planning Scheme. The Minister for Planning to consider not publicly exhibiting the Amendment as it has been informed by prior consultation and has already been approved by the Victorian State Government. When the Planning Scheme is amended, the assessment of applications will need to consider the strategic direction in the Moolap Plan.

Management of the Wetlands and Former Saltworks Precinct

Responsibility: Victorian State Government with private landowner/s

Action: Prepare a Management Masterplan to guide the design and management of the wetlands and former saltworks.

The Management Masterplan will identify the long-term layout, design, works, infrastructure, buildings and facilities, management, tenure and funding for the Wetlands and Former Saltworks Precinct. Consistent with the Strategic Framework of the Moolap Plan, the Management Masterplan needs to prioritise environmental outcomes, while guiding and potentially balancing:

- Environmental constraints, risks and values
- Coastal retreat
- Cultural and heritage values
- Infrastructure, services, facilities and buildings
- Public space and access
- Relationship with adjacent precincts and areas
- Feasibility, including ongoing management, approvals, costs, funding and land tenure.

Consultation with land owners, lessees, authorities, the community, proponents and other key stakeholders will be required. The preparation of the Management Masterplan may also require detailed investigation, analysis of options and examples, design, costings and recommendations on:

- response to environmental values, risks and constraints such as native flora and fauna, potential acid sulfate soils and ground water salinity
- improvements to facilitate habitats for migratory birds, including species common to the site and listed by the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act), protected by the JAMBA, CAMBA or ROKAMBA International Treaties, or listed in the Flora and Fauna Guarantee Act 1988 (FFG Act)

- response to predicted sea level rising and storm surges, including coastal retreat, protection measures (including defensive structures and basins) to avoid impacts to infrastructure, facilities, services and buildings along Portarlinton, Point Henry and Cheetham Roads
- appropriate interface treatments (including with the CSIRO AAHL) and connections with other precincts and areas
- opportunities for tourism, commercial, research and education facilities
- improved public access (including any restrictions), public open space, recreation, community facilities and infrastructure
- response to heritage and Aboriginal cultural values, including the areas previous industrial history
- drainage improvements (including retention and treatment) for the former saltworks and wetlands that may also have positive impacts for the urban areas of Moolap and Newcomb, and may support the development of adjacent precincts in the study area
- how the area would work as an integrated system
- the ongoing responsibility for maintenance and management
- the future tenure arrangements including ownership and leases
- revenue sources to contribute to the cost of management, aiming for financial sustainability, to avoid significant ongoing government costs and liability from the future infrastructure, facilities and management of this land
- compliance with the policies and actions of the Victorian Coastal Strategy 2014 and the policy objectives of the Victoria Planning Provisions
- approvals that may be required for works or development in accordance with the Environment Protection and Biodiversity Conservation Act 1999, the Environment Effects Act 1978, the Coastal Management Act 1995 and the Flora and Fauna Guarantee Act 1988
- response to Aboriginal and heritage values and the necessary approvals in accordance with the Heritage Act 1995, the Aboriginal Heritage Act 2006 and the Greater Geelong Planning Scheme.



Realising land use transition

Responsibility: Victorian State Government and the City of Greater Geelong

Action: Monitor the future plans and relocation opportunities for existing industrial operations in the Moolap East Precinct.

Action: Monitor the future plans and decommissioning and remediation of the land by land owners in the Point Henry Precinct.

Action: Consider if applications for the use and development of land is consistent with the Moolap Plan.

Action: Consider mechanisms to avoid new and existing heavy industry in the Southern Precinct from impacting uses in the study area and adjacent areas.

Action: Consider if interim land use and development, consistent with the zoning of the land, would prejudice the ultimate transition to future land use directions of the Moolap Plan. The following decision guidelines should be considered when assessing interim land use and development proposals, as appropriate:

- expected timing of the transition to future land use that are identified in the Moolap Plan
- potential adverse impacts on the environment (i.e. contamination or degradation of soil or water quality)
- potential land use conflict, adverse amenity impacts or other off-site impacts (i.e. additional areas impacted by required separation distances)
- the need for provision and ongoing maintenance of new infrastructure
- extent, life cycle and implications of significant investment (i.e. infrastructure, services or buildings).

Decision making would need to consider if a permit should be granted for interim uses and development, and whether any conditions would be required to limit the extent, nature and expiry of proposals that may prejudice the future land use directions of the Moolap Plan.

Detailed planning to guide urban development

Responsibility: Victorian State Government (i.e. Victorian Planning Authority (VPA)) with City of Greater Geelong, proponents and land owners

Action: Prepare a Precinct Structure Plan for Point Henry Precinct and Moolap East Precinct.

A Precinct Structure Plan (PSP) that includes detailed investigation, design and solutions is required. A PSP would determine the layout; location of residential and commercial area; required infrastructure and community facilities to service the precinct; the interface and management of significant and/or sensitive areas; the provision of open space; and the method to fund utilities and facilities through an Infrastructure Contributions Plan (ICP).

As part of the preparation of the PSP, detailed investigation would analyse site conditions, risks, values, potential impacts and the relationship and interdependencies with other precincts.

The timing of the PSP may need to consider when areas will be ready for development, i.e. after Dow Chemical leaves the Moolap East Precinct and when needed remediation will be completed. Consideration may also be required towards the merits of a separate PSP for the two precincts. This may be required if there was to be a significant time gap between when they were to be developed. Separate PSPs would still require each to consider the relationship and interdependency with each other, particularly for access, community facilities, utility services and other infrastructure.



Infrastructure assets analysis

Responsibility: Asset owner/s with land owners, State Government and the City of Greater Geelong

Action: Analyse and plan for the future need, provision, funding and maintenance of infrastructure and utility services, particularly where required to service future land use change and development.

Understanding the need and options for the provision of infrastructure and utility services, will inform detailed planning in each precinct.

The size, location, funding, delivery and maintenance options of infrastructure will all need to be considered. This would also include analysis of the potential merits of connecting back to the systems of urban Geelong versus standalone systems (i.e. stormwater management and sewerage treatment).

This analysis, and the provision of infrastructure for all precincts, should consider the needs of the Southern Precinct and surrounding urban areas, and the opportunities to improve their stormwater management and sewerage treatment.

Management of the foreshore

Responsibility: land owners and public land manager with relevant stakeholders

Action: Prepare and update management plans.

An update of existing and new management plans is required for the foreshore. The direction to manage the foreshore needs to be considered with the preparation of Precinct Structure Plans and/or master plans. The vision and principles of the Moolap Plan should be embedded within the management plans, i.e. principles such as 'facilitate increased public access to the coastal foreshore' and 'recognise and respond to areas of heritage, cultural and environmental value'.

