



COMMUNITY INFRASTRUCTURE PLAN

APOLLO BAY - SKENES CREEK - MARENGO

ISSUES AND OPPORTUNITIES REPORT

NOVEMBER 2019

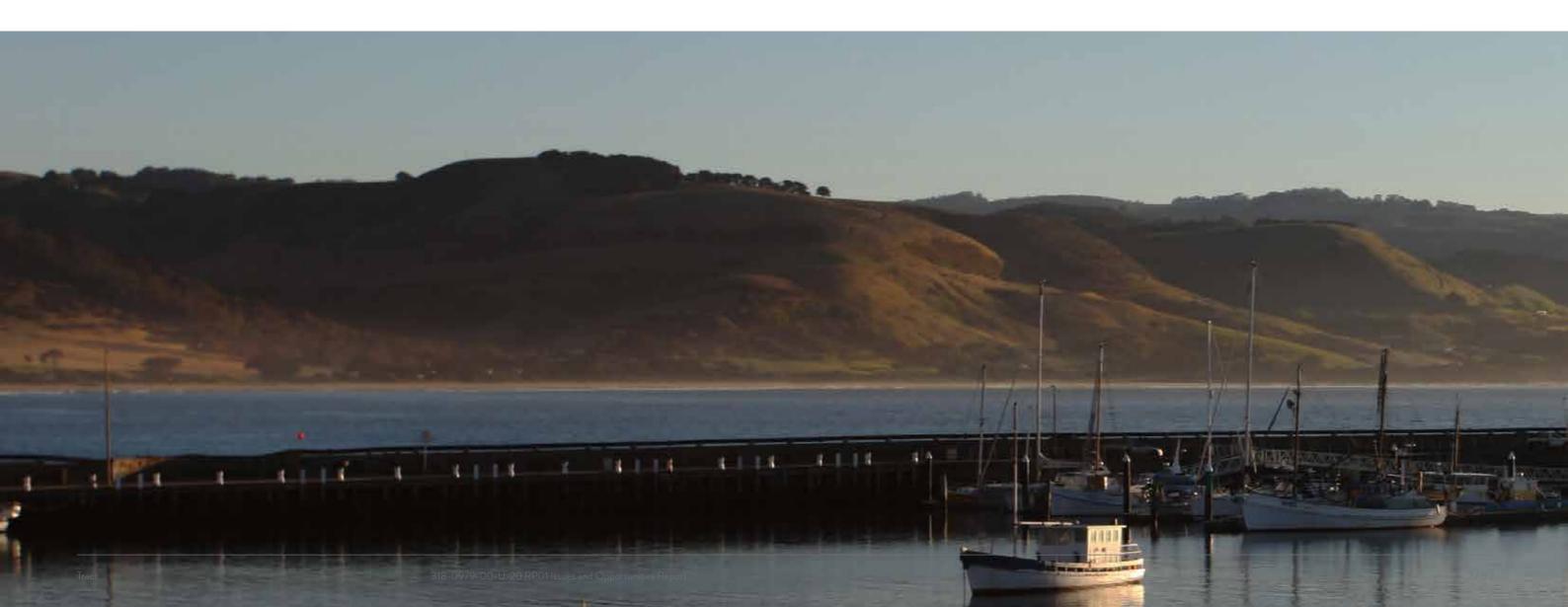




CONTENTS

1	INTRODUCTION	5
1.1	Project Overview	6
1.2	Paper Overview	9
1.3	The Study Area	10

2	CONTEXT
2.1	Overview
2.2	Regional Context
2.3	Historical Context
2.4	Key Demographics and Social Trends
2.5	Key Influencing Strategies
2.6	Current / Planned Projects



11
12
12
14
16
19
27

3	DISTRICT ISSUES AND OPPORTUNITIES	29
3.1	Overview	30
3.2	Community Infrastructure Assessment	30
3.3	Service Infrastructure	34
3.4	Tourism	38
3.5	Climate Change and Erosion	41

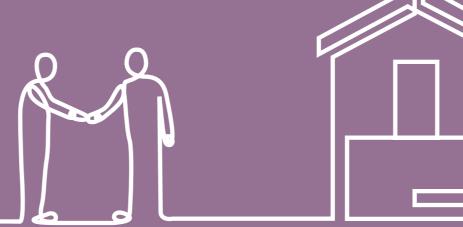
TOWNSHIP ISSUES AND OPPORTUNITIES 4 Apollo Bay 4.1 4.2 Apollo Bay Harbour 4.3 Skenes Creek 4.4 Marengo



43
44
54
64
72



1 INTRODUCTION



7



1.1 Project Overview

1.1.1 Introduction

The townships of Apollo Bay, Skenes Creek and Marengo are nestled along the Great Ocean Road between a dramatic backdrop of hills and forest and the coastline. Whilst the towns have relatively small permanent residential populations; the nature of visitation within the three towns is changing and this is having a major impact overall on the Great Ocean Road and Shipwreck Coast region. This shift from domestic and longer stay visitation to international and day visitations is placing stress on existing infrastructure and contributing to the perception of a divide in the community (between visitors and residents).

The Apollo Bay, Skenes Creek and Marengo Community Infrastructure Plan (the CIP) is being undertaken by Colac Otway Shire (Council), in partnership with the Otway Coast Committee (OCC) and Department of Environment Land Water and Planning (DELWP). It aims to develop appropriate benchmarks to ensure that the towns continue to grow and remain as enjoyable places to live for the local population whilst also taking advantage of the economic opportunities presented by tourism. An essential part of this will be integrating buildings, infrastructure and services into key activity nodes and improving connections between and through key components of the town centre, foreshore and car parking areas.

1.1.2 The need for a strategic design framework

While infrastructure needs are a focus of the CIP, infrastructure alone may not answer the long-term needs identified through the analysis and consultation process. Infrastructure may address short term capacity and servicing needs, but fail to deal with underlying site planning and design problems or the broader changes related to new patterns of visitation and the economic potential linked to those changes.

On that basis, the analysis and design process must identify existing issues related to each coastal community, but also develop a strategic way of thinking and a logical design framework that can provide the basis for long term infrastructure changes across the whole study area.

1.1.3 Deliverables

Key aspects of the project will include:

- A Community and Civil Infrastructure Plan plans for Apollo Bay, Skenes Creek and Marengo focusing on the public realm and community and civil infrastructure.
- Apollo Bay, Skenes Creek and Marengo District Plan - which identifies:
 - Key activity centres and destinations (including the harbour, foreshore and commercial hub and others as identified through this project)
 - Linkages between towns and between activity centres and destinations, including options for types of travel (e.g. walking, cycling, driving)
 - Design Guidelines for public infrastructure, with a materials and planting palette covering things such as signage, street furniture and landscaping
- Detailed Master Plans for activity centres identified



- The following matters are outside the scope of the CIP project:
- Changes to land use zoning across the study area, including the Harbour Precinct
 - Changes to land use permitted or prohibited
 - by existing zone provisions (for example,
 - Accommodation is a prohibited use in the Special Use Zone which applies to the Harbour).
 - Development on private property
- Building heights
 - Bypass of Apollo Bay
 - Relocation of the Golf Course
 - Mitigation of erosion on the foreshore (the
 - Department of Environment, Land, Water and Planning are addressing erosion as part of a separate project)
 - Infrastructure not provided by Colac Otway Shire Council including water, sewer, gas and telecommunications
 - Alignment and detailed design for the Skenes Creek to Wild Dog Creek Coast Discovery Trail (separate project)

1.1.4 Project Process

The CIP will be developed across a number of stages as outlined below.

The process is anticipated to take about 12 - 18 months from the start of the process until it is finally approved.



Project stages Figure 1.

1.1.5 Community Consultation

Community and stakeholder consultation is an important part of developing the Apollo Bay, Skenes Creek and Marengo Community Infrastructure Plan (CIP). It provides the opportunity to understand local values, aspirations and ideas, whilst building on consultation undertaken as part of the Colac Otway Shire Tourism Parking and Traffic Study and other previous studies.

Extensive opportunities for community input will be offered over three stages of consultation, which are outlined opposite. The 3 main consultation phases where the community will be invited to have input include:

- Consultation Phase 1 To understand, discuss and confirm the existing opportunities and issues facing the project (including negotiables and non negotiables).
- **Consultation Phase 2** To inform the community of preliminary and emerging ideas and seek feedback with regards to these ideas.
- Consultation Phase 3 To invite feedback from the various key stakeholders and the community on the draft report and ensure there is support for the proposed CIP.

A Community Consultation - Final September 2019 provides a summary of results from community and stakeholder engagement undertaken during Project Inception and Phase 1, held between April and July 2019.

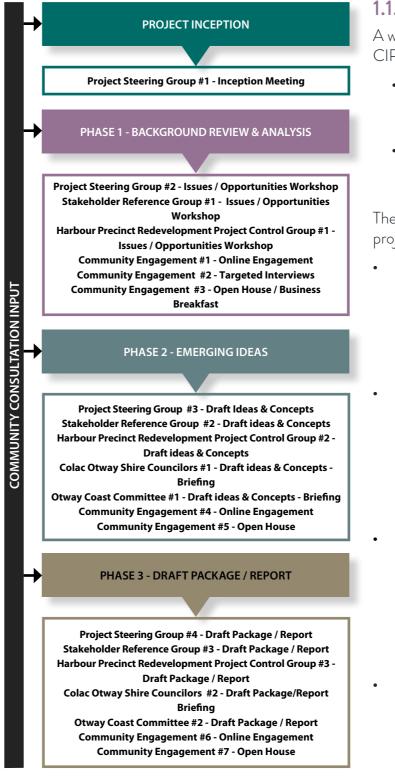


Figure 2. Consultation Phase Diagram

1.1.6 Governance Structure

A wide range of stakeholders will have an interest in the CIP. A governance structure has been established to:

- Ensure that various stakeholders and parties' views are considered and integrated in a meaningful way into the preparation of the CIP;
- Facilitate ownership of outcomes proposed by the CIP by organisations that may have the responsibility to implement identified outcomes.

The tiered governance structure proposed for the project is as follows:

Apollo Bay Community Infrastructure Plan Project Control Group (PCG) - Includes representatives from Council and OCC. The role of the PCG is to advise the project team, particularly on OCC's project knowledge and local experience.

Apollo Bay Community Infrastructure Plan Project Steering Group (PSG) - The role of the PSG is to provide inter-agency oversight into the development of the plans. The agencies and departments represented on the PSG will have management or regulatory responsibilities for land and services which are the subject of the CIP.

Apollo Bay Community Infrastructure Plan Community Stakeholder Reference Group (SRG)

- The role of the SRG is to provide agency input into the development of the plans and feedback to the PCG and PSG. It is not a decision-making body. Representatives for the SRG have been identified by Council.

Apollo Bay Harbour Precinct Redevelopment Project Control Group (HPR PCG) - The role of the HPR PCG is to provide input into the project generally, but in particular, input on the Development Plan for the Harbour.

The project governance structure is outlined on the following page.

PROJECT CONTROL GROUP (PCG)

General Manager, Development & Community Services – Colac Otway Shire General Manager – Otway Coast Committee Manager, Planning, Building and Health – Colac Otway Shire Coordinator Strategic Planning & Major Projects – Colac Otway Shire

PROJECT STEERING GROUP (PSG)

Manager, Arts & Leisure – Colac Otway Shire Manager, Community Services – Colac Otway Shire Manager, Environment & Community Safety – Colac Otway Shire Manager, Economic Development and Events – Colac Otway Shire

Regional Roads Victoria Regional Manager, Barwon South West Land & Built Environment. Department of Environment, Land, Water & Planning

STAKEHOLDER REFERENCE GROUP (SRG)

Colac Otway Shire

Members of the PCG

Manager, Services and Operations

- Colac Otway Shire

Manager Assets and Project Delivery

- Colac Otway Shire

Great Ocean Road Taskforce Port of Apollo Bay Great Otway Road Regional Tourism Regional Roads Victoria Eastern Maar Aboriginal Corporation Otway Health Aboriginal Victoria Regional Development Victoria

Parks Victoria Corangamite Catchment Management Authority Country Fire Authority Department of Health & Human Services Barwon Water Environment Protection Authority Department of Transport Apollo Bay Chamber of Commerce Skenes Creek Advancement Association

APOLLO BAY HARBOUR PRECINCT REDEVELOPMENT **PROJECT CONTROL GROUP**

Community Representatives

Colac Otway Shire Council

Department of Environment, Land, Water & Planning

Regional Development Victoria Department of Transport

Figure 3. Project Governance Structure

1.1.7 Community Reference Groups

Input from Community Reference Groups will also be sought throughout the development of the CIP. These groups include Targeted Stakeholders - General and the Broader Community. These groups are outlined further below:

TARGETED STAKEHOLDERS - GENERAL

Otway Forum Apollo Bay Sailing Club Apollo Bay Fishermen's Coop Apollo Bay Surf Life Saving Club Apollo Bay Golf Club

BROADER COMMUNITY

General Community Local Sporting Clubs and Associations Local Art and Historical Groups Local Environment and other Interest Groups Apollo Bay P12 School State and Federal Members of Parliament

1.1.8 Key Project Linkages

A number of projects are currently underway in Apollo Bay that will be incorporated into the CIP. These are outlined below and described further in section 2.6 of this report.



Figure 4. Key Project Linkages

1.2 Paper Overview

1.2.1 Purpose of this Paper

This Issues and Opportunities Paper has been prepared to identify the context, issues, processes, challenges and opportunities facing the townships of Apollo Bay, Skenes Creek and Marengo.

More specifically, it aims to:

- Consolidate a broad range of existing and new information that has relevance to Apollo Bay, Skenes Creek and Marango in order to provide a framework for further plan making activities;
- Identify the key state and local policy provisions, programs and strategies that affect the study area;
- Identify the key technical issues that affect the study area;
- Identify and analyse the key constraints and opportunities;
- Gain a preliminary understanding of the existing community, their needs and aspirations;
- Identify any conflicting issues requiring resolution;
- Identify information gaps, where applicable; and
- Provide direction and recommendations for the Community Infrastructure Plan.

This paper will provide background for the development of the Apollo Bay, Skenes Creek and Marengo Community Infrastructure Plan and the next stage of work, the development of options.

1.2.2 Structure of this Paper

This Issues and Opportunities Paper comprises the following:

1. INTRODUCTION

Introduction to the Community Infrastructure Plan, the project, this report and its purpose.

2. CONTEXT

Description of the Community Infrastructure Plan and its context. This section also provides a review of key background documents, policies and strategies and their implications, previous consultation outcomes and demographics / social trends influencing the project.

3. DISTRICT ISSUES AND OPPORTUNITIES

Analysis and identification of broader issues and opportunities for the Community Infrastructure Plan, relative to the three townships.

4. TOWNSHIP ISSUES AND OPPORTUNITIES

Analysis and identification of the key issues and opportunities for the Community Infrastructure Plan, relative to the individual townships.

Figure 5. Paper Structure

This report should be read in conjunction with the other parts of the Community Infrastructure Plan, once completed.

1.3 The Study Area

The Study Area for the project is focused on the townships of Apollo Bay, Skenes Creek and Marengo. The study focuses on the public realm and publicly owned land areas within the boundary; as shown on the figure opposite; including road reserves, council and crown land, the foreshore, creeks and recreational open spaces. As the project evolves, the study area maybe refined accordingly.



Figure 6. Study Area

2 CONTEXT



2.1 Overview

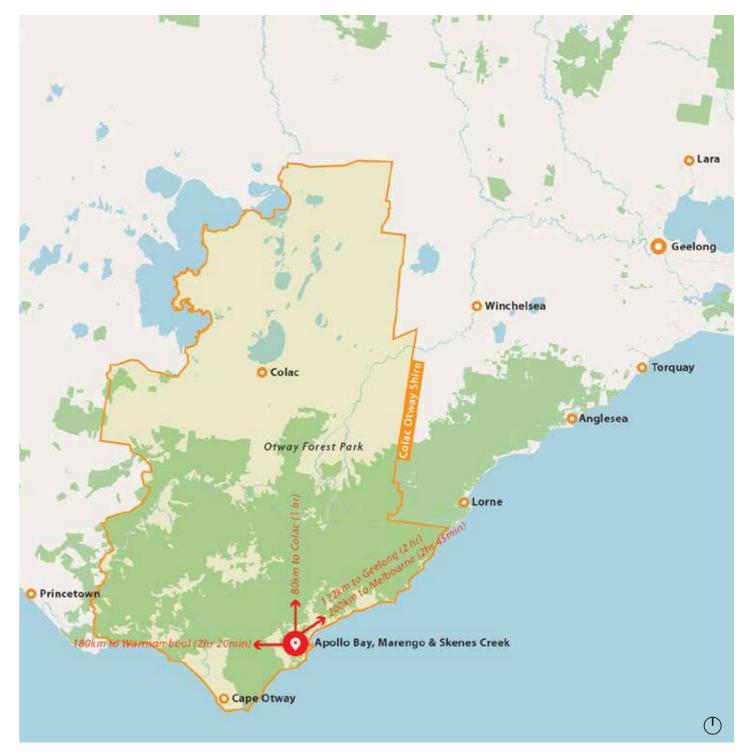
This section of the paper aims to outline key contextual influences for the Community Infrastructure Plan. It includes an overview of key background documents, policies and strategies and their implications, the history of the area and demographics / social trends influencing the project.

2.2 Regional Context

Apollo Bay, Skenes Creek and Marengo are located at the southern end of Colac Otway Shire, approximately 200km south west of Melbourne. Apollo Bay is the major coastal settlement within the Shire with a residential population of 1,366 according to the 2016 census. To the south west of Apollo Bay is the small community of Marengo with a permanent population of 239 people. Skenes Creek is located to the north east and has a permanent population of 164 people.

Tourism is a major contributor to the local economy. The unique location of the three towns along the Great Ocean Road, as part of Shipwreck Coast and their proximity to natural environmental features, attracts visitors to or through the towns all year round. All three towns experience extreme population fluctuation during peak periods, with Apollo Bay experiencing a ten-fold population increase in the summer peak season. This places significant pressure on infrastructure and services for a large part of the year.

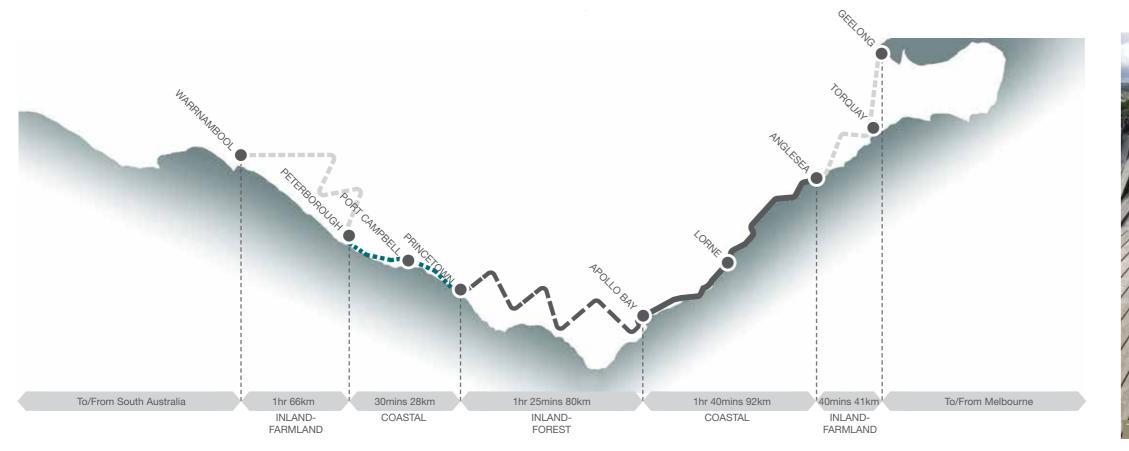
Strategically, the three towns are located at the halfway point between Geelong and Twelve Apostles. As such, the towns also experience day-time peak periods for those tourists stopping in for lunch or restrooms. Given the expanded offering of Apollo Bay, much of this is focused on Apollo Bay.





Access to the three towns is via the world-famous Great Ocean Road or inland from Colac; which is the closest large regional town. Additionally, regional bus services connect the towns to Geelong and Melbourne.

The Otway foothills serve as a scenic backdrop for the coastal townships and contribute to their unique characters. The Great Otway National Park covers a large stretch of undulating mountains and hills, rugged coast-land and beaches from Torquay to Princetown (east-west), and from Colac to Cape Otway (northsouth).



Mapping the Great Ocean Road drive experience, Shipwreck Coast Master Plan, McGregor Coxall, 2015 Figure 8.



2.3 Historical Context

Heritage is an important aspect of the local character and identity of the three townships.

The study area is situated within the traditional lands of the Gadubanud (Ktabanut) or King Parrot people. The area provided a source of food, resources and materials for the community.

The foreshore and creek areas, provided an ideal place to hunt and forage for food, while creeks provided drinking water. Aboriginal occupation of the study area is evidenced by the presence of extensive coastal shell middens as well as other important artefacts. Descendants of the Gadubanud people are represented in the local communities including in Apollo Bay.

The Harbour Precinct and Point Bunbury contain some known sites of Aboriginal significance (middens and a likely drinking well under the Harbour Masters Works Office). The full extent of Aboriginal heritage sites across the study area however is largely unknown.

Since the arrival of Europeans, the townships of Apollo Bay, Skenes Creek and Marengo has had a rich and layered history. In 1800, the Cape or Cape Otway, as it is now known, was chartered by Lieutenant James Grant as he surveyed the Victorian coast sailing the Lady Nelson. Soon after, sealers and whalers began to operate in the area and a whaling station was established at Point Bunbury, where the Apollo Bay Golf Course is now located.

In 1845, Captain Loutitt, sought shelter in the Bay on a trading voyage from Melbourne to Port Fairy. Loutitt named the Bay 'Apollo' after his schooner of the same name.

In 1849, timber cutters, began to settle in the area. Timber mills were constructed in the early 1850's to support a growing industry and a settlement of workers huts began to emerge near the Barham River. This settlement was known as Middleton.

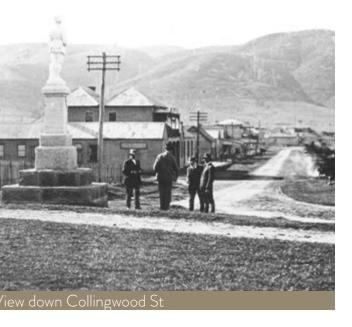
Although the Bay provided sheltered anchorage for the ships, the absence of a pier meant that timber logs to be transported were floated out to sea to be loaded onto waiting ships. A long timber pier was later constructed at Point Bunbury for loading logs on ships, but was later destroyed by storm, as well as a second pier. As a result, the 'Long Pier' was built in a more sheltered site in 1892. The remains of this pier can be seen near the Skate Park in the Apollo Bay Foreshore Reserve. Today timber remains an important industry in the wider Colac Otway region.







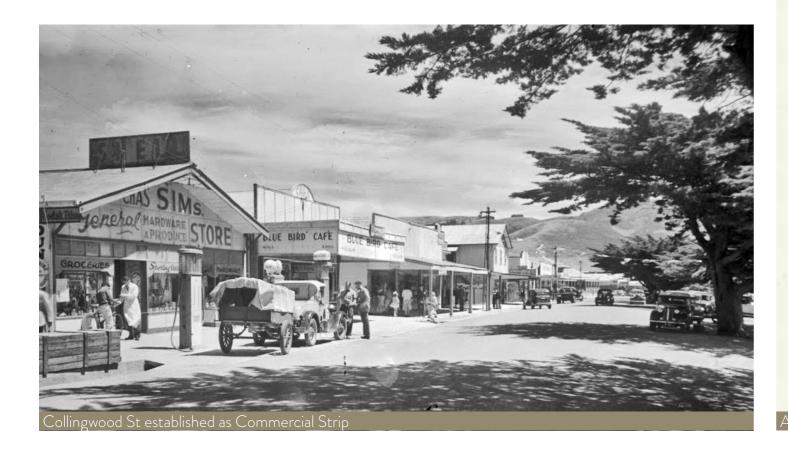
The flat and undulating land around the Bay provided the ideal location for the establishment of a town. In 1853, the area was surveyed and in 1864, farming land was made available. By the mid 1870's the first blocks were being offered for sale. Along with land sales, several buildings were also erected in the late 1870's and 1890's including a school and a post office, churches and a pub. Town planning indicated Pascoe Street would be the main street, however with several buildings being erected along Collingwood Street, this became the commercial centre for the town. In 1898, the township, was renamed to 'Apollo Bay'.

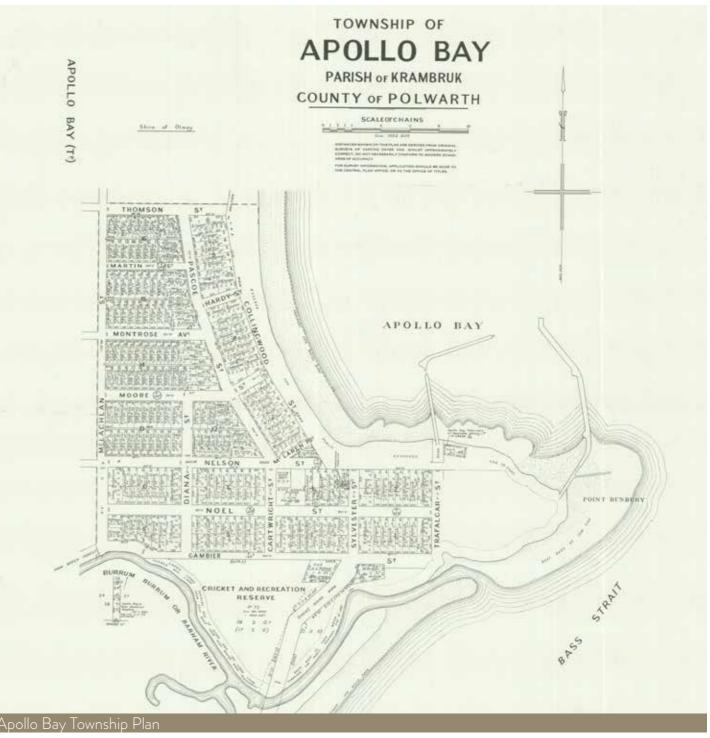


Access to townships in the early days was provided by a rough coach track and dense bush from Colac and for many years the only real means to access the towns was by sea. It wasn't until construction of the Great Ocean Road was completed in 1932 that the towns became easily accessible. Survey work for the Great Ocean Road began in 1918, with thousands of returned serviceman descending to the small towns along the Cape Otway coast.

With the establishment of the Great Ocean Road, fishing became important to the town, with the road making it possible to provide daily deliveries of fresh fish to Melbourne. Apollo Bay Harbour was constructed in the 1960s, and it remains an important part of the fishing industry within the town.

While visitors have been encouraged to the area since the first coach operated between Apollo Bay and Birregurra, the Great Ocean Road provided easier access to the small coastal towns. Since, tourism has become the major industry of Apollo Bay.





2.4 Key Demographics and Social Trends

2.4.1 2016 ABS Census Trends

The ABS data tells an interesting story of the three townships which are affected by the influx of seasonal tourism through the summer period and at other key weekends during the year where festivals attract large volumes of tourists.

Apollo Bay is the beacon of the three townships due to its size and location central to the towns. Within Apollo Bay there are two communities which start to emerge, that is the permanent residents and the holiday residents/tourists. The impact of tourism and the seasonal residents (holiday houses) is such that more than 60% of private dwellings are unoccupied for a large part of the year.

The median weekly household income for the three towns is relatively consistent, with Marengo being slightly higher at \$979 per week however this is significantly lower than Victoria as a comparison (\$1,419 per week). Refer to Table 1 overleaf.

Using the Population i.D catchment area of 'Great Ocean Road – Otways' (refer Figure 8) for suburb boundaries the following key social trends are evident for 2016:

- The dominant age group in 2016 was empty nesters and retirees (60-69) who made up 20.4% of the population.
- Parents and homebuilders (35-49) and Older workers and pre-retirees (50-59) also made up a significant portion of the population in 2016 (17.3% and 16.8% respectively).
- Internet connectivity has increased from 63.4% in 2011 to 69.4% in 2016 which is still lower than Victoria (79.6%) and regional Victoria (73.5%).

Refer to Table 1 and 2 overleaf for further details.





Apollo Bay, Marengo, Skenes Creek (L to R) State Suburb Boundaries (Source: ABS Quick Stats) Figure 9.



Housing

- Most residents live in separate dwellings (83% Apollo Bay - 95% Skenes Creek) with the most common dwelling type being 3-bedroom dwellings.
- A significantly high proportion of people are renting (Apollo Bay 32.8% compared to 21.6% Colac Otway and 23.9% Regional Victoria).
- Significant numbers of rental households are living in 'housing stress', i.e. paying more than 30% of their household income on rent (Apollo Bay 14% compared to Victoria 10.4% overall).
- The percentage of social housing offer in 2016 was 2% (26 households) compared with 3.3% in regional Victoria. This has increased slightly from 1.7% (18 households) in 2011.

Employment and Income

- A high proportion of workers in Apollo Bay work part time (45.7% compared to 40.9% Colac Otway and 38.3% Regional Victoria).
- A very high proportion of households are earning middle to low incomes (less than \$650 per week) 30.4% Apollo Bay and 35.4% Skenes Creek compared to 20.3% Victoria.
- In Skenes Creek, the most common occupations were Labourers (19.1%), Managers (16.3%), and Technicians and Trade Workers (16.0%). The top response for industry of employment was Accommodation with 16.1%. This is followed by Cafes and Restaurants with 8.4%.

In Apollo Bay, the amount of people working parttime was significantly higher than that of those working full-time, with 56.2% and 34.4% respectively. The two most common occupations were equal, with Professionals and Community and Personal Service Workers at 19.0% each. The top response for industry of employment was Accommodation with 36.7%, significantly higher than the second most common Market Research and Statistical Services with 13.3%.

In Marengo, the amount of people working fulltime was 47.2% and part-time was 40.7%. The two most common occupations were almost equal, with Technicians and Trade Workers at 21.2% and Labourers at 20.2%. Managers followed with 18.2%. The top response for industry of employment was Accommodation with 15.5%. This is followed by Cafes and Restaurants, and Pubs, Taverns and Bars at 8.6% each.

	Apollo Bay (SSC)	Marengo (SSC)	Skenes Creek (SSC)	Comparison – Victoria
Population	1,598	239	164	5,926,624
Median Age (years)	50	56	58	37
No. of Occupied private Dwellings	616 (39.5%)	97 (37.2%)	64 (21.3%)	88.3
No. of Unoccupied private dwellings	942 (60.5%)	164 (62.8%)	237 (78.7%)	11.7%
Rented dwellings	201 (32.8%)	25 (25.3%)	9 (15.3%)	28.7%
Median Weekly Household Income (\$)	\$926	\$979	\$924	\$1,419

 Table 1.
 Apollo Bay Demographic Summary 2016 (Source: ABS Quick Stats)

RED = Above LGA, Regional or Victorian Average **GREEN =** Below LGA, Regional or Victorian Average

Social Connections

Census data also shows some indicators of potential social isolation in the area including:

- High proportions of lone person households - Apollo Bay 35% and Skenes Creek 42.6% compared to 29.2% Colac Otway and 27% Regional Victoria.
- High proportions of lone parent households – Apollo Bay 13.9% and Skenes Creek 13.5% compared to 9.4% Colac Otway and 10% Regional Victoria.
- Higher proportions of people in the older age groups compared to Victoria overall including:
 - 60 64 years 10% (Vic 5.4%)
 - 65 69 years 9.2% (Vic 4.9%)
 - 70 74 years 6.4% (Vic 3.7%)
 - 75 79 years 4.75% (Vic 2.8%)

Summary

Key social trends influencing the CIP include:

- A significant increase anticipated in the number of older age residents living in Apollo Bay by 2041 – 372 with additional people aged 70 years comprising 10.9% of the total 2041 population.
- Significant related increases in the number of people living with a disability in the 60 - 64 years and 75 – 79 year age groups.
- Extreme population fluctuation during peak periods and impacting on public amenities and infrastructure such as toilets, open space and bus parking areas.

Future infrastructure and the CIP will need to respond to these social trends and ensure the needs and interests of local residents and tourists are considered.

	Apollo Bay	Marengo	Skenes Creek	Colac Otway	Regional Vic	Vic
Housing						
Separate house	83.40%	87.60%	95.30%	89%	87.90%	73.20%
3 bedroom dwellings	48.50%	48.90%	55.70%	49.40%	46.80%	44.00%
Housing tenure - Rent	32.80%	25.30%	15.30%	21.60%	23.90%	28.70%
Dwelling owned outright	42.0%	38.40%	59.30%	38.50%	35.70%	32.0%
Median Monthly Mortgage Repayment	\$1,441	\$1,102	\$1,250			\$1,728
Median Weekly Rent	\$250	\$300	\$223			\$335
Households with rent payment greater than or equal to 30% of household income	14.00%	9.90%	6.80%			10.40%
Households with mortgage payment greater than or equal to 30% of household income	7.00%	3.60%	9.70%			7.50%
Employment and Training						
Work part time	45.70%	40.70%	36%	40.90%	38.30%	31.40%
Education institute attending: University or tertiary education	5.60%	0.00%	11.40%	1.30%	2.60%	17.80%
Income						
Household income less than \$650 per week gross	30.40%	31.00%	35.40%			20.30%
Social Connections						
Lone person households	35.00%	33.70%	42.60%	29.20%	27.00%	24.70%
Lone Parents Household	13.90%	7.90%	13.50%	9.40%	10.00%	15.30%
No internet	21.00%	13.20%	15.90%	21.90%	18.10%	13.6

 Table 2.
 Apollo Bay Social Indicators 2016 (Source: ABS Quick Stats 2016; Profileid.com.au)

RED = Above LGA, Regional or Victorian Average GREEN = Below LGA, Regional or Victorian Average

2.5 Key Influencing Strategies

There are a number of key strategies& documents that will influence the development of the CIP. These include:

2.5.1 State / Regional Strategies

Great Ocean Road Region Strategy, 2004

The Great Ocean Road Region Strategy is a land use and transport strategy for the region extending from Torquay to Warnambool. Released in 2004, the strategy builds upon previous work, including the Victorian Coastal Strategy, and regional catchment strategies.

The strategy provides direction for the State Government, local councils, the community, businesses and other government agencies to plan for the region's future, set priorities and make decisions.

The strategy's four key directions are:

- Environment: protect the landscape and care for the environment
- Settlement: manage the growth of towns
- Access: improve the management of access and transport
- Prosperity: encourage sustainable tourism and resource use.

These should be considered as part of the development of the CIP to ensure that it aligns with broader strategic directions for the region.

Great Ocean Road Action Plan, 2019

Great Ocean Road Action Plan outlines an unprecedented range of reforms designed to protect the future of the coastal land and waters of the Great Ocean Road region, and identifies the steps that need to be taken to safeguard it. Five overarching objectives of this Action Plan are:

- · Protect the ecological and landscape integrity of coastal and marine environments
- Increase Traditional Owner inclusion
- Protect distinctive areas and landscapes
- Grow the local. state and national visitation economies
- Modernise governance

The project included significant community input in order capture a wide range of perspectives. These were summarised in the Governance of the Great Ocean Road Region: Community Views Report, 2018. The CIP should align to and complement the objectives of this action plan, where possible.



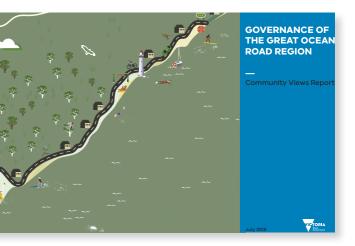
Promote the geographic and seasonal dispersal of visitors throughout the whole region. Camperdown erang Vinchelsea Cola Cobden regurra rguay Warrnamboo Separation Creek Wve River avers Hill Kennett Rive Skenes Creek Improve travel information and signage Develop world best practice Apollo Bav along the Great Ocean Road, at each sustainable tourism end and throughout the region NORTH 20 **Strategy Framework** kilometre

Figure 10. Great Ocean Road Region, A land use and Transport Strategy, DSE, 2004, Strategy Framework

Governance of the Great Ocean Road Region: Community Views Report, 2018

This report outlines community and stakeholder views on the governance of the Great Ocean Road Region. Through engagements, it is understood that there is strong stakeholder and community support for a new approach to the management of the Great Ocean Road region, a number of key messages emerged from the process are:

- Major change is required doing nothing is not an option;
- Nature and the environment are the most valued elements of the Great Ocean Road region;
- Each community along the Great Ocean Road is unique and has its own distinct identity;
- Management of traffic and tourism needs to change;
- More emphasis is needed on environmental protection, road safety and climate change implications;



Victorian Coastal Strategy, 2014

• There is strong support for the establishment of a single entity to manage the Great Ocean Road and its environs;

- A shared vision of the future for the region and a strategic framework plan is needed.
- Further engagement on any new governance arrangements is desired.

Specific feedback concerning Apollo Bay:

Current state views:

- The GOR is at saturation point now, with negative impacts for tourists and residents.
- The GOR area is also home to residents; it is not just a tourism playground.
- The experience at the Twelve Apostles is disappointing - expectations are not being met.
- Frustration that locals subsidise tourist infrastructure.
- Impacts on road safety due to high tourism numbers.
- Coastal areas decreasing due to erosion. This affects the safety and quality of roads.
- Natural heritage flora and fauna is vulnerable to destruction.

Future management views:

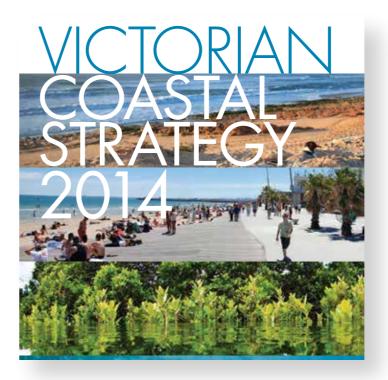
- Action is required immediately to manage tourism on the GOR.
- Funding to manage the GOR should be a priority - consider 'user pays' models.
- The Great Barrier Reef Marine Park Authority is a potential management model.
- Decrease the number of agencies involved - ideally, one body would coordinate the management.
- Consider consolidating the number of municipalities.
- Future management needs equal local consideration.
- A capacity analysis of the GOR is needed as a priority.

It should be noted that this report does not make specific mention of Marengo or Skenes Creek.

The Victorian Coastal Strategy 2014 sets a long term vision and framework for how we plan and manage the coast, guided by the Hierarchy of Principles, policies and actions. It identifies and addresses five key issues to provide benefits in the future:

- Managing population growth
- Adapting to a changing climate
- Managing coastal land and infrastructure
- Valuing the natural environment
- Integrating marine planning

Regard should be had to the policies and actions contained within this strategy.



It should be noted that the Victorian Coastal Strategy 2014 will soon be replaced by a new Marine and Coastal Policy, developed under the Marine and Coastal Act 2018.

2.5.2 Local Strategies

Apollo Bay - Coastal Protection Study, 2018

Apollo Bay foreshore experienced significant erosion in a series of storms during 2018. As a result, infrastructure and the Great Ocean Road are at risk. This report documents investigations, options assessment, review of long-term treatment options, and design of short-term remedial work for the Apollo Bay foreshore.

The assessment also indicates that Apollo Bay Harbour provides a certain level of shelter from the dominant southerly waves to Apollo Bay, however north of Cawood Street, the beach is fully exposed to the dominant wave energy.



Department of Environment, Land, Water, and Planning (DELWP) Apollo Bay – Coastal Protection Study

The document assesses a variety of long term management options, which can be categorised as:

- Non-Protective Options
- Non-Structural Protection Options
- Structural Protection Options

The study produces a comparison metric table for the options, and assumes that a combination of these options may be necessary to assist in the management of Apollo Bay coastline.

Proposed Remedial Work:

• Construction of a rock revetment over 240m of the foreshore around Milford Street. Multiple assessments in this study have confirmed this is an appropriate treatment.

Design Objectives:

- Protect the Great Ocean Road (primary design objective)
- The works needs to be implemented quickly to reduce risk to the Great Ocean Road
- Protect the walking path and vegetation including cypress trees that line the foreshore
- Preserve sea views and landscape character
- Provide path and beach access
- Minimise impact on beach
- Structure can be modified or incorporated into long term erosion strategy for Apollo Bay

The following next steps were also recommended as part of the study:

- Undertake a comprehensive coastal process study, including reassessment of the longshore sediment transport.
- Investigate the feasibility of the viable long term options favoured by the community feedback, recognising that different options, or combinations or options, will be appropriate in different parts of the study area.
- Review of sand management and bypassing at the harbour to ensure sand is being used for maximum benefit in light of updated coastal process understanding and long term erosion control options.

This report is part of the ongoing and long-term management of coastal erosion in Apollo Bay.

Colac Otway Shire Tourism Parking and Traffic Strategy, 2018

The tourism parking and traffic strategy outlines the infrastructure requirements for the key coastal and tourism settlements within Colac Otway Shire to provide evidence based tourism and parking strategies and to outline infrastructure priorities and traffic management strategies required to support the growing number of tourists and the challenges they present. The draft strategy outlines a number of recommendations for the three townships including:

Apollo Bay

•

- Investigate the provision of a shuttle bus between Skenes Creek, Apollo Bay and Marengo during peak periods.
- Improve the utilisation of the off-street car park on Pascoe Street through wayfinding signage.
 - Re-route buses to travel on Pascoe Street rather than Collingwood Street.
 - Provide public toilets near bus parking.
 - Provide improved pedestrian crossing infrastructure along Pascoe Street.
 - Improved bicycle parking provision.
- Improved pedestrian access between the Information Centre, bus stop and foreshore car park.
 - Provide additional pedestrian crossing infrastructure on Collingwood Street in appropriate locations.
- Investigate opportunities to reduce footpath obstructions in the retail precinct.
- Pedestrianise Collingwood Street through prioritised treatments.
- Trial the full pedestrianisation of Collingwood Street through tactical urbanism exercises.
- Improved traffic management in surf club foreshore carpark.
 - Provide long vehicle / bus parking along Pascoe Street.
- Medium and long-term strategic locations for additional off-street bus parking.

- Town entry treatments and 40km/h speed limit through township.
- As an ultimate solution, re-route the Great Ocean Road via Thomson Street, Pascoe Street and Nelson Street.
- Intersection of Collingwood Street and Nelson Street upgrade.

Skenes Creek

- Directional arrows and turning guidelines at Great Ocean Road / Skenes Creek Road intersection.
- Improve pedestrian connectivity between either side of the river by widening footpath on bridge.
- Improve pedestrian crossing safety on the Great Ocean Road.
- Improve traffic management in the foreshore car park on the western side of the bridge.
- Town entry treatments and 40km/h speed limit through township.

Marengo

• Town entry treatments and 40km/h speed limit through township.

The findings for Apollo Bay, Skenes Creek and Marengo will be integrated into the CIP to ensure all infrastructure needs are considered in their entirety.

As part of the development of the Tourism Parking and Traffic Strategy, a number of consultation activities were undertaken to ensure all community and stakeholders concerns and suggestions were heard. These included:

- Meetings with a Project Control Group and Steering Committee
- Community workshops and drop in sessions
- Government and business stakeholder workshops
- Phone and face-to-face interviews with local bus companies and tour operators
- Online questionnaire

Consultation findings were summarised and included as part of the strategy. Given the findings are relatively recent, these will be considered as part of the development of the CIP.

Apollo Bay Drainage Strategy, 2016

Apollo Bay Drainage Strategy is an engineering drainage design and apportionment analysis undertaken by Arup Pty Ltd that addresses some specific drainage problems caused by inadequate capacity of the current drainage system in Apollo Bay.

The strategy provides recommendations for the future management of drainage in the township. Works are occurring in 2018/19 to implement the first stage of works recommended in the study.

Apollo Bay to Skenes Creek Coastal Discovery Trail, 2018

For a number of years the local community of Skenes Creek and Apollo Bay, as well as Colac Otway Shire have been seeking Government support to extend a shared trail along the foreshore between the towns. This study examines the feasibility of the project, in particular the connection between Wild Dog Creek and Skenes Creek. The aim is to complete the coastal experience with a world-class, mostly elevated trail.

It is understood that the project has been funded. The trail is identified in the CIP but the detailed planning and design is being undertaken as a separate project.



Apollo Bay Trails Feasibility 2012

While undertaken some time ago, this study provides a basis for planning future path linkages in and around Apollo Bay. The study investigates the feasibility of a number of loop walks and "one day walks" radiating from, and linking to Apollo Bay. It reviews and undertakes detailed planning for walks determined feasible. The study recommends priority for the trail construction sequence as below:

- 1. The Wild Dog Trail / The Highview Trail
- 2. The Wild Dog Falls Trail
- 3. The Wild Dog Loop Trail
- 4. The Wild Dog Mariners Link Trail
- 5. The Barham River Shared Path

The Barham River Shared Path at the point of the study completion appeared to be "not feasible". However should the private land along the river revert to the Crown as a river reserve, the Airfield to be relocated, or private land along the proposed route become available for purchase, a shared path located inland between Apollo Bay and Marengo would create significant recreational opportunity. Improved trail and path networks will need to be considered by the CIP.

Apollo Bay Structure Plan, 2007

This document provides strategic direction regarding major changes for Apollo Bay, Marengo, and Skenes Creek over the next 20 years. It also provides an opportunity to identify community needs and aspiration, as well as greater certainty to investors, Council and the community. The document contains objectives and strategies for the following themes:

- Landscape Setting & Environment
- The Size of the Settlements,
- Settlement Character and Form
- Activities: Business, Tourism, Community & Recreation
- Access

Numerous items under these themes, along with associated objectives and strategies, are applicable to this project. Some of the relevant items and objectives are:

 Apollo Bay town centre streetscape: Require new development and streetscape works in the Apollo Bay town centre to build on and reinforce the fishing village coastal character of the township, and contribute to the creation of a vibrant public realm.



- The Harbour Precinct: Develop the port vicinity with a tourism, fishing, boating, commercial and recreational focus strengthening links to the town centre of Apollo Bay and providing net community benefits.
- Community and Recreation: Encourage future recreation facilities to be located together with other community facilities in a central and accessible location. Ensure that community, health, education and recreation facilities are provided to meet the needs of current and projected future residents and visitors to the area.
- Tourism: Support the growth of tourism as a major employer for the region.
- Connecting the three settlements for pedestrians and cyclist. Strengthen the pedestrian and cyclist connections between Marengo, Apollo Bay and Skenes Creek.
- Pedestrian network: Create a highly walkable town centre in Apollo Bay with safe and convenient access to the shops, community facilities and recreational activities.
- Traffic: Manage the orderly flow of traffic at all times of the year and enhance pedestrian safety and movement.
- Parking: Ensure the future parking needs of Apollo Bay are met and parking congestion in the Great Ocean Road is minimised.

The Structure Plan provides a number of actions and ideas for Apollo Bay. Many of these are yet to be implemented and could be reviewed as part of the development of the CIP.

Colac Otway Public Open Space Strategy, 2011

The Strategy provides a strategic framework for the planning and provision of open space within the municipality. It sets a Vision and Guiding principles to provide a sustainable network of open spaces across the Shire. In particular, it provides recommendations for Apollo Bay Foreshore and Harbour:



Apollo Bay Foreshore

Explore developing a walking track on the coastal perimeter of the course.

Ensure that the Foreshore Reserve is used primarily for coastal recreation related uses and any commercial uses of this area only be considered if they are dependent on a coastal location.

Explore opportunities for new buildings and structures that could be designed and sited more appropriately to replace the existing structures that are highly visible and detract from the naturalness of the setting.

Plant additional indigenous vegetation to provide shade to help screen prominent structures and would add to the naturalness of the reserve.

Improve walking and cycling routes by providing a more consistent and coordinated pedestrian connections along the foreshore to link the harbour in the south to the town centre.

Continue to investigate alternative sites (e.g. Heathfield Estate Reserve) for the relocation of the pony club and ensure the continued availability of this foreshore land for public open space purposes.

Enhance surfers' needs by improving beach and parking access at Mothers Beach and Barham Beach.

Ensure that if new camping areas are proposed on foreshore land, then they are only located in areas that have been significantly altered by former land uses and are designed for use only in peak seasons.

Apollo Bay Harbour

- Enhance the range of non-boating recreation facilities available for informal recreation such as fishing, walking over water, ocean views.
- Upgrade the public toilets and provide changing facilities.
- Provide interpretative facilities on Indigenous culture, history of the area, natural environment and the fishing/maritime industry.
- Explore a walkway on the eastern breakwater.
- Improve the traffic management and parking arrangements.
- Protect the Aboriginal middens near the harbour (which are disturbed) and at Point Bunbury.
- Develop new sailing club facilities.

The Strategy also delivers recommendations for Marengo, including the possibility of Tramway Reserve providing a linkage or neighbourhood open space, and developing interpretive signage for the Marengo Flora Reserve. It is also stated that opportunities for open space for Skenes Creek should be considered.

These recommendations are consistent with the project observation and should be considered by the CIP.

Colac Otway Economic Development Strategy, 2019

The Strategy outlines how Council will support economic development by promoting investment and jobs creation in the Shire. It highlights multiple opportunities and actions across different sectors in Apollo Bay.

The strategy did not provide specific actions for Marengo and Skenes Creek, however key actions identified for Apollo Bay include:



- Advocate for the Great Ocean Road Authority head office to be located in Apollo Bay;
- Facilitate investment in the Port of Apollo Bay to improve its functioning for the fishing industry;
- Collaborate with Otway Health to prepare a precinct plan for the Otway Health facilities in Apollo Bay as part of the Apollo Bay Community Infrastructure Plan;
- · Undertake buildings and works to facilitate the redevelopment of the Apollo Bay Harbour Precinct;
- Collaborate with the Fishermen's Co-Operative and Seafood Industry Victoria on future activities involving Apollo Bay Harbour. Investigate the development of a local fresh food seafood node to attract tourists, including promoting local seafood in Apollo Bay restaurants and opportunities for visitors to learn about the local seafood industry;
- Identify opportunities for the development of 4+ star accommodations in Colac and Apollo Bay.

In preparing the Economic Development Strategy, a number of stakeholder engagement activities were undertaken. These included an events workshop conducted with Council officers and event organisers, several one on one meetings were held with key regional stakeholders, an extensive business survey was developed and promoted across the region. This resulted in 137 responses; and a public exhibition process to seek community feedback on the draft strategy between October and December 2018.

Council adopted the strategy in March 2019.

Skenes Creek Master Plan, 2014

The Master Plan assesses the township opportunities and constraints of Skenes Creek, and delivers a series of visions consolidated from a residents survey. Key componants of this vision include the natural setting of Skenes Creek (proximity to open paddocks, bushland and the coast) and the close community. Some of the issues raised are:

- Development pressure
 - Poor condition of some local roads
 - Speed limits
- Unsafe beach access
 - Poor pedestrian access on and across GOR
 - Poor car park
- Limited public transport to Apollo Bay
- Ideas outlined in the plan, relevant to the CIP include:
 - Preserve and enhance Skenes Creek
- Maintain semi-rural environment. (i.e. Gravel roads, trees etc.)
- Pedestrian and bike link to Apollo Bay
 - Encourage walking and riding, shared paths
 - Walkable township/pedestrian friendly (Traffic calming)
- No footpaths
 - Establish a corner store/cafe
- New township signage
- New playground
- Opportunities to implement relevant ideas should be considered in the CIP.

Apollo Bay Harbour Master Plan, 2014

In 2014, Council prepared a new Apollo Bay Harbour Master Plan based on an earlier plan from the 2008 Enquiry by Design community engagement process. In response to community feedback, the key change from the EBD plan was the removal of a hotel and health and well-being centre.

Key features of the revised Apollo Bay Harbour Master Plan included:

- An upgraded entry road to improve safety
- Improved road treatments, pedestrian and cycle paths
- An expanded Fishermen's Co-Op building
- Small harbour-side commercial and community buildings, and board-walk



- A recreational marina on the eastern breakwater
- Upgraded boat ramp and trailer parking
- A relocated port operations yard
- New sailing club
- Aboriginal cultural centre
- A floating commercial site
- An extended eastern breakwater
- A formalised car park at Mother's Beach

The Master Plan was not adopted, however a planning scheme amendment was introduced which required the preparation of a Development Plan that reflects the preferred land uses and developments expressed in the plan. In particular, the planning scheme amendment ensured that use of land at the harbour for accommodation would be prohibited, unless another planning scheme amendment was carried out.

The Apollo Bay Harbour Precinct is a G21 Priority Project. The CIP will need to consider preferred land uses and development expressed in the master plan and the requirements of the planning scheme.

Apollo Bay Destination Action Plan 2018-2020, 2018





• Advocate for the dredging of the whole of the Apollo Bay Harbour to its maximum working depth, so as to both maintain it as a working fishing harbour and major visitor attraction;

- Achieve a workable, sustainable and funded solution to the issue of bus parking, visitor toilets, streetscape, other amenities and associated traffic management/flow;
- The development of walking and riding trails, particularly the proposed Wild Dog to Skenes Creek Discovery Trail as well as re-opening Marriners Falls to the public; and
- Cement the iconic cultural events such as Seafood Festival and WinterWild into the annual calendar.

The CIP will need to consider how these goals can be delivered or what the impacts might be on the future use and development within Apollo Bay.

Apollo Bay Settlement Boundary & Urban Design Review, 2012

Apollo Bay Settlement Boundary & Urban Design Review provided the opportunity to identify urban design initiatives to improve the quality of existing streetscapes and pedestrian links, and to better integrate infill development and new residential growth areas with the existing Town Centre.

The report identifies three initiatives for the Town Centre and its immediate surrounds, including:

- Improvements to existing car parking areas to the rear of the shops along the Great Ocean Road
- Enhancement of mid-block pedestrian laneway connections
- Improvements to Pascoe Street streetscape treatments
- The proposed actions for these urban design initiatives regarding Apollo Bay Town Centre are:
 - Consolidate, formalise and improve rear car parking areas located to the rear of the main shops.
 - Enhance the appearance of existing through-block pedestrian laneway connections.
 - Provide new mid-block laneway connections between the Great Ocean Road and Pascoe Street.
 - Provide improved signage and wayfinding in the town centre.

- Improve the pedestrian and visual amenity, and function of the Pascoe Street streetscape.
- Amend DDO5 to include reference to the Urban Design Initiatives

These actions should be considered by the CIP.

Apollo Bay Coastal Valley and Hills Precinct Development Principles, 2003

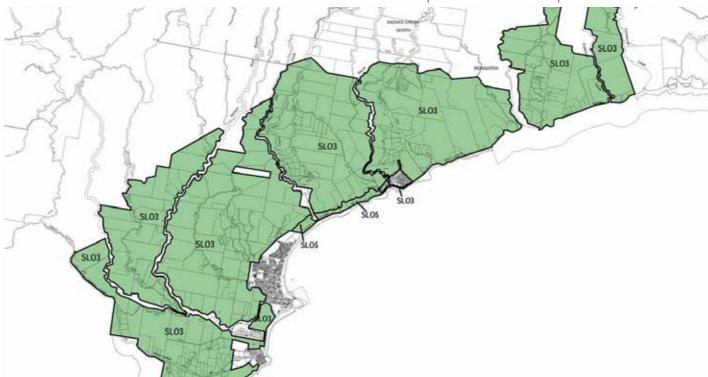
An Incorporated Document in the Colac Otway Planning Scheme, this paper was developed as part of the Great Ocean Road Region Landscape Assessment Study in 2003.

The paper summarises the key landscape characteristics of Apollo Bay Valley and Hills precinct, and lists a number of landscape objectives aiming at retaining and protecting those characteristics. The objectives are:

- To increase the use of indigenous vegetation to highlight natural features within the precinct.
- To retain the contrasts between landscape elements within the precinct.

- To ensure that development that occurs on hill faces or in other prominent locations is not highly visible.
- To minimise the visual impact of signage and other infrastructure, particularly in coastal areas, hill faces and ridges.
- To protect the clear, sweeping views to the ocean available from the precinct.
- To retain the dominance of an indigenous natural landscape in coastal areas, between townships, particularly from the Great Ocean Road.

Precinct development principles from this paper should be taken into consideration when developing the CIP, as it provides design responses to minimise visual impacts on the landscape.



Creative Colac Otway, Arts and Culture Strategy 2018-2022

This strategy aims to guide the future provision of arts and culture within Colac Otway Shire, increase the levels of participation in arts and cultural activities and provide Council with direction for the type and level of support given to arts and culture activities.

Arts and cultural services and activities provide direct and indirect benefits to local communities and economies through their impact on the social, cultural, environmental and economic sectors. The broader creative sector plays an essential role in creating resilient and growing local economies.

Arts and culture contribute to:

- Enhancing the "liveability" of a region to attract and retain people to work, live and invest;
 - Developing a sense of place and social connection for residents;
 - New experiences that resonate in their interpretations of local history and stories.
- This strategy sets out a number of goals, strategies and recommended actions.

2.6 Current / Planned Projects

2.6.1 State Government Projects

Apollo Bay Coastal Protection Study

Parts of the foreshore are subject to on-going attack from coastal erosion. In places this erosion is threatening the Great Ocean Road and adjacent footpath networks. Recent efforts to address the impacts of erosion have involved relocating sand to affected areas. In response to the longer term issues of erosion, State Government commenced a study in October 2018 to consider infrastructure options to protect the foreshore from future erosion. The first output of this study was the Apollo Bay - Coastal Protection Study, 2018. These findings as well as subsequent proposals will be integrated into the CIP, as appropriate.

Coastal and Marine Management Plan

The Coastal and Marine Management Plan (CMMP) provides the strategic direction for the management of coastal Crown Land managed by the Otway Coast Committee (Otway Coast). The CMMP is a requirement of the Marine and Coastal Act 2018 and in addition to land managed by Otway Coast it considers matters on coastal that impact on the marine environment and those that cross different land management arrangements. The CMMP identifies the values of the coast and clarifies the issues and opportunities for management. Management will be guided by a strategic framework including the vision, goals and interim management outcomes for the five-year planning horizon. A set of strategic actions and an initial set of precinct scale actions will form the basis of implementation.

2.6.2 Regional Roads Projects

Nelson Street Roundabout

Regional Roads Victoria are currently working through a proposal to install a roundabout at the intersection of the Great Ocean Road and Nelson Street, Apollo Bay. RRV have advised that a roundabout is its preferred option as this was considered to provide a range of benefits including:

- paths would be provided to the relocated war memorial and the proposal had the support of the local RSL:
- increased parking adjacent to Moontide and the church;
- allowing buses to turn around on the Great Ocean Road;
- addressing safety issues such as confusion at the intersection and pedestrian safety.

This project is on hold pending the outcomes of the CIP project.

2.6.3 Otway Coast Committee Projects

Coastal Foreshore Plans

The Otway Coast Committee has for several years had the intention of preparing a Central Foreshore Master Plan for the area between the harbour and the service station. The plan would establish future priorities for use and development of the precinct. The OCC have provided funding for this plan to be prepared as part of the CIP. This will ensure that there is a well-integrated approach to development of the foreshore, community engagement is well focussed, and that issues such as car parking can be dealt with in a co-ordinated way. Master plans developed as part of the CIP for the Central Foreshore, as well as the foreshore areas at Marengo and Skenes Creek, will feed into future Coastal and Marine Management Plans for these areas.



2.6.4Council Projects

Apollo Bay Harbour Precinct Redevelopment

Two projects are currently being undertaken by Colac Otway Shire in relation to Apollo Bay Harbour and Port.

Firstly, Council are seeking funding for the repair of critical marine safety infrastructure at the harbour. Secondly, a draft Development Plan, business case and expression of interest is being prepared to guide future development and private investment at the harbour.

The purpose to the Development Plan is to ensure that the redevelopment of the harbour is wellcoordinated and that development outcomes reflect the strategic goals of the area.

The CIP will look to progress the Development Plan based on the Special Use Zone (SUZ2) requirements and past technical/planning work that has been undertaken. In particular, the SUZ2:

Prohibits accommodation as a use.

Requires that development supports the ongoing operations and viability of the Harbour's port operations (including commercial fishing and the Fishermen's Cooperative).

Requires that built form reinforces the established landscape character and does not intrude upon the Harbour's southern skyline.

Allows for up to 200m2 of food / drink premises without a permit. This can be exceeded with a permit.

Provides for the ongoing operation of the Apollo Bay Golf Course.

In addition, the SUZ2 encourages a mix of private and public investment to facilitate regional tourism, to provide social and recreational opportunities for the community and to create better links with the town centre.

The CIP will also consider integrating the precinct's development with improvements to crown land and public streets around it. The Business Case and Expression of Interest process will be part of a separate planning process following the completion of the CIP.

Pascoe Street Toilet

Council are currently working on developing a concept plan for a temporary toilet within the Apollo Bay Town Centre. The toilet is proposed to be located within Council owned car parking, along Pascoe Street and near the Bendigo Bank. While details of the toilet are to be resolved, the proposal will attempt to minimise the loss of car parks and will include a ramp to allow for all abilities access. The toilet will become permanent once funding becomes available. For the purposes of the CIP, the location of the toilet is assumed to be locked in.

Colac Otway Shire Public Toilet Strategy

Council is currently seeking suitably qualified consultants to undertake a Shire-wide Public Toilet Strategy. This Strategy will provide input into the Community Infrastructure Plan as further recommendations are developed.

Port of Apollo Bay Boat Trailer Park Upgrade

Council are currently undertaking upgrades to the Port of Apollo Bay's boat trailer parking area. The works include drainage works and resealing of the parking area. The project was partly funded through the State Boating Safety and Facilities Program.

È





3.1 Overview

This section identifies existing and future issues and opportunities for Apollo Bay, Skenes Creek and Marengo.

3.2 Community Infrastructure Assessment

3.2.1 Overview

Apollo Bay, Marengo and Skenes Creek provide a small number of existing community facilities commensurate with the permanent population numbers for each town. Apollo Bay as the largest town of the three acts as a centre for services with both Marengo and Skenes Creek offering limited permanent community infrastructure. Residents of Skenes Creek and Marengo rely heavily on Apollo Bay to provide essential services.

A community infrastructure assessment was prepared by Tract Consultants and K2 Planning Pty Ltd as background to this report. It provides an audit of existing community facilities and identifies gaps in the future provision of infrastructure having regard to the population trends, existing facility requirements and stakeholder feedback.

Key findings from this community infrastructure assessment have been summarised and are outlined in the following sections.

3.2.2Key Social Trends Impacting **Community Infrastructure Demand**

Key social trends impacting on the demand for community infrastructure in Apollo Bay Include:

- Significant levels of vulnerability amongst children in the early years age groups.
- Relatively high numbers of young people aged 15 – 24 years who are disengaged from both employment and education.
- A significant increase anticipated in the number of older age residents living in Apollo Bay by 2041 – 372 with additional people aged 70 years comprising 10.9% of the total 2041 population.
- Significant related increases in the number of people living with a disability in the 60 - 64 years and 75 – 79 year age groups.
- High numbers of tourists using the area and impacting on public amenities such as toilets, open space and bus parking areas.
- Evidence of two distinct communities in Apollo Bay: the permanent resident community (with a high proportion of people who are: aged 70 and over; working part time; renting; living on low incomes); and tourists and visitors (including a high proportion of vacant properties owned by nonresident holiday makers).'

3.2.3 Current Community Infrastructure Provision

The community infrastructure assessment identified 34 community facilities that are currently located in Apollo Bay including:

• 2 Council owned facilities (Apollo Bay Pre-School; Apollo Bay Senior Citizens Centre)

32 Non-Council community facilities that are owned by a range of other organisations including: State Government; Great Ocean Road Health; Otway Coast Committee (OCC).

It is also noted that Colac Otway Shire Council is currently responsible for the management of 6 of these existing community facilities in Apollo Bay refer to Figures 11-16.

A range of open space infrastructure is also provided in Apollo Bay, including:

7 Council owned reserves (Heathfield Estate Reserve, Heathfield Estate Road Reserve, Anderson Creek, Milford Creek, Park Avenue Reserve, Seaview Drive Reserve 1, Seaview Drive Reserve 2)

7 Non-Council open space reserves that are owned/managed by a range of other organisations including: State Government and the Otway Coast Committee (OCC).

• 1 active open space facility (Apollo Bay Recreation Reserve) which consists of a sports oval, cricket wickets, tennis/netball courts etc. This is Crown Land managed by the Otway Coast Committee.



Figure 11. Apollo Bay - Council Owned / Managed Facilities



Figure 12. Apollo Bay - Non Council Owned / Managed Facilities



Figure 13. Skenes Creek - Council Owned / Managed Facilities



Figure 14. Skenes Creek - Non Council Owned / Managed Facilities



Figure 15. Marengo - Council Owned / Managed Facilities



Figure 16. Marengo - Non Council Owned / Managed Facilities

3.2.4 Recent Initiatives

A number of recent initiatives will contribute significantly to the available community infrastructure in Apollo Bay including:

- Planning for a new Early Years Hub located on the Apollo Bay P- 12 College site; and
- Refurbishment of the Apollo Bay Senior Citizens Centre to become a multipurpose Apollo Bay Community Centre.

3.2.5 Identified Gaps

An assessment of the current provision and use of community infrastructure in Apollo Bay identifies the following gaps:

- Early Years' Services supported playgrounds for vulnerable families.
- Mental health support services perinatal, youth, older years residents.
- Non-sporting activities and programs for young people.
- Dementia and age-friendly public space infrastructure that ensures accessibility by all groups.
- Age appropriate and disability specific accommodation.
- Medical specialist consulting services.
- Facilities that support the needs of tourists e.g. bus parking, public toilet amenities etc.

Colac Otway Shire Council has proactively responded to the need for improved early years' infrastructure in Apollo Bay through the planning of a new Early Years' Hub to be located on the Apollo Bay P-12 College site. This new hub will respond to most of the needs for early years' services identified though the community infrastructure assessment.

Infrastructure Type	Identified Need
Apollo Bay Community Centre	 Evidence of need for expanded or additional comprograms including: Healthy and active classes specifically for old residents Non sporting programs such as drama for your of the support services: perinatal, you years residents
Community Halls	Improvements to existing facilities i.e. Mechanic Designated Conference facility in Apollo Bay
Arts and Culture Facilities	A designated Arts Space that can act as an arts i support arts and culture events in Apollo Bay
Open Space	Open space improvements that respond to the f older residents and people living with a disability
Sporting Reserves	Investigate an alternative site for the future relo Apollo Bay Recreation Reserve
Community Infrastructure Precinct	Endorse the proposed development of a Precinc Pengilley Avenue area that currently accommod town's community infrastructure including: the facility; Apollo Bay P-12 College; Regional Libra Centre.
Other Community Infrastructure Related Improvements	
Tourism related Infrastructure	Designated bus parking area

Tract

mmunity

older years

oung people outh and older

ics Institute Hall

incubator and

e future needs of

ocation of the

ct Plan for the dates most of the Otway Health ary; and Leisure

3.3 Service Infrastructure

3.3.1 Overview

A study focusing on existing services and related infrastructure attributed to sewage and drainage was undertaken by LD Eng. This section provides a summary of the key findings from this report.

3.3.2 Utility Services

Stormwater and Drainage

Several drainage and development studies have been undertaken within the Apollo Bay, Skenes Creek and Marengo. In particular, the Engineering Drainage and Apportionment Analysis Report prepared by ARUP. This report highlighted problematic (localised) flooding within the Apollo Bay township, due in part to undersized drains that do not have the capacity to convey design storm flows being generated. Specific, drainage problems identified included:

- Intersection of Thomson St and Great Ocean Rd
- Between Murray St and Thomson St
- Between Cawood St and Murray St
- Intersection of McLachlan St and Thomson St

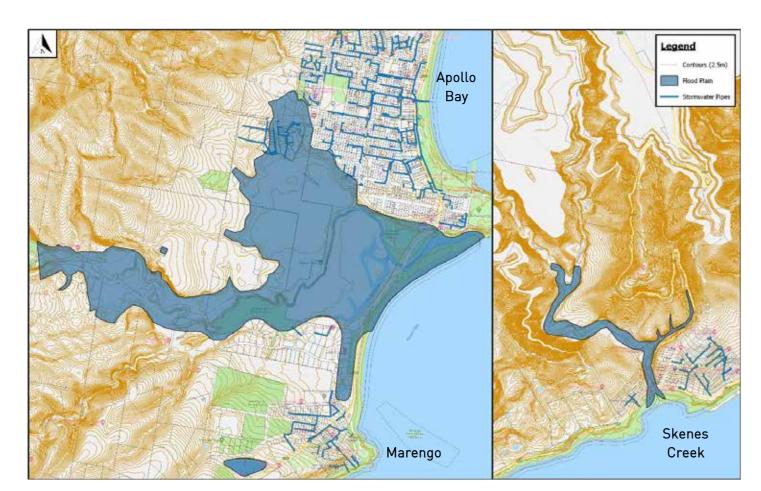


Figure 17. Current Drainage Upgrades, Background Services Infrastructure Report, 2019, LDeng

Several mitigation measures were recommended within the ARUP report, including the provision of an additional outlet south of Thomson St in conjunction with diversion pipes running north and south of McLachlan St from Pengilley Ave. Upgrades at Thompson Road are currently being undertaken.

The ARUP report noted that with future growth/ development of Apollo Bay, onsite retarding basins should be mandated as a pre-development condition for new developments. This option would help ease the burden of the existing network, that is already having to undergo significant main drain upsizing in order to safely convey design storm events in residential and commercial areas.

Flood mapping information of major waterways within the area (Barham River and Skenes Creek) was sourced from the Corangamite Catchment Management Authority (CCMA). The flood extents (shaded blue) shows that the contributing flood flows do not impact on the Apollo Bay township. As noted previously, township drainage issues are generally caused by localised flooding.





Stormwater quality management could be improved within all three townships, through periodic maintenance of existing GPTs.

A wetland in Marengo provides treatment for runoff from the town, however due to a lack of maintenance, the asset is degraded from both visual and performance perspectives. In order to restore the wetland back to its intended function, a reset of the entire system will be required, as well as ongoing maintenance. However, alternative treatment options might also be considered subject to further investigation.

Outfalls located at Skenes Creek appear to discharge directly into ocean. This is normally not recommended, however as the catchment is established and primarily low-density treatment may not be required. There are opportunities to undertake remediation works on the existing drainage network, which would greatly increase the reduction of polluted stormwater being discharged directly into Bass Strait, however further investigation would be required to determine an appropriate solution.

Additional catchments within Apollo Bay discharge directly into waterways. These catchments appear to be a combination of industrial and new residential development. There is the opportunity to consider water quality treatment assets e.g. GPTs, bioretention basins/swales etc. in these areas so that the existing creeks do not become polluted.



Figure 19. Existing Water Infrastructure, Background Services Infrastructure Report, 2019, LDeng

Drinking Water Supply

Barwon Water is the responsible Authority for provision of potable water within the area. Potable water ring mains circle the towns with ample access for any future connections in public areas. The recent construction of an additional reservoir provides added water supply security to the townships, allowing for future expansion.

Sewerage

Barwon Water is the responsible authority charged with the planning and maintenance of the sewage system for the study area.

All three towns capture the sewage from their respective towns to pump station/s, which is then pumped to the Apollo Bay Treatment Plant located on Piggery Lane, Apollo Bay.

3.3.3 Public Toilets

Within the three towns, there are a number of public toilets. These are mapped below and include:

- Apollo Bay Harbour Precinct Within the Harbour Precinct there are three public toilets. These are temporary facilities but are considered in good condition.
- Apollo Bay Golf Course A small toilet block is located within the car park area. The facilities here are considered quite small and the amenities themselves, in poor condition.



Apollo Bay

Marengo



Figure 21. Existing Public Toilets, Background Services Infrastructure Report, 2019, LDeng

Legend

Skenes

Creek

Existing Sewer Infras

• Apollo Bay Foreshore - The major public toilet block with the Apollo Bay foreshore is located near the playground, part way between Moore St and McLaren Pde. It contains several toilets, however is not considered adequate to sustain servicing the ever-increasing number of tourists. Additionally, due to a design flaw this toilet is frequently blocked.

- Apollo Bay Information Centre Located opposite Hardy St are two (2) toilet blocks. These are considered adequate to supply tourism activity along the foreshore and for beachgoers.
- Skenes Creek Toilet Includes an existing toilet block and pump station facilities building that is owned by Barwon Water. This is the only toilet available to the public within Skenes Creek.

Public toilets are currently not provided at Marengo. A previous toilet block was removed, due to the threat of coastal erosion, however Council have indicated that this toilet block was well used and should be replaced in a nearby location.

Projected tourism numbers are likely to place additional strain on their availability. This, as well as upgrades to address operational issues, should be considered by the CIP.

Planned Public Toilets

The provision of a temporary public toilet is planned within an off street car park along Pascoe Street.

Providing a well-placed public toilet with adequate facilities is intended to encourage tour operators to park in this location and reduce the impact on other public toilets.

The toilets were recommended as part of the COS Tourism Parking and Traffic Strategy Report and are intended to service bus drivers and visitors, as well as reduce demand on foreshore infrastructure. These toilet will be made permanent if funding becomes available. Additionally, Council are developing a public toilet strategy, which will provide further recommendations for public toilet amenities within the study area.



Figure 22. Pascoe Street Public Toilets Proposal, Apollo Bay, Background Services Infrastructure Report, 2019, LDeng

3.4 Tourism

Tourism is a key economic driver for the region. Visitation is driven by a range of offerings including the Great Ocean Road; one of Australia's iconic attractions; heritage, nature-based tourism activities, food and beverage, recreational fishing, cultural events and experiences, regional and local business, and the variety of attractions Apollo Bay and the region has to offer. The nature of visitation within Apollo Bay is however changing and this is having a major impact overall on the Great Ocean Road and Shipwreck Coast region. This shift from domestic and longer stay visitation to international and day visitations is placing stress on existing infrastructure and contributing to the perception of a divide in the community (between visitors and residents).

Apollo Bay already functions as a tourism and leisure destination, as well as a regional service centre for a broader region. Well positioned at the half way point between Melbourne and the 12 Apostles, it provides a stopover point for visitors travelling along the Great Ocean Road. Investment in the Harbour, foreshore and along the Great Ocean Road, are likely to increase its popularity and result in further visitation to the area.

The town has the potential to position itself as a regional visitor destination and capitalise on the visitor economy as a key economic driver. In order to do this, future visitation and investment within Apollo Bay and the wider region must be planned for to ensure infrastructure can meet anticipated demand and expectations (including bus parking, toilet provision, traffic flows, streetscape amenity and pedestrian access) and that this is balanced with environmental protection needs.



Key destinations for visitors within Apollo Bay are generally focused along GOR and the foreshore areas between Thomson and Nelson Street. Establishing a network of key destinations for visitors throughout Apollo Bay, Skenes Creek and Marengo that can offer both specialist functions and a range of other leisure functions and scenic attractions (day and night) is desirable. Spreading visitors across a wider range of settings could also help to minimise impacts and provide a richer visitor experience. Other key destinations identified through consultation included Marriners Lookout and Paradise Picnic Reserve, however these will need further investigation.

The Great Ocean Road provides the key connection point to the town and region for people arriving by car, foot, bicycle or public transport. The presence of the Visitor Information Centre along the Great Ocean Road and within the foreshore forms part of the arrival experience for many car-based visitors. As a first point of contact for welcoming visitors, the Information Centre plays a critical role in defining the visitor experience.

A key challenge for the CIP will be maintaining the authenticity and low-key nature of the town, while providing for tourism growth. Locals and visitors appear to be resistant to over-scaled and inappropriate development that disconnects Apollo Bay from its history or its landscape. Additionally, fluctuating populations mean that there is a need to create adaptable foreshore settings that can be used in low use and high use mode without losing the overall character of the towns.

The CIP should build on the physical assets and qualities of Apollo Bay and its surroundings and capitalises on opportunities to improve public space amenity and services for residents and visitors alike. A number of these opportunities were identified in the Apollo Bay Destinations Action Plan. Key opportunities identified by the Action Plan and through consultation include:

- Enhanced digital connectivity to boost both visitor experience and emergency services needs.
- Investigating user pays opportunities to generate funding for ongoing upgrades and maintenance of key facilities.
- Better manage congestion during peak times (with increased numbers of tourist buses and vehicles).
- Providing improved public transport options including more local buses.
- Considering management of visitation, particularly congestion at key sites, and the need to limit visitor numbers to ensure an enjoyable experience.
- Enhancing the provision of tourism infrastructure - including sheltered rest stops, viewing points and parking facilities, as well as their ongoing maintenance.
- Enhancing the visitor experience through the interpretation of Aboriginal culture, history and heritage.
- Attract visitors during off peaks through events etc.
- Proving a range of short and long loop trails that cater for both visitors and residents that take in varied and spectacular sites of the region.

Facilities to support these tourism opportunities could include:

- Outdoor events space and public art;
- Pedestrian and cycling links to key destinations and strategic assets such as open spaces and the retail centre;
- Way-finding and interpretation signage;
- Sufficient car and bus parking, including long vehicle/RV parking.
- Public spaces including comfortable and sheltered spaces to sit and relax and recover;
- Public toilets, including parents' room and Changing Places facilities;
- Visitor services including booking facilities bike hire, transportation services and a hub for tours;
- Transport services at convenient hours and frequency (coordinated with the timetable of services, hours of operation etc);
- Digital services including wifi / internet access.

3.4.1 Recreational Trail Opportunities

Several studies have identified opportunities for loop trails that would provide for a diversity of experiences and strengthen the current visitor offer to Apollo Bay, Skenes Creek and Marengo. These trails are outlined on the following pages and include:

Trail 1 - Foreshore Trail

There is the opportunity to provide for a continuous foreshore experience connecting Skenes Creek with the Great Ocean Walk at Marengo along a 10km long trail. There are a number of missing links along this trail. These include:

- Section 1a Skenes Creek to Wild Dog Creek Coast Discovery Trail. This is currently being planned with committed funding.
- Section 1b Connecting the Harbour to the town centre of Apollo Bay. It would need to extend through / next to dune systems to provide a scenic connection. Connections along the street network are not considered to provide an enjoyable and scenic coastal experience, as provided elsewhere along the trail.
- Section 1c This section connects Marengo beach to the Great Ocean Road Walk. It could be provided by a scenic board walk with views across to the Marine Reefs Sanctuary.

Trail 2 - Les Noseda Highview Walk

An 11.8km loop trail utilising an unused Government Road along a ridge line and providing spectacular views across Apollo Bay and the Barham River Valley. This trail was identified in the Apollo Bay Trails Feasibility Study, 2012.

Trail 3 - Wild Dog Trail

An 16.5km trail already used by bushwalkers providing a range of landscape experiences and views of forested ridges and river valleys behind Apollo Bay. This trail was identified in the Apollo Bay Trails Feasibility Study, 2012.

Trail 4 - Wild Dog Falls Trail

A 3.5 km trail traversing through wet forest and along Wild Dog River and terminating at the Wild Dog Falls. This trail was identified in the Apollo Bay Trails Feasibility Study, 2012.

Trail 5 - Wild Dog Loop Trail

A 10.1 km loop trail starting at Skenes Creek-Forest Road through wet forest integrating the Wild Dog Falls. This trail was identified in the Apollo Bay Trails Feasibility Study, 2012.

Trail 6 - Old Coach Road Loop Trail

A 6.0km loop trail provide for a range of forest and coastal viewing experiences providing spectacular views across to Apollo Bay and the Harbour. This trail was identified through community engagement.

These trails would create significant recreational opportunity for both visitors and residents alike.

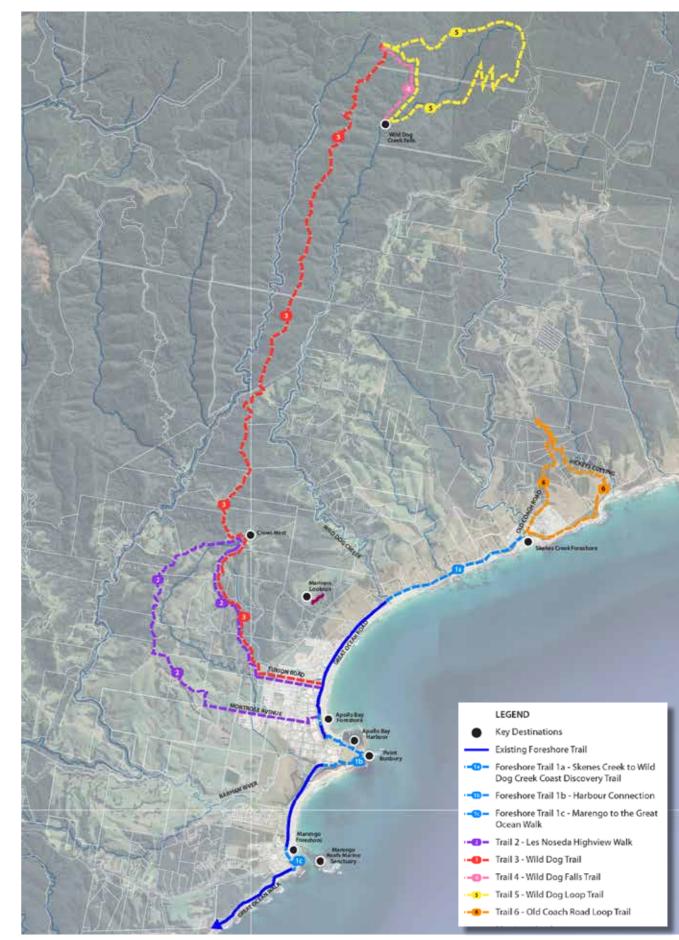


Figure 23. Recreational Trails

The Apollo Bay Trails Feasibility 2012 also explored a number of a other trails. However these were considered unfeasible for a range of reasons. These trails included:

- Barham River Shared Trail Provided an inland connection between Apollo Bay and Marengo, along the Barham River. This was considered unfeasible due to private land ownership along the river (and the cost of acquisition).
- Mariners Falls Link Trail Parks Victoria are unlikely to support he reopening of Mariners Fall due to safety concerns. There are erosion issues along this trail.
- Apollo Bay to Marengo Loop This was considered unfeasible due to private land ownership along the river (and the cost of acquisition), significant costs associated with a proposed pedestrian bridge and the need to traverse the Airfield.

Additionally, DELWP are undertaking a study to assess the value, benefits and options for a coastal walking and/or cycling trail between Fairhaven and Skenes Creek. This study is in its preliminary stages and is likely to require further environmental and technical investigations. That being said, this could eventually provide a network of coastal walks from Torquay to Apollo Bay.

3.5 Climate Change and Erosion

A study focusing on the impact of erosion and climate change has been undertaken by Water Technology. Its findings are reflected in section 4 of this report.

Victoria's climate is changing. It is becoming warmer and drier, the average rainfall has declined and there are more frequent and extreme storms. Furthermore, the oceans are warming, wind and wave patterns have changed, and sea levels are rising.

For Apollo Bay, Skenes Creek and Marengo this has resulted in erosion which in recent years has accelerated and is now threatening sections of the Great Ocean Road, existing infrastructure including sections of footpaths, local beaches and coastal vegetation. If this erosion continues, there are concerns that ultimately the Great Ocean Road might have to be moved inland, that infrastructure will be destroyed and that the appeal and amenity of the region will be diminished.

Work by various authorities has been undertaken recently to help mitigate some of the impacts of this coastal erosion. This includes:

- Temporary fencing and path re-establishment work between Cawood Street and Mariners Look Out Road. This is only a temporary measure.
- Rock revetment constructed on high risk areas at the entry into Apollo Bay. There are plans to extend this revetment to the stormwater drain outflow.
- Sand re-nourishment at varied locations.

In addition, DELWP are currently working with the Otway Coast Committee (OCC), Colac Otway Shire (COS), Regional Roads Victoria (RRV) and the local community to identify locations and short and long term options for protecting the coastline along Apollo Bay and Marengo. The emerging proposal is to incrementally provide a combination of rock revetment and groynes along the foreshore. Further input is being sought in regard to this proposal, specifically the type, style, length, frequency and materials for protection.

While the treatment of coastal erosion is outside the scope of the study, mitigation treatments result in their own range of visual and environmental effects. This will need to be considered by the CIP. Additionally, all new structures and works proposed in foreshore areas, as part of the CIP, will need to respond to potential sea level rise and acknowledge future erosion potential.



4 TOWNSHIP ISSUES AND OPPORTUNITIES

4.1 Apollo Bay

4.1.1 Overvirew

Apollo Bay is the largest settlement amongst the three townships and is situated between Skenes Creek and Marengo along the Great Ocean Road. Apollo Bay has traditionally provided a range of retail, employment, community facilities and events for its residents and visitors and those in the surrounding settlements such as Marengo and Skenes Creek.

Apollo Bay includes an extensive foreshore area, the harbour, a retail and commercial core, industrial area, a school and a number of community facilities (generally clustered in the vicinity of Pengiley Avenue), a recreation reserve and two caravan parks.

The following provides a summary of analysis, challenges and opportunities for Apollo Bay.



Figure 24. Apollo Bay Aerial

4.1.2 Previous Strategy Recommendations

Previous documents reviewed provide several recommendations for improving public spaces and community infrastructure within Apollo Bay. Some of these are listed below:

- Investigate the provision of a shuttle bus between Skenes Creek, Apollo Bay and Marengo during peak periods.
- Improve the utilisation of the off-street car park on Pascoe Street.
- Re-route buses to travel along on Pascoe Street rather than Collingwood Street.
- Provide public toilets near bus parking.
- Provide improved pedestrian crossing infrastructure along Pascoe Street.
- Improved bicycle parking provision.
- Improved pedestrian access between the Information Centre, bus stop and foreshore car park
- Provide additional pedestrian crossing infrastructure on Collingwood Street in appropriate locations.
- Investigate opportunities to reduce footpath obstructions in the retail precinct.
- Pedestrianise Collingwood Street.
- Improved traffic management in surf club foreshore carpark.
- Provide long vehicle / bus parking along Pascoe Street. Town entry treatments and 40km/h speed limit through township.
- Re-route the Great Ocean Road via Thomson Street, Pascoe Street and Nelson Street.

- Trial the full pedestrianisation of Collingwood Street through tactical urbanism exercises.
- Explore developing a walking track on the coastal perimeter of the Golf Course.
- Ensure that the Foreshore Reserve is used primarily for coastal recreation related uses and any commercial uses of this area only be considered if they are dependent on a coastal location.
- Explore opportunities for new buildings and structures within the foreshore are designed and sited more appropriately to replace the existing structures that are highly visible and detract from the naturalness of the setting.
- Plant additional indigenous vegetation within the foreshore to provide shade to help screen prominent structures and would add to the naturalness of the reserve.
- Improve walking and cycling routes by providing a more consistent and coordinated pedestrian connections along the foreshore to link the harbour in the south to the town centre.
- Continue to investigate alternative sites (e.g. Heathfield Estate Reserve) for the relocation of the pony club and ensure the continued availability of this foreshore land for public open space purposes.



Enhance surfers' needs by improving beach and parking access at Mothers Beach and Barham Beach.

Ensure that if new camping areas are proposed on foreshore land, then they are only located in areas that have been significantly altered by former land uses and are designed for use only in peak seasons.

4.1.3 Land Use and Infrastructure Town Centre

Apollo Bay Town Centre comprises a range of retail and commercial uses which reflect its roles as a regional service centre for several smaller surrounding settlements. Tourism and the visitor economy is an important aspect of Apollo Bay. As such there are also a significant number of food and beverage outlets and other retail activities focused towards visitors in the town centre.

The town centre has a relaxed coastal character influenced by the predominately low scale (1-2 storey) buildings and generous streetscape. 3 storey buildings within the town are limited however there are a few along the main street that allow for elevated views of the water that lies beyond the dunes along the foreshore.

In recent times, there has been little enhancement and revitalisation of key streetscapes around Apollo Bay, while there has been an ad-hoc approach to the implementation of street and furniture and materials used within the town. There is an opportunity to develop a comprehensive streetscape improvement plan that also considers traffic and pedestrian improvements.

Central Foreshore Reserve

Central Foreshore Reserve lies between Collingwood Street and the ocean and is managed by the Otway Coast Committee. It includes a series of public spaces, facilities and car parking areas. The foreshore has unfortunately been planned in an ad-hoc way and this has resulted in discontinuous paths, scattered uses and an eclectic mix of landscaping and furniture.

The Information Centre is located along the northern entry into Apollo Bay. The building is relatively discrete. Given the Information Centre generally provides for those visiting and unfamiliar with Apollo Bay, there is the opportunity to enhance its prominence along the Great Ocean Road.







The Surf Life Saving Club is located prominently in the centre of the Foreshore Reserve and sits opposite a key beach access point. It was established in 1952 and provides an important public safety and community service for the town. The current building and facilities are however considered run down, inadequate and in several areas are noncompliant. Additionally, the building, while screened with vegetation along the Great Ocean Road, is highly visible and is a barrier to visual and physical connections along the foreshore.

The Surf Life Saving Club have proposed a concept plan for providing new and improved facilities. This includes a new building in a similar location with an integrated public toilet, and improvements to beach access and car parking.

The proposal will be considered separately to the CIP.

A large open grassed area is located in the centre of the Foreshore Reserve, which allows for events. It it currently underutilised and could offer more for the community and visitors given its central location.

The playground is a well-used by both residents and visitors. While relatively new, there is the potential to provide a more substantial facility that reflects the regional significance of this space for a variety of people. There is also the potential to consider the location of the playground within the broader Foreshore Reserve.

Generally, toilets are an issue along the entire foreshore. In Apollo Bay toilets are under pressure, particularly during peak seasons due to high tourist visitation volume. The major public toilet within the foreshore is located near the playground, and it does not have the relevant capacity to service the masses during peak times.

Public toilets are generally limited in the foreshore reserve and town centre. There are opportunities to provide additional / new toilets and improve existing facilities. A new temporary toilet is being planned along Pascoe Street in a publicly owned car park, adjacent to the Bendigo Bank. This location was recommended as many buses park within the parking lot and there is space available.

Within the Foreshore Reserve, there is an eclectic variety of furniture items including seating, picnic tables, shelters, bbq's materials, planting and public art etc. This inconsistency in the furniture and materials palette reflects the adhoc development of the foreshore over time. Additionally, it represents the difficulties of unclear jurisdictional boundaries and maintenance along the Foreshore Reserve.

The adhoc approach to planning and siting of infrastructure has limited the ability of the foreshore to become a regionally significant visitor destination. There is a need to provide a clear framework for future development and the siting and design of facilities and infrastructure.

Besides the Foreshore Reserve, Apollo Bay has limited open space area for the community, particularly within the residential areas. Access to open space, other than the foreshore, will increasingly become important as tourism and visitor numbers increase in Apollo Bay. Strategies to enhance and increase open space in both existing and new residential areas are outlined in the Colac Open Space Strategy. These opportunities should be considered in the CIP.

4.1.4 Heritage

The Great Ocean Road was constructed by returned serviceman as a memorial to the First World War serviceman. It stands as a memorial to the war service and sacrifice and was considered an enormous undertaking during the time of construction. The importance and heritage of this road should be respected and celebrated.

A heritage overlay applies to the Great Ocean Road, as well as several buildings and assets. Some of these include the Visitor Information Centre, Apollo Bay Hotel, Pioneer Memorial, Speculate Anchor and the War Memorial. Where appropriate, these should be integrated into the future development of the town and celebrated to provide greater awareness of their historic importance.









1 Opportunity to reconfigure carpark to improve efficiency.

2 Opportunity for streetscape upgrade.

3 Large open space for events should ideally be adaptable for a range of uses, including special events.

4 Opportunity to enhance Visitor Information Centre's prominence and its visibility.

5 Surf Life Saving Club has proposed a concept plan for providing new and improved facilities.

6 Potential to investigate the possibility to provide a stage/platform within this space.

7 Potential for toilet to be replaced with a larger facility with a gravity sewer outlet.

8 Planned new temporary toilet

9 Opportunities to include exercise equipment, nature play, improved maintenance and additional car parking.

10 Integrate heritage assets into the future development of the town to provide greater awareness of their historic importance

1 Opportunity to improve the public toilet and car park at the Golf Club clubhouse

	Public Use	٢	Childcare
	Commercial & Retails	Θ	Education
	Heritage	0	Health & Community
)	Carpark	۲	Community Hall
•	Toilet	0	Arts and Culture
	Bus Stop	0	Open Space
•	Aged and Disability	0	Recreation Space
		0	Emergency

4.1.5 Landform and Views

The relationship between the hills, the town centre and foreshore are an important feature for Apollo Bay. Visual definition of the township is important.

Views to the water from the town and Foreshore Reserve are limited by the dunes and vegetation located along the coast. Discrete views can be obtained from Thomson St, Hardy St and Moore Street or from elevated areas such as Point Bunbury and Marriners Lookout. As such, Apollo Bay has a different relationship to the sea than other coastal towns which are visually connected to the water. There may be opportunities to provide stronger visual connections to the water from within the foreshore reserve.

The Barham River floodplain provides a landscape and visual break between Apollo Bay and Marengo and is defined by agricultural and pastoral landscapes.

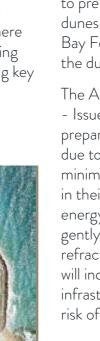
The Apollo Bay Recreation Reserve, camping area and pony club are also located in a flood prone area along the edge of the Barham River. The potential to relocate the pony club has previously been flagged along with the potential relocation of the sports oval, which has also been identified to improve their usability throughout the year. The relocation of the sports oval could also potentially allow for the expansion of the adjacent camping areas.

Much of the coastal environmental systems along the foreshore have been altered over time through natural processes such as erosion and sand displacement or human intervention. Historical photos clearly demonstrate these changes and that much of the foreshore dunes help to stabilise them. Where appropriate, this vegetation should be retained and rehabilitated, to enhance the environmental qualities and landscape character of the foreshore. Additionally, environmental rehabilitation should be integrated into all new works.

4.1.6 Vegetation

Vegetation is a key historic and visual feature of Apollo Bay. Along the Great Ocean Road, a row of mature Monterey Cypress trees define the northern entry into town, while within the Foreshore Reserve scattered Norfolk Pines stand prominent. The Cypress trees are aging and need to be replaced. Over the years, many of the original Norfolk Pines within the foreshore have been removed and while once a key characteristic of the town, they are not so much anymore. While there is the opportunity to reinforce the historical and visual amenity of these trees, there is also the opportunity to consider the provision of indigenous tree planting.

Generally, tree planting along streets within Apollo Bay is limited. Street tree planting can provide a range of benefits such as improved wayfinding, shade protection, reduced impacts of urban heat island effect and habitats for fauna and bird species. There are opportunities to provide additional tree planting within the streets of Apollo Bay, particularly along key pedestrian and cycle paths.





-oothills as scenic backdrop



4.1

Coastal erosion is clear in Apollo Bay. Great Ocean Road and sections of the adjacent footpath are at risk of coastal erosion and sea level change. Erosion is present adjacent to the beach access track, and stormwater discharge. Boulders have been placed on the beach, although these are haphazard and would require additional works to provide enough erosion protection. At present these rocks could potentially be exacerbating the erosion.

The coastline at Thomson Street, whilst quite flat and low-lying, is above the inundation extents. This location is suitable for coastal infrastructure from an inundation perspective.

The foredune at Apollo Bay is scoured at its toe along most of its length. This scouring should be monitored to pre-empt any loss of protection afforded by the dunes. Vulnerability of development within the Apollo Bay Foreshore Reserve would increase significantly if the dunes were compromised.

4.1.7 Erosion

The Apollo Bay, Skenes Creek & Marengo CIP - Issues and Opportunities Paper: Coastal study prepared by Water Technology noted that inundation due to storm tides at Apollo Bay is expected to be minimal, with dunes providing enough protection in their current form. This is due to the lower wave energy in lee of the Harbour breakwaters and gently sloping nearshore bathymetry that dissipates refracted wave energy. Although the risk of inundation will increase with further dune retreat, the present infrastructure and land use results is not at significant risk of inundation or erosion.

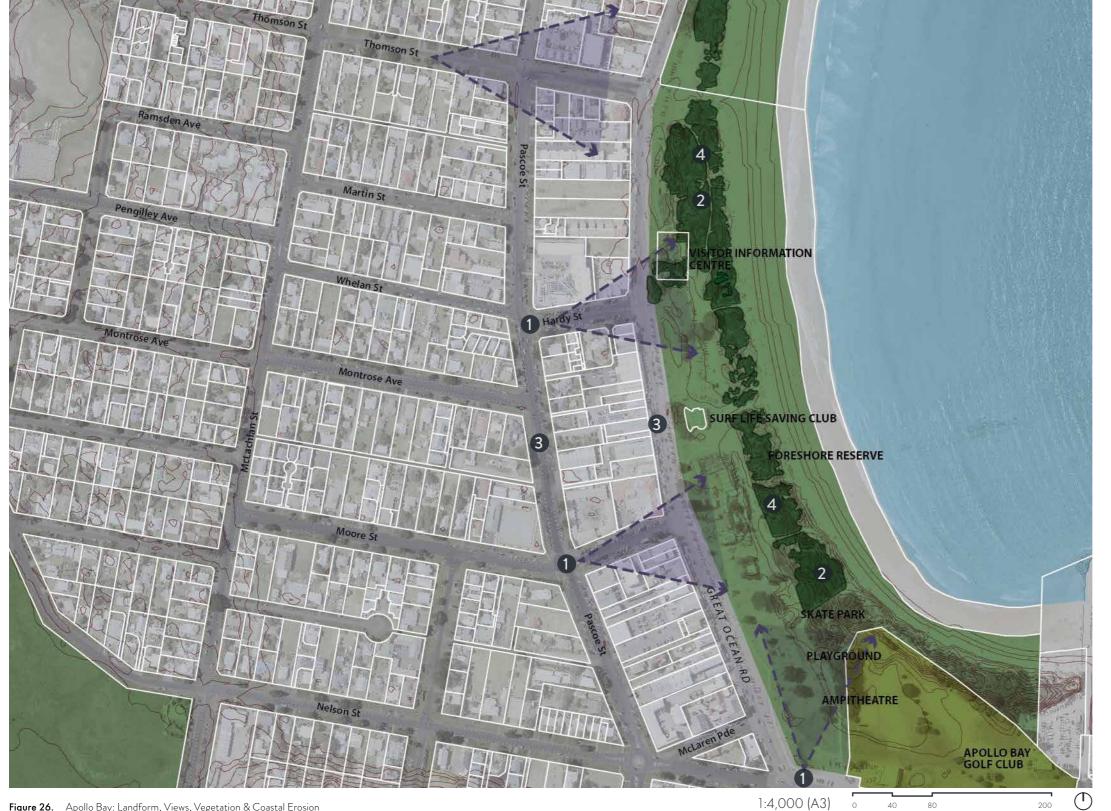


Figure 26. Apollo Bay: Landform, Views, Vegetation & Coastal Erosion

① Opportunities to enhance key existing views.

- 2 Dune vegetation should be retained and rehabilitated, to enhance the environmental qualities and landscape character of the foreshore.
- **3** Opportunities to provide additional tree planting within the streets of Apollo Bay, particularly along key pedestrian and cycle paths.
- 4 Vulnerability of development within the Apollo Bay Foreshore Reserve would increase significantly if the dunes were compromised.



Pasive Open Space Active Open Space Vegetation 0.5 Contour Line Key View

4.1.8 Walking and Cycling

Walking and cycling should be encouraged as the method of travel in Apollo Bay, reducing the need for car travel and car parking.

Walking and cycling connections along the foreshore and to key destinations (such as community facilities) are disjointed and could generally be improved. Pedestrian paths are provided throughout the central area of Apollo Bay, however within residential areas there are some gaps in the footpath network. This is particularly evident in the residential areas west of Pascoe Street where foot paths are generally absent, forcing pedestrians to walk along the road. Pedestrian amenity could also be improved through the provision of shade / weather protection, safe crossings, appropriately located rest areas and way finding signage.

Collingwood Street is the main retail street within Apollo Bay. As such it is the focus of high pedestrian volumes. While the street has generous footpaths (roughly 4.2m wide) along the retail edge, there is competition for this space from retailers, cafes and pedestrians. In many instances, retail displays obstruct pedestrian movement along the footpath, particularly during busy periods.

Furthermore, the high volumes of traffic along Collingwood Street make it difficult for pedestrian to move between the retail uses and the foreshore, particularly in peak season. Along Collingwood Street, there are only two pedestrian zebra crossings located approximately 250m apart. Many pedestrians therefore cross Collingwood Street informally, which is unsafe. Opportunities to provide additional safe crossings points along the Great Ocean Road should be investigated.

The opportunity to reroute traffic along Pascoe Street (either permanently or temporarily) has previously been flagged to reduce traffic on the GOR at key times of the year and to allow for improved connections between retail areas and the foreshore.

Within the Foreshore Reserve, gravel footpaths meander along its length, defining zones of activity and providing links to the beach beyond the dunes. While generally continuous, there are some key locations where these footpaths are disjointed or compromised. In particular, the areas near the Surf Life Saving Club and the Information Centre, as well as parking areas create barriers to pedestrian movement along the foreshore and for those crossing Collingwood Street.

Existing on-street bicycle lanes are provided along a number of streets. End-of-trip bike parking facilities, such as bicycle parking, shower and change facilities and lockers, are limited throughout Apollo Bay. There is the opportunity to provide bicycle infrastructure, including end of trip facilities within the town centre and at key destinations such as community uses, schools and the harbour.







4.1.9 Vehicle Access and Parking

The construction of a round-about at the intersection of Nelson Street and the Great Ocean Road is planned by Regional Roads to improve safety. This current design will require the relocation of the existing monument, which has a symbolic connection to the Great Ocean Road in its current location. There has been strong community feedback to retain the monument in its current location in any design for the intersection.

Demand for parking within the town centre and close to the beach is high, especially during summer peak and lunch times. Parking demand along Collingwood Street is provided on street and is often at capacity.

Within the foreshore, two small car park areas are provided. Both are well used however have limited capacity in their current arrangement and configuration.

Alternative parking options include along Pascoe Street and within public car parks accessed from Pascoe Street. These areas however are generally underutilised. Enhanced signage and effective wayfinding could improve awareness of these parking locations and reduce the pressure on key parking areas closer to the foreshore.

More efficient use of existing off-street car parking should also be considered, in particular, the Information Centre and informal gravel car park within the Foreshore Reserve. Additional off-street parking opportunities such as near the playground / skate park could also be contemplated to improve access to these facilities and the beach and to distribute activity along the foreshore.

Apollo Bay is a convenient stop for many of the tour bus companies that travel along the Great Ocean Road, including mini buses and large coach style vehicles. Estimates outlined in the recent Colac Otway Shire Tourism Parking and Traffic Strategy, suggested that 40-50 tour buses pass through Apollo Bay, each day.

Given the limited supply and high demand of formalised bus parking spaces and pick up / drop off opportunities, many of the buses park in residential streets, creating conflict between operators, passengers and residents. Additionally, some operators are dropping of their customers in unsafe locations where pedestrians are required to walk directly in the path of passing vehicles. If bus parking is not provided appropriately, current issues will continue.

As noted previously, Council have identified the potential to provide additional bus parking along Pascoe Street, as part of their recent Tourist Parking and Traffic Strategy. This will be combined with new temporary public toilets located in the publicly owned car park area adjacent Bendigo Bank. The CIP will need to consider the potential impacts this proposal has for access, wayfinding and car parking.

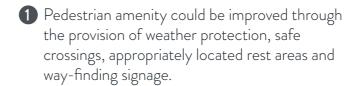


mand for parking along F<u>oreshore</u>





Figure 27. Apollo Bay: Access and Circulation



- **2** There is competition for footpath from retailers, cafes and pedestrians.
- 3 Opportunity to reroute traffic along Pascoe Street (permanently or temporarily) has previously been flagged to reduce traffic on the GOR.
- A Footpaths are disjointed or compromised. Opportunity to improve.
- **5** Opportunity for enhanced bicycle infrastructure.
- 6 Location for roundabout as identified by Regional Roads to improve the safety of road access.
- 7 Town and town centre entrances could be enhanced through landscape treatments and signage to define arrival.
- 8 Alternative parking are generally underutilised. Enhanced signage and effective way-finding could improve awareness of these parking locations and reduce the pressure on key parking areas closer to the foreshore.
- 9 Council have identified the potential to provide additional bus parking along Pascoe Street, in their recent Tourist Parking and Traffic Strategy.



Carpark

Bus Stop

4.2 Apollo Bay Harbour

The Apollo Bay Harbour Precinct is an important asset to the area, it provides a major tourism opportunity for Apollo Bay and the region. The precinct is bordered by a 9 hole Golf Course (Apollo Bay Golf Course) at Point Bunbury and comprises the harbour with its breakwaters, the harbour master's office, marina berths, a slipway, a boat ramp and associated car and trailer parking, the Fishermen's Co-Op, Apollo Bay Sailing Club and adjacent foreshore / beach areas.



4.2.1 Special Use Zone Requirements

The Harbour Precinct has undergone a number of master planning processes with the community, which have culminated in the implementation of a Special Use Zone. This outlines land use and development requirements for the Precinct:

- Prohibits accommodation as a use.
- Requires that development supports the ongoing operations and viability of the Harbour's port operations (including commercial fishing and the Fishermen's Co-Op.
- Requires that built form reinforces the established landscape character and does not intrude upon the Harbour's southern skyline.
- Allows for up to 200m2 of food / drink premises without a permit.
- Provides for the ongoing operation of the Apollo Bay golf course.

Also relevant, Special Use Zone - Schedule 2 outlines key projects for a future Development Plan. These include:

- The Harbour Precinct Entry Road Upgrade to straighten the 'dog leg' south of the Fishermen's Co-Op building and provide safer access to the Harbour.
- Breakwater Road Upgrade to a suitable standard to allow two-way vehicle movement with allowance for parallel parking if there is sufficient space.
- Provision or upgrade of pedestrian/bicycle paths throughout the harbour.
- Retain and provide for the eastern extension of the Fishermen's Co-Op building for fish processing operations.

- Construct new Harbour Edge Buildings located on the water's edge south of the boardwalk which could cater for a mix of retail, hospitality, aquatic based recreation, health and wellbeing facilities and multi-use event and meeting spaces for club, community and commercial activities.
- Provide a new recreational marina mooring along the eastern breakwater wall based on appropriate mooring types.
- Increasing the capacity of the boat launching facility to at least three lanes.
- Relocate and expand the port operations and boat repair facility to the north to provide for the pedestrian boardwalk
- A new Sailing Club Facility to be provided generally in its current position to provide clubrooms, race control facilities, toilets and storage space, roll-in access to the Harbour Beach and grassed surrounds for small craft laydown.
- The potential for an Aboriginal and Cultural Centre, subject to a detailed business case and the support of the Aboriginal community.
- Provision for other commercial water based development.
- Provide for an extension of the eastern breakwater by approximately 60 metres to enable safe access to the Harbour.
- Upgrading of the Mother's Beach car park to maximise the number of parking spaces available.
- Retention and enhancement of Public Open Space within the Harbour that contributes to the use and enjoyment of the harbour and vistas to the Otway Coast.

The Apollo Bay Harbour Development Plan should provide a precinct approach to parking provision. Parking should be provided at the following four nodes:

- Mother's Beach carpark;
- Fishermen's Co-Op;
- Boat trailer car park; and
- Breakwater Road.

These will need to be considered when developing the framework plan for the precinct as part of the CIP.

4.2.2City Deal Funding

The Harbour is a key state-owned asset estimated to contribute \$43million annually to Victoria's economy. As just one of three safe blue havens in Victoria, west of Port Phillip Bay, the Harbour Precinct is identified in the Planning Scheme as a key development opportunity 'to deliver economic benefits to the Shire and promote Apollo Bay as a tourist destination.'

Colac Otway Shire is the designated Port Manager for the harbour through an agreement with the State Government and is responsible for its management, operations and maintenance. The redevelopment of the Harbour is a priority project for Council, hence Council have been advocating for investment into it.

Funding has recently been secured by Council through the 'City Deal' which will support a first stage of redevelopment for the harbour. Stage one will focus on a wide range of upgrades and new infrastructure to facilitate regional tourism, to provide social and recreational opportunities for the community and create better links with the town centre.

- Specifically the City Deal Funding will allow for the following as works to be undertaken:
- Upgrading of Mothers Beach Car Park.
 - Harbour Precinct Entry Road Upgrade.
 - Breakwater Road Upgrade.
 - Provision or upgrade of pedestrian and bicycle paths connecting the harbour precinct with the township including historical and interpretive signage.
- A new boardwalk along the harbour water's edge.
 - Extension of the Fisherman's Co-operative building.
- New port operations depot, and public change room and amenities.
- Replacement of fencing in the harbour.
- Utility upgrades.
- Further redevelopment of the precinct will be informed by the outcomes of the CIP project and a business case being developed by others, on behalf of Council.

4.2.3Land Use and Infrastructure

Constructed in the 1950's, the harbour provides a home for a range of local, commercial and recreational fishing uses and other water-based activities. Additionally, a number of community uses are based at the harbour, while the harbour and headlands provide a range of recreational opportunities for both residents and visitors to Apollo Bay.

The harbour itself is enclosed by two large breakwaters, an eastern and inner. Both breakwaters allow for pedestrian access and recreational fishing. Within the breakwater there is a floating marina, as well as swing moorings, a public boat ramp and a winch and slipway. The slipway is available for harbour users/ vessel owners requiring out of water maintenance.

The working depth of the harbour is currently maintained through dredging. Sand ingress is an ongoing issue that needs to be managed.

The function and aesthetics of the harbour as a commercial and recreational fishing facility is identified during recent consultation as being highly valued by the community. It was also noted that there is the opportunity to improve the presentation of the harbour and to consider minimising the adverse impacts of harbour operations on public areas (i.e. dust and spray from the slipway).

Public realm improvements would also help to enhance the amenity of the area for all users and potentially provide a catalyst for private interest and investment in the precinct. This could include a cohesive materials and planting palette to ensure improvements are in keeping with the desired character of the precinct.

Marine Operations also operate in the area and play an extremely important role in the safety of boaters along Victoria's coastline.

The Golf Club sits south-west of the Harbour Precinct. A future master Plan for the Golf Club recommends the rearrangement of several golf holes, as well as the inclusion of a path around the Golf Course, linking the harbour and town centre and around Point Bunbury. This would allow for both golfer and public access.



Additionally, the presentation of maintenance facilities, which are accessed from the parking area near Mothers Beach, could be enhanced.

At the centre of the precinct is a terraced section of the shoreline. The lower section of the terrace is occupied by the port operations office, storage and yard facilities and a slipway that extends northward into the harbour. These areas are currently fenced off, restricting public access along this edge. There is the opportunity to reconfigure and consolidate the storage area / yard to allow public access along the water's edge.

The upper section of the terrace is occupied by the Fishermen's Co-Op building, one of only three remaining in Victoria. In operation since 1948, the Fishermen's Co-Op includes a fish and chip café and seafood storage and processing facilities, as well as an informal thoroughfare, parking and an outdoor eating and viewing area. There are potential plans for the expansion of the Fishermen's Co-Op that need to be considered.

Closer towards Point Bunbury and near the boat ramp, the Apollo Bay Sailing Club currently operates from a small club house. The club house, a small converted shipping container, needs to be replaced and access to water, sewerage and electricity provided. The club also leases an area for yacht parking / dry storage, located in the adjacent car park. This area is unsecured and allows boat owners to store their boats in the area between November and April. The club additionally utilises a bollarded grass area, located adjacent to the club house for rigging.

The Sailing Club have identified potential improvements to their facility and the boat ramp area which could include:

- Upgrade of club house building.
- Provision of a pedestrian walkway along the water's edge to harbour area.
- Safer pedestrian connections near boat ramp with consideration of reserving boats/trailers.
- Replacement and extension of the southern pontoon to avoid conflict between recreational fisherman and sailing club boats.
- Dredging of the harbour and area between the pontoons.





Opportunities to adopt Sailing Club and adjacent boat ramp facilities should be considered by the CIP.

Within the precinct there are two popular swimming locations including is a small beach within the harbour (along the eastern breakwater) and Mothers Beach, which lies outside the harbour, along the western breakwater. Both are protected by the breakwater walls and are an ideal spot for families and children to swim. Amenities could be provided to support the use of these popular swimming spots.





4.2.4 Heritage

The Harbour and Point Bunbury are prominent and historic features of Apollo Bay, given their connection to the settlement of the area. While much of the land form around the harbour has been altered overtime, there are sand dunes within the precinct that remain highly culturally sensitive and have the potential to contain aboriginal heritage.

While the full extent of Aboriginal heritage sites is unknown, key known sites include 7620-0192 – a shell midden and a (suspected) freshwater spring (Blackfella's Well). The shell midden extends from the Fishermen's Co-Op to the boat ramp. The freshwater spring has not been found, however is believed to be located in the embankment next to the Fishermen's Co-Op. These areas should be respected and celebrated.



Additionally, a heritage overlay (HO300) applies to the Harbour Precinct and includes the Fishermen's Co-Op building. It is understood that while the building is a significant feature and demolition of the building is unlikely, there is scope to make changes to the existing building without undermining its heritage values.



1 Dredging required to maintain maximum working depth. Opportunity to use sand to stabilise other areas of the coast.

2 Informal carpark, opportunity to improve.

3 Narrow streetscape with poor pedestrian access.

4 Opportunity to store Ocean Rescue boats close to the existing boat ramp to allow for easy boat launch and improved rescue times.

5 Golf Club maintenance facilities could be enhanced.

6 Lower Terrace: potential to reconfigure and consolidate the storage area / yard to allow public access along the water's edge.

7 Upper Terrace: potential plans for the expansion of the Fishermen's Co-Op.

8 Potential facility improvement for Sailing Club.

9 Amenities (toilet, shower, change rooms) could be provided to support popular swimming spots.

10 Potential site of aboriginal heritage (shell midden and drinking well).

	Public Use	0	Health & Community
	Commercial & Retails	Θ	Community Hall
m	Active Frontage	0	Arts and Culture
${\prime\prime\prime}$	Heritage	0	Open Space
	Special Use Zone	0	Recreation Space
)	Carpark	0	Emergency
•	Toilet	0	Harbour Facility
)	Bus Stop	0	Aboriginal Artefects

4.2.5Landform and Views

Significant views are afforded into and out of the harbour area, including to the town centre, beach and Otway Ranges. Future development should not negatively impact these key views. Views to the Harbour from Apollo Bay are also important. As a benchmark previous studies have suggested that future built form heights within the precinct should not exceed the height of adjacent Norfolk Island Pine Trees.

A tidal rock shelf dominates the southern shoreline of the harbour west of the boat ramp. This limits boat access within this area. Within the harbour, infestation from invasive kelp and other sea life has the potential to significantly impact maritime and recreational activities. These risks need to be managed.

In terms of the harbour breakwater, the inner face of the eastern breakwater was assessed in 2018 and found to have fretting of the road edge and slumping of the rear face due to wave overtopping. Repair of the inner face is recommended and should be conducted prior to further development of the area. Areas near to the dunes are protected by narrow stone walls.

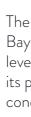
4.2.6Vegetation

Dense coastal vegetation along the foreshore softens built form elements within the precinct and helps to stabilise the adjacent dunes. A flora and fauna assessment of the terrestrial area of Apollo Bay Harbour was recently undertaken to explore future development options and inform the Apollo Bay Harbour Development Plan. Key findings in relation to the precinct are as follows:

- 2.248 ha of native vegetation, including 0.070 hectares of Coastal Dune Grassland EVC 879, and 2.178 ha of Coastal Dune Scrubland EVC 160. Both EVCs have a bioregional conservation status of depleted.
- No significant ecological communities were deemed to be present within the study area.
- No significant species were recorded during the site assessment. However coastal dune scrub and coastal dune grassland may be utilised as breeding habitat for several threatened shorebird species and the precinct could potentially provide habitat for other threatened species.

Due to the proximity of the ocean and the Barham River estuary the site may be used a wildlife corridor for shorebird species.

Where appropriate, impacts on native vegetation and threatened species habitat should be minimised. Additionally, there is the potential to enhance the environmental qualities and landscape character of the foreshore through increased planting of appropriate species.



Erosion within the harbour has not been considered in previous reports but with coastal processes affecting the south-eastern dune accelerated erosion is possible. Further consideration is recommended.





4.2.7 Erosion

The Apollo Bay, Skenes Creek & Marengo CIP - Issues and Opportunities Paper: Coastal study prepared by Water Technology noted erosion to the inner Harbour access ramp to the beach, and to the dunes at the Harbour's south-eastern beach. Considering the protection afforded by the Harbour walls, this is most likely due to carpark runoff (access ramp) and storm tides/loss of vegetation/wind erosion/ currents due to seiching (dune). The dune to the west of the inner-boat ramp is well vegetated and showing no signs of erosion. The beach at the northern end of Mounts Bay (Bunbury Point) is stable, with no indication of erosion.

The Bunbury Point Groyne is currently holding sand, with one section close to shore that needs urgent repair. At present, the structure could be outflanked during a storm event. The groyne was originally designed as a sand trap for later sand bypassing to prevent sand build-up within the harbour. Although the groyne has not recently been used in this way, any development plan of the area should consider this function.

The car park and grass area in front of the Apollo Bay Sailing Club sit above the predicted storm-tide levels up to 2100. Erosion risk here is low, considering its protection by the breakwaters and its present condition.



Figure 30. Apollo Bay Harbour: Landform, Views, Vegetation and Coastal Erosion

1 Retain views from town to existing mature trees in Golf Club, as previous studies have suggested that future built form heights within the precinct should not exceed the height of adjacent trees.

2 Risks of infestation from invasive kelp and other sea life has the potential to significantly impact maritime and recreational activities.

3 Repair of the inner breakwater face is recommended and should be conducted prior to further development of the area.

4 The Bunbury Point Groyne is currently holding sand, with one section close to shore that needs urgent repair.



Pasive Open Space Active Open Space Vegetation 0.5 Contour Line Key View Assets Area Risk uuuuu Groyne/Revetment

4.2.8 Walking and Cycling

Pedestrian access between the Harbour, Town Centre and Point Bunbury is generally provided via Nelson Street, footpaths along the foreshore and adjacent streets or via the beach.

A 'pinch point' for pedestrian movement is located between the Fishermen's Co-Op and Golf Club, where Nelson Street intersects with Trafalgar Street and Breakwater Road and the road access narrows. There is an absence of footpaths and a number of movement paths (both pedestrian and vehicular) converge. Additionally, access along the foreshore is restricted by harbour activities and existing vegetation.

Overall public access to and around the harbour precinct could be enhanced, including the provision of continuous, safe and clear pedestrian access between the town centre and Point Bunbury. This access should always be available (including high and low tides) and include nodes of interest (e.g. information boards, playground, seating, kiosk, active uses, viewing points).

The potential to provide a public trail along the perimeter of the Golf Course has previously been identified. This would require the modification of some of the golf holes to enable this to be safely delivered.

This route of the Great Ocean Walk runs along the western edge of the harbour precinct and is visually disconnected from the harbour, headland and golf course features. Its path is also unclear, as it connects from the foreshore to the footpath along the Great Ocean Road. The is the potential to incorporate the Harbour and Point Bunbury into the Great Ocean Walk route, providing access to spectacular views of the water.

4.2.9 Vehicle Access and Parking

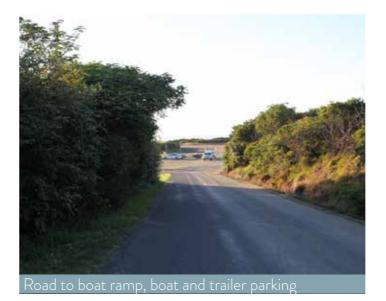
Vehicle access between the Harbour, Town Centre and Point Bunbury is generally provided via Nelson Street. Similar to pedestrian access, the 'pinch point' between the Fishermen's Co-Op and Golf Club affects vehicular access.

Parking in the precinct is provided at the following locations:

- Mother's Beach carpark;
- Fishermen's Co-Op;
- Boat trailer car park; and
- Breakwater Road.



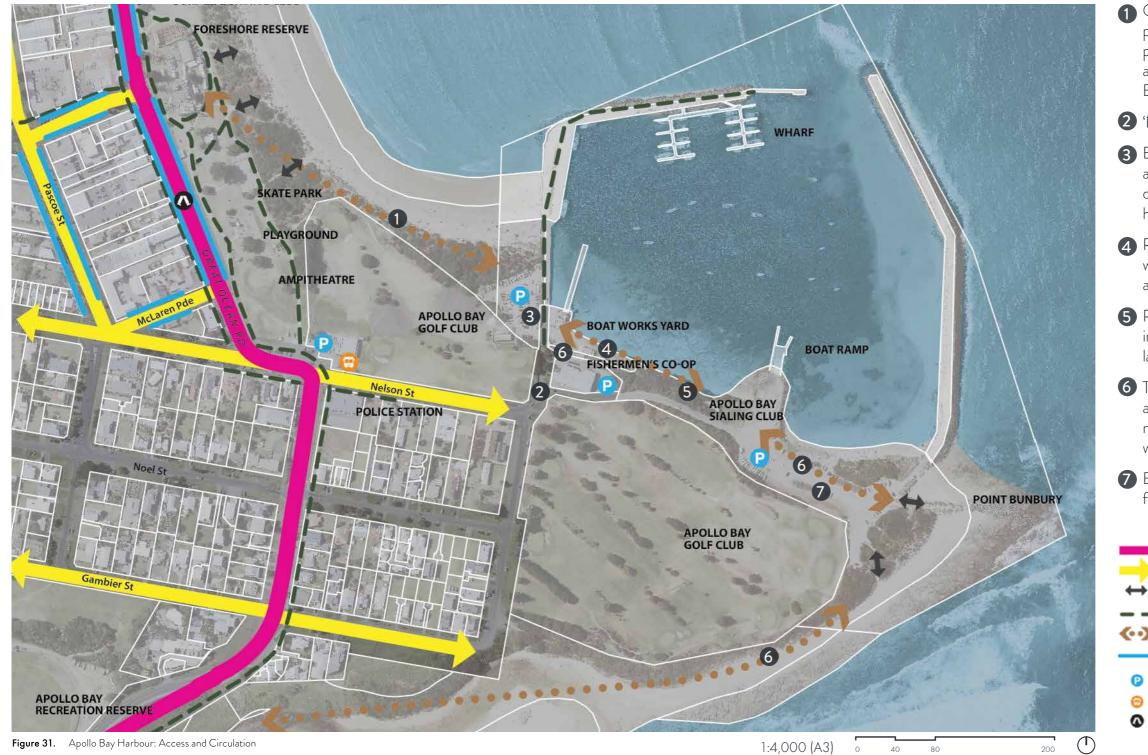




Generally parking in the precinct is inefficient and could be better organised. Future parking will need to consider increased tourist use, trailers, disabled and bus parking, day to day users and harbour activities and be designed so that it does not visually dominate the landscape setting.

Currently the boat and trailer parking at Point Bunbury is being formalised. Similarly parking at Mothers Beach could be formalised, while access to the Fishermen's Co-op car parking improved. Alternatives to on-site car parking (e.g. Shuttle bus), as well as overflow car parking should also be considered.





• Overall public access to and around the harbour precinct could be enhanced, including the provision of continuous, safe and clear pedestrian access between the town centre and Point Bunbury.

2 'Pinch point' for pedestrian and vehicular movement.

3 Existing carpark is poor. Opportunity to provide adequate parking for increased tourist use, trailers, disabled and bus parking, day to day users and harbour activities.

Potential to develop a wide harbour promenade/ wharf that is part of the public domain and accessible at all time.

5 Provide enhanced pedestrian access at the intersection of the promenade/wharf and the low landing.

6 The is the potential to incorporate Point Bunbury and the Harbour into the Great Ocean Walk route, providing access to spectacular views of the water.

Ø Boat and trailer parking at Point Bunbury is being formalised.



Great Ocean Road

- Key Vehicular Route
- Beach Access
- Shared Path
- Desired Pedestrian Link
- On Street Carparking
- Carpark
- Bus Stop
- Pedestrian Crossing

4.3 Skenes Creek

Skenes Creek is a small coastal settlement located approximately 6 kilometres east of Apollo Bay. The town is focused around Skenes Creek and a small beach, located at the mouth of the creek. It includes a small number of houses, a caravan park, public toilets and parking / picnic area and swimming beach.

The following provides a summary of analysis, challenges and opportunities for the Skenes Creek.



Figure 32. Skenes Creek Site / Aerial Plan







4.3.1 Land Use and Infrastructure

Skenes Creek has a quiet village character, influenced by low scale dwellings, existing bushland and natural assets and gravel roads. This character of the township is highly valued by the community (as referenced in previous reports).

Skenes Creek includes many holiday homes and rentals. Many of these belong to temporary residents (i.e. approx. 65% of its population are non-resident owners). Community feedback indicated that this transient and fluctuating population may have impacts on the vibrancy and sense of community within the town.

The Skenes Creek Beachfront Park occupies a premium location along the foreshore. While the land is managed by the Otway Coast Committee, it is leased to a private operator. The Caravan Park is open for 7 months of the year and provides a lower cost accommodation option for visitors.

Located at the caravan park is also a kiosk which is operational during peak seasons. There are few other services or facilities provided other than the kiosk within the town. Community feedback suggested that this kiosk functions as a hub for the community and should be open all year round. This would be subject to a permit process and would need approval from relevant authorities. Additionally, the provision of additional community facilities such as a meeting room could be provided nearby to complement the kiosk and its role as a community hub, providing a space for both residents and visitors to meet.

The foreshore and car park area, is another key activity node, providing the main access to the beach. Visually, the area is dominated by extensive areas of asphalt / gravel, which diminishes this important space in Skenes Creek.

Skenes Creek Reserve is located on the opposite of Great Ocean Road, along side Skenes Creek. This informal park provides an area of lawn and seating, signage and access to a small wooden jetty. Pedestrian access is facilitated between the two spaces, by an informal link under the GOR bridge.

There are opportunities to improve the appearance, functionality and amenity of both areas. A consistent palette of materials could also be provided to improve visual connections between the spaces and reflect the local qualities of Skenes Creek.

Community feedback suggested that additional facilities such as a drinking fountain, more bins and a shower could also be provided, preferably close to the beach.

Safety of the beach was also raised during consultation. Suggestions to improve this included the provision of additional signage alerting the public of the risks or potentially patrolling the beach, if number warranted.

Public toilets, owned by Barwon Water, are located near the entrance to the caravan park and main beach. The toilets sit adjacent a sewer pump station (also owned by Barwon Water). They are discrete, hidden by topography and planting and cannot be seen from the road. Pedestrian access to the toilet is compromised by the creek, making the paths disjointed.





It is understood that these toilets are not considered to meet current standards and therefore have recently been identified to be decommissioned. Given these are the only public toilets in Skenes Creek, these should be replaced. In doing so, there are opportunities to consider how the areas surrounding the toilet could also be enhanced to create a focal point for the town.

The drainage study for Apollo Bay indicated that currently septic tank drainage seeps into the roadside open drains. More environmentally acceptable alternatives to this arrangement should be investigated.





1 Reinforce the kiosk as a hub for the community by investigating the opportunity to open all year round or providing additional facilities to complement its role.

2 Improve the appearance, functionality and amenity of key public spaces. This includes providing a consistent palette of materials and planting that reflects the relaxed coastal character of Skenes Creek.

3 Investigate opportunities to replace the public toilets and improve the precinct surrounding as a public space focal point.

4 Investigate the opportunity to provide additional facilities at the foreshore including a drinking fountain, bins and a shower.

5 Improve awareness of the risks associated with swimming in the ocean, potentially through enhanced signage in various languages or beach patrols, when numbers warrant.

6 Consider more acceptable alternatives to septic tank seepage into roadside drainages.

Heritage

- Carpark
- Toilet
- **Bus Stop**
- Caravan Park
- Open Space

4.3.2Landform and Views

The landscape setting of Skenes Creek, at the intersection of the foothills, the coastline, creek corridor, bushland and farmland are an important feature of the township. In particular, the sloping topography, allows for significant views to the water. Vegetation around the edge of the town also acts as a visual buffer between the shoreline and the housing areas.

4.3.3Erosion

An assessment of historical coastal impacts show erosion of access paths due to large storms as well as inundation risk to existing infrastructure and assets including carparks, toilet blocks, and the caravan park. These are identified on the following map as 'Assets' areas risk'.

Key areas of impact include:

- The car park area is exposed to erosion risk and inundation risk from a combination of storm tide and wave runup.
- There are two picnic areas at each end of the carpark, with the ground sloping down towards the creek. The eastern picnic area is low-lying, while the western picnic area is at a higher elevation and could house infrastructure of greater value/lower resilience. The picnic area upstream of the bridge on the western bank of Skenes Creek slopes down, transitioning to higher risk at its far side towards the creek. The area closest to the bridge is elevated above the predicted 2100 storm tide levels.
- The dune in front of the caravan park is stable at present, showing establishment of new vegetation.





APOLLO BAY - SKENES CREEK - MARENGO

• The access paths and steps to the beach from the large car park area are subject to erosion and variability due to the Skenes Creek channel. Improvements to beach access would require a study into options with further consideration of the longterm coastal processes of the area.

If further infrastructure is placed in these vulnerable areas, adaptation to the prevailing conditions should be considered, such as raised structures or those that are highly resilient to coastal flooding.

Skenes Creek is a key waterway and natural asset. The creek enters the ocean near the foreshore car parking areas, making access to the beach here difficult and separating connections to the public toilets further east. Additionally, the creek is subject to flooding. There are opportunities to enhance the waterway environs, enhance its amenity and to utilise the corridor to provide additional shared trails.



APOLLO BAY - SKENES CREEK - MARENGO

• Coastal vegetation around the edge of the town also acts as a visual buffer between the shoreline and the housing areas and should be maintained.

2 Skenes Creek enters the ocean near the foreshore car parking areas, making access to the beach here difficult and separating connections to the public toilets further east.

3 Opportunities to enhance the waterway environs, enhance its amenity and to utilise the corridor to provide additional shared trails.

Access to Skenes Creek Reserve could be enhanced.



Pasive Open Space Vegetation 0.5 Contour Line Key View Assets Area Risk

Walking and Cycling 4.3.4

Generally, footpaths within the residential areas of Skenes Creek are limited. The absence of footpaths and the lower volumes of traffic however would appear not to necessitate the construction of footpaths along all roads.

Walking and cycling connections between residential areas and the foreshore are disjointed and difficult to achieve due to the sloped terrain. The Great Ocean Road provides a barrier to pedestrian movements. Safe pedestrian connections between key destinations in Skenes Creek should be provided for, including improving beach access at key points.

Crossing the Great Ocean Road is hazardous and unpredictable due to sightlines, vehicle speed and narrow road verges. The current speed limit through town is 60km/h and increases to 80km/h to the east and west of the township. The Tourism Parking and Traffic Study recommended that this speed limit should be revised to 40km/h. The needs of pedestrians should be prioritised over through traffic.

There are no completed pedestrian / cycle connection between Apollo Bay and Skenes Creek. Funding for the Coast Discovery Trail to Skenes Creek has been committed to and is expected to proceed.

DEWLP are currently undertaking a feasibility study to provide a coastal walk or cycle trail between Skenes Creek and Fairhaven. Early consultation undertaken by DELWP has indicated support for a trail, however a preferred route has not been determined, nor funding committed.

4.3.5Vehicle Access and Parking

Vehicle access to Skenes Creek is provided via the Great Ocean Road and Skenes Creek Road (which connects to Forrest). A series of sealed and unsealed local roads provide access to housing.

The descent into Skenes Creek from Forrest provides for spectacular views to the water, however arrival along the Great Ocean Road is nondescript. Arrival into Skenes Creek provides part of the entry experience into the area, including Apollo Bay. This arrival experience should be enhanced through improved signage and landscape treatments and should reflect the character and amenity of the region.









Key car parking areas in Skenes Creek include the car park near the caravan park and the foreshore. Parking near the public toilets is limited and the toilets are disconnected from key picnic areas. The foreshore car park area is difficult to access due to vehicle speeds and sight-lines. The quantity of car parking is limited, and the informal layout of the area is inefficient. There is an opportunity to improve the appearance, functionality and amenity of this area, whilst managing capacity constraints and environmental impacts.



1 Signed speed limit inappropriate for town area.

2 No sense of arrival. Opportunity to create it through views and signage.

3 Opportunity to improve pedestrian crossing to bus stop.

4 Discontinued path. Opportunity to provide continuous shared path to Wild Dog Creek, connecting Apollo Bay.

5 Informal gravel carparking. Opportunity to improve pedestrian and vehicle access clarity, reduce expansive areas of asphalt.

6 Opportunity for safe pedestrian link across the creek.

7 Opportunity for dedicated pedestrian bridge that provides a landmark element for the foreshore.



Great Ocean Road Key Vehicular Route Beach Access Footpath Desired Pedestrian Link Proposed Trail Carpark **Bus Stop**

4.4 Marengo

Marengo is a small coastal settlement located approximately 2.5km south of Apollo Bay. It includes a small number of houses, an airfield, a caravan park and swimming beach, as well as a cemetery, water treatment plant and several environmental areas.

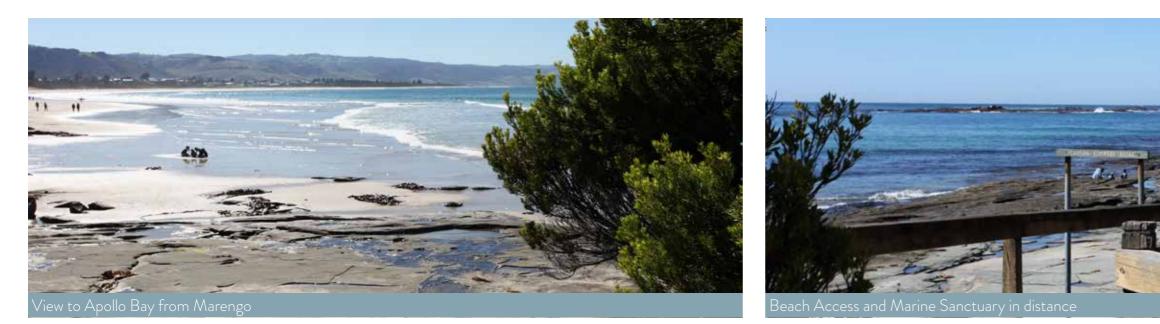
The following provides a summary of analysis, challenges and opportunities for the Marengo.



Figure 36. Marengo Site / Aerial Plan

APOLLO BAY - SKENES CREEK - MARENGO

21 November 2019







4.4.1Land Use and Infrastructure

Marengo has a relaxed coastal character influenced by the low scale buildings, established vegetation and limited infrastructure. Views to the water are available from many areas because of the topography.

Marengo Holiday Park is located on the eastern point, a premium location close to the beach. It is managed by Otway Coast Committee and open all year round. The park provides affordable accommodation within Marengo including camping sites and cabins, catering for diverse visitor needs.

Apollo Bay Airfield is located off Telford Road, in Marengo. An important economic asset for the region, several scenic flight operators work out of the airfield. A study of the Airfield in 2001 noted that as an important contributor to the tourism growth of the region, expansion of the airfield would be required to support increased aircraft capacity.

The foreshore and car park area near Maregno Crescent is the major day use destination and is heavily used by residents and visitors. The useable foreshore reserve is limited and car parking dominates the area. There are opportunities to improve the appearance, functionality and amenity of this area, while managing capacity constraints.

Public toilets were previously located along the Great Ocean Road, near Ocean Park Drive. These were removed as they were under threat from coastal erosions. There the opportunity to replace the public toilets at Marengo, in a convenient and accessible location for visitors.











1 Maintaining camping and caravan park facilities and other lower cost accommodation options will be important to cater for diverse visitor needs.

2 Lack of amenities related to beach such as toilets.

3 Sewer Pump Station to be retained.

An informal car parking provides parking for visitors to the beach here, but the gravel parking area is inefficient. Opportunity to formalise parking and create a larger foreshore reserve which is available for public use.

Opportunity to replace the public toilets at Marengo, in a convenient and accessible location for visitors.

- Public Use
- Heritage
- Carpark
- **Bus Stop**
- Caravan Park
- Open Space

4.4.2 Landform and Views

The landscape setting of Marengo is a distinctive feature and contributes to its character and charm. Residential areas are located on the elevated slopes that frame the coastline. The dense coastal vegetation around the edge of the town acts as a visual buffer between the shoreline and the housing areas. The housing areas north of the Great Ocean Road are less elevated, they have larger lots and a stronger influence of coastal vegetation.

Barham River is located to the north of the township. The Barham River floodplain provides an important landscape break between Apollo Bay and Marengo.

Vegetation 4.4.3

Marengo includes several significant and protected environmental areas including Marengo Native Flora Reserve and Marengo Reefs Marine Sanctuary. These provide habitat for several flora and fauna species, including a seal colony. These areas are ecologically significant and should continue to be protected and enhanced.

There are opportunities to provide new / improved interpretation in public places such as the foreshore to improve the understanding and appreciation of these spaces and their broader ecological values. A viewing platform allowing for seal and whale watching was also identified as an opportunity during community consultation. The location of such a facility would however need to consider existing views of the shoreline and respond to potential views of the seal colony / whales.

4.4.4 **Erosion**

Marengo is well protected from erosion by coastal cliffs along the headland. The dune to the north of the foreshore carpark are currently stable, showing no signs of recent erosion, while the carpark slopes up away from the shoreline providing increased resilience from coastal erosion. The shoreline is additionally protected by a revetment that is presently in good condition.

An assessment of the inundation risk to the area bordering Marengo and Mounts Bay found that the carpark and dunes would be inundated in cases where peak storm tide inundation and wave runup reached between 3.9 and 4.6 m (AHD), based on a 100 year ARI storm tide and corresponding significant wave heights of 5 – 8 m (Figure 2-5). Analysis of updated LiDAR with the same elevations indicates that inundation would partially cover the carpark area.





318-0979-00-U-20 RP01 Issues and Opportunities Report



These are identified on the following map as 'Assets' areas risk'. If further infrastructure is placed in this area, adaptation to the prevailing conditions should be considered, such as raised structures or those that are highly resilient to coastal flooding.

The foreshore environment north of Marengo however has been impacted significantly by erosion, both inundation and erosion risk increase significantly with recent erosion requiring dune re-nourishment and stabilisation. New works provide the opportunity to rehabilitate this foreshore environment and locate infrastructure appropriately.



Figure 38. Marengo: Landform, Views, Vegetation and Erosion - Opportunities Plan

Ocean view on Great Ocean Road town entry. Views to the water and the relationship to the shoreline should be retained.

2 Existing vegetation provides protection of coastal edge and bank stability. Opportunity to improve ecological role of coastal vegetation.

3 Impacted significantly by erosion. Opportunity to rehabilitate this foreshore environment and locate infrastructure appropriately.

4 Shared Path close to road, might be at risk of coastal erosion.

5 Revetment is presently in good condition.

6 Opportunities to provide new / improved interpretation in public places about significant habitats and reserves.

Opportunity for viewing platform allowing for seal and whale watching.



Pasive Open Space Vegetation 0.5 Contour Line Key View Assets Area Risk uuuuu Groyne/Revetment

4.4.5 Vehicle Access and Parking

The Great Ocean Road provides access to the township and neighbouring towns. Residential streets south of Great Ocean Road are curvilinear and sealed, while local roads north of the Great Ocean Road are generally straight and unsealed. The western entrance along the Great Ocean Road is signified by a descent in the hill providing views across the water and to the distant Otway foothills. This view is partially obstructed by powerlines are along the side of the road. There is the opportunity to underground these powerlines.

An informal car park and circulation area is located just off Marengo Crescent. It provides parking and access for visitors to the foreshore and beach. The gravel parking area is inefficient. There is the opportunity to formalise parking to improve ingress and egress and provide clearer parking and circulation spaces. Crossing the Great Ocean Road is hazardous and unpredictable due to sightlines and vehicle speeds. The current speed limit through town is 60km/h and increases to 100km/h heading west near the water treatment plant. The Tourism Parking and Traffic Study recommended that this speed limit should be revised to 40km/h. The needs of local site users and pedestrians should be prioritised over through traffic.

4.4.6 Walking and Cycling

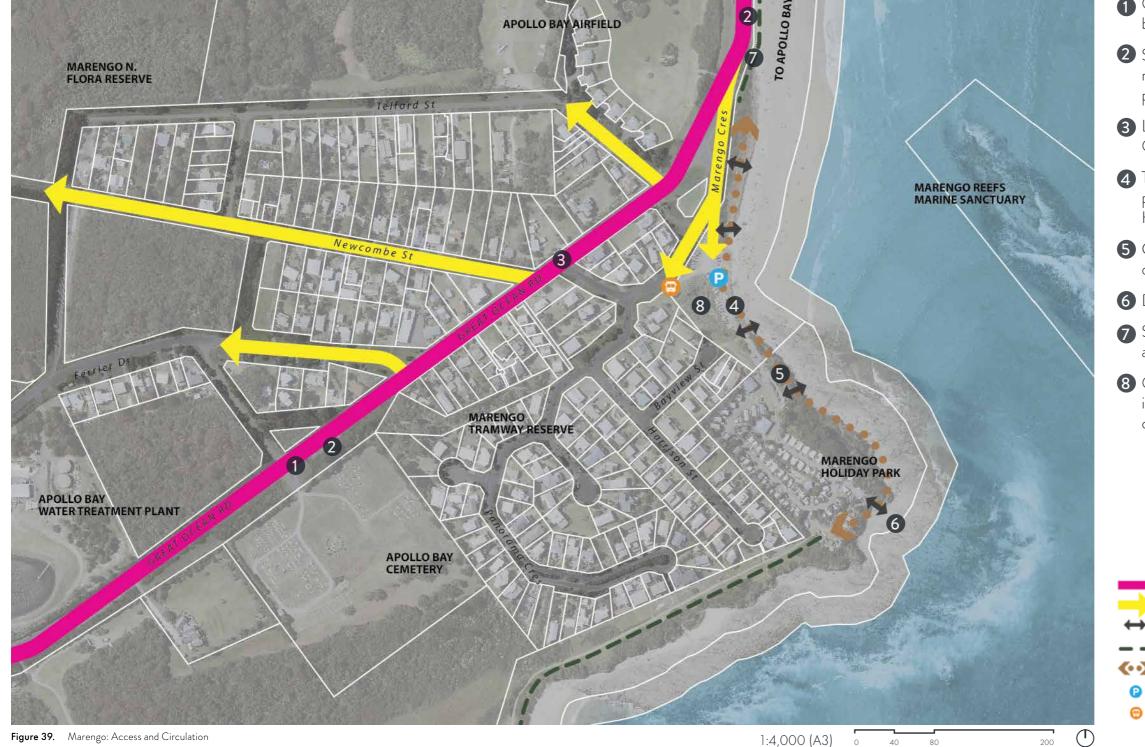
Generally, there are no footpaths within the residential areas of Marengo. Because of the low volumes of traffic, pedestrians can use the roadways for walking. There may however be an opportunity to provide a footpath along the Great ocean Road due to the major volume of traffic.

Walking and cycling connections along and to the foreshore however are unsafe, unmaintained and disjointed. These should be improved. Additionally, Marengo provides for the Great Ocean Walk, a key recreational asset for both residents and visitors. The route of the Great Ocean Walk is unclear, particularly as it meanders through the Marengo Holiday Park. Continuous and clear access along this walk, during both high and low tides should be provided.









1 Opportunities to underground powerlines should be investigated to provide a better arrival view.

2 Speed limit through town is recommended to be revised to 40km/h to prioritise local site users and pedestrians.

3 Lack of safe pedestrian crossing on the Great Ocean Road.

4 The route of the Great Ocean Walk is unclear, particularly as it meanders through the Marengo Holiday Park.

5 Continuous and legible access along this walk, during both high and low tides should be provided.

6 Difficult beach access.

7 Shared Path close to road, unsafe for pedestrians and cyclists.

8 Opportunity to formalise parking here to improve ingress and egress and provide clearer parking and circulation spaces.



Great Ocean Road Key Vehicular Route Beach Access Shared Path Desired Pedestrian Link Carpark **Bus Stop**

