

WOODLANDS AND WETLANDS KEY AREA PLAN 2016 IMPLEMENTATION REVIEW – FEBRUARY 2020

The Woodlands and Wetlands Key Area Plan 2016 recommended actions were reviewed by the Nature Parks in January 2020 and endorsed by the Board in February 2020.

The responsibility, priority and timing of the actions are as stated in the Key Area Plan, with the timing based on a ten-year timeframe as follows:

- short-term – commence within 2 years
- mid-term – commence within 5 years
- long-term – commence within 10 years

The status of each action has been given a traffic light indicator as follows:

- **red** – not started or not proceeding
- **amber** – underway
- **green** – completed



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No	Recommended Action	Responsibility	Priority	Timing	Status
1	Adopt the Woodlands and Wetlands KAP as part of the overall Nature Parks Strategic Planning Framework 2012-2017	NATURE PARKS Board	High	Short term	Completed
2	Seek support in principle for the adoption of the Woodlands and Wetlands KAP from key land managing agencies	BCSC, DELWP	High	Short term	Endorsed by the Nature Parks Board.
3	Support the preparation of planning measures to provide adaptation space for the landward migration of saltmarsh and mangrove fringed shorelines	NP, BCSC, DELWP, PV	Moderate and ongoing	Short term	Amendment C140 completed by BCSC.
4	Seek funding to allow further studies and investigations as listed in this report:				
	a) Preparation of voluntary cultural heritage management plans for proposed development within the woodland and wetland reserves.	NP	High	Short term – Long term as funding permits	Not required as yet.
	b) Further investigate the status of one identified threatened ecological flora community listed as Plains Grassland (South Gippsland)	NP	High	Short term – Long term as funding permits	Threatened Species Plan completed.
	c) Conduct a hydrological study of the ideal flows to sustain the Newhaven Swamp	DELWP	High	Short term – Long term as funding permits	Not started.
	d) Prepare a local coastal hazard assessment of the shoreline from Rhyll to Newhaven	NP, BCSC, DELWP, PV	High	Short term – Long term as funding permits	Not started.
	e) Support the review and preparation of planning measures to provide adaptation space for the landward migration of saltmarsh and mangrove fringed shorelines.	NP, BCSC, DELWP, PV, landowners	High	Short term – Long term as funding permits	Amendment C140 completed by BCSC.
	f) Assessment of the potential impacts on ecological values resulting from increased acidity and drainage flow issues at Rhyll Inlet.	NP	High	Short term – Long term as funding permits	Not started.
	g) Local community support and willingness to partner with Nature Parks in the proposed for a small Community Bushland Reserve within Ventnor Koala Reserve	NP, BCSC	High	Short term – Long term as funding permits	Not started.

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No	Recommended Action	Responsibility	Priority	Timing	Status
5	Ventnor Koala Reserve				
	a) Consider establishing a community bushland reserve (- 12 hectares) to allow for approved recreational activities and partnership management arrangements between Nature Parks and the local community.	NATURE PARKS	all Moderate	Short to Mid term	MODIFY ACTION Change to – further investigate the opportunity to open Ventnor Koala Reserve for a variety of public uses and assess impacts on wildlife. Action to be changed to Low priority and Long term timeframe.
	b) The balance of the reserve (-52 ha) to have restricted public access and be managed primarily for conservation values.				
	c) Remove 'Koala' from the reserve name.				
d) Consider the potential to link the community bushland reserve with future trail network for Phillip Island.					
6	Five Ways Reserve				
	Establish a new shared trail link through the reserve to improve safety in crossing Phillip Island Road.	NP, BCSC	High - Moderate	Short to Mid term	Completed
	Construct a shared trail in the road reserve from the motel to the designated road crossing near the entry to the KCC.	NP, BCSC and VicRoads	High - Moderate	Short to Mid term	Completed
	Investigate the benefits of the sale or lease of a portion or portions of the reserve to adjacent landowners to rationalise the reserve's boundaries and reduce NATURE PARKS's management costs in maintaining the remainder of the reserve.	NP	High - Moderate	Short to Mid term	REMOVE ACTION Not considered appropriate for further private lease and no current demand.
7	Koala Conservation Centre				
	Improve the layout, functionality and safety of the entry road and parking areas to the KCC.	NP	High	Short term	Completed as part of relocation works to KCC.
	Plan for the replacement of the older elevated boardwalk used for koala viewing.	NP	Moderate	Mid term	Planning underway.
	Undertake feasibility assessments into the potential benefits of: <ul style="list-style-type: none"> • adding an additional koala viewing area; and/or • a premium product experience allowing visitors to have a more personalized guided tour with a KCC Ranger; and/or • developing a large woodland aviary within the reserve. 	NP	Moderate	Mid term	Planning underway.
	Retain Crooks Paddock for ongoing operational purposes by Nature Parks.	NP	Moderate	Mid term	Completed
	Allow for a shared trail on the management road connecting the KCC parking area to Harbison Road.	NP, BCSC	High	Short term	Planning in progress.

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No	Recommended Action	Responsibility	Priority	Timing	Status
8	Oswin Roberts Reserve				
	Maintain the existing network of recreational trails within the reserve.	NP	Ongoing	Mid term	Completed
	Inform and educate trail users at the trackhead entry points of the shared rights of use on the existing trails.	NP	Ongoing	Mid term	Completed
	Cooperate with the BCSC to develop a new direct route, shared path along Cowes-Rhyll Road at the northern boundary of the reserve to improve the safety for riders.	NP, BCSC	Moderate	Mid term	Planning underway with BCSC.
	Investigate the alignment and costs of a new route for a recreation trail link around the southern side of the freehold title on the northern boundary of the reserve. Subject to the findings of this investigation, construct the link.	NP	Moderate	Mid term	Planning underway with BCSC.
	Formalise the small car parking area off Cowes – Rhyll Road and install trackhead signage for Oswin Roberts reserve.	NP	Moderate	Mid term	Track head signage installed.
9	Conservation Hill				
	Continue to maintain the reserve and existing visitor trail and facilities.	NP	Ongoing	Ongoing	Completed
	Investigate the junk/trash located near the former quarry as to whether these have any heritage value or should be removed.	NP	Moderate	Mid term	Not started.
	Agree a course of action to remove or replace the lookout. If it is to be replaced it should incorporate interpretation of the conservation values of Rhyll and Rowell Swamps (E1). In any event, explore the development of a high quality, at grade viewing area on Conservation Hill as a location for telling the story of the effects of sea level.	NP	Moderate	Mid term	Not started.
	Upgrade and repair the existing pontoon structure on the Mangrove Boardwalk	NP	High	Short term	Planning underway
10	Rhyll and Rowell Swamps				
	Maintain conservation values within the reserve.	NP	Ongoing	Ongoing	Completed and ongoing
	Continue to restrict public access to the reserve.	NP	Ongoing	Ongoing	Completed and ongoing
	Allow access by Nature Parks permit for nature-based tourism purposes, educational research and by environmental and community groups.	NP	Moderate	Ongoing	Limited access permitted through Nature Parks permit process.
	Remove the old bird hide and install signs at known illegal entry points to inform users of the conservation values and limited public access requirements.	NP	Moderate	Mid term	Bird hide not removed but signage in place.
	Continue to support the linking of the reserve to developing wildlife corridors on surrounding properties.	NP	Ongoing	Ongoing	Ongoing

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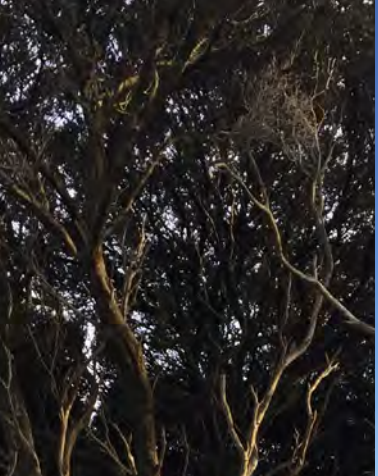
No	Recommended Action	Responsibility	Priority	Timing	Status
11	Rhyll Former landfill and Transfer Station				
	Continue to implement and monitor the Post Closure Plan.	NP	Ongoing	Ongoing	Completed and ongoing.
	Continue to restrict public access to the reserve	NP	Ongoing	Ongoing	Completed and ongoing.
12	Rhyll Inlet				
	Support the recommendations of the WPLCHA including the need to explore planning measures to provide adaptation space for the landward migration of saltmarsh and mangrove fringed shorelines in Rhyll Inlet.	NATURE PARKS as partner with BCSC, DELWP, PV	Ongoing	Ongoing	Amendment C140 completed by BCSC.
	Maintain and enforce compliance with regulations (e.g. prohibit dogs, restrict access by marine craft, impose fines) to help reduce impacts on the breeding and migratory birds.	NATURE PARKS as partner with BCSC, DELWP, PV	Ongoing	Ongoing	Completed and ongoing.
	Continue to monitor the landfill site to ensure that leachate does not impact on the reserve.	NATURE PARKS as partner with BCSC, DELWP, PV	Ongoing	Ongoing	Completed and ongoing.
13	Silverleaves – Banksia Woodland				
	a) Support the recommendations of the WPLCHA including the need to adopt a strategic approach to the monitoring, management and future adaptation of the shoreline including planning measures to minimise the risks. b) Continue fire management planning and practices and other on-going conservation programs.	NATURE PARKS as partner with BCSC, DELWP, PV	Ongoing	Ongoing	Completed and ongoing.
14	Silverleaves Beach				
	a) Support the recommendations of the WPLCHA including the need to adopt a strategic approach to the monitoring, management and future adaptation of the shoreline including planning measures to minimise the risks. b) Maintain and enforce compliance of regulations (e.g. prohibit dogs, restrict access by marine craft, impose fines) to help reduce impacts on the breeding and migratory birds.	NATURE PARKS as partner with BCSC, DELWP, PV	Ongoing	Ongoing	Completed and ongoing.

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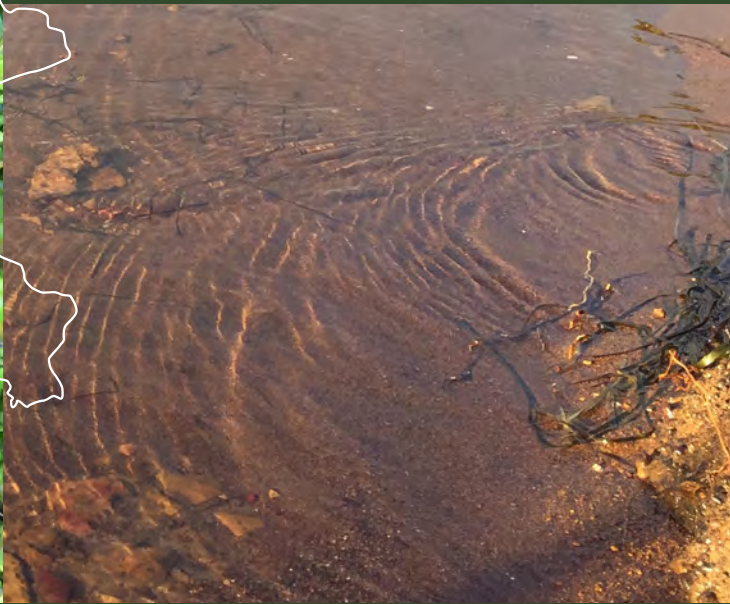
No	Recommended Action	Responsibility	Priority	Timing	Status
15	Observation Point and Ghetto Rocks				
	Support the recommendations of the WPLCHA including the need to adopt a strategic approach to the monitoring and management of predicted changes.	NATURE PARKS as partner with BCSC, DELWP, PV	Ongoing	Ongoing	Completed and ongoing.
	Enforce existing regulations; in particular, maintain a ranger presence during active summer boating months to provide education and interpretation to visitors and to enforce regulations when necessary.	NATURE PARKS as partner with BCSC, DELWP, PV	Ongoing	Ongoing	Completed and ongoing.
	Encourage development of legislative measures that will enable enforcement of restrictions on marine activities such as vehicle speed, mooring, access and/or use of fires) in the waters surrounding the reserve.	NATURE PARKS as partner with BCSC, DELWP, PV	Ongoing	Ongoing	Proposal submitted to Parks Vic but rejected.
16	Rhyll to Churchill Road Saltmarsh and Swan Bay				
	a) Support the recommendations of the WPLCHA including the need to adopt a strategic approach to the monitoring and management of predicted changes.	NATURE PARKS as partner with BCSC, DELWP, PV	Ongoing	Ongoing	a) & b) Completed and ongoing. c) Completed. d) Land boundaries surveyed, and environmental impacts assessed, not recommended at this stage.
	b) Continue to protect the shoreline bird habitat values and to restrict public access to the foreshore reserve to the west and north of Scenic Estate Conservation Reserve.				
	c) Extend the existing foreshore trail westwards along the foreshore at Scenic Estate Conservation Reserve initially to a lookout point on the small coastal bluff and eventually to Fishers Wetland.				
	d) Investigate the feasibility of creating a foreshore recreation trail from Scenic Estate Conservation Reserve to Churchill Road in the long term.				
17	Fisher's wetland to Boys Home Road				
	Complete current works for new trail links and the construction of a bird hide at Fisher's Wetland with interpretation.	NATURE PARKS, BCSC	High	Short term	Completed
	Complete the land survey of the foreshore land between Churchill Road and Fisher's Wetland to enable a feasibility assessment of a new route for a recreation trail link the west to reach Churchill Road. Subject to the findings of this investigation, construct the link.	NATURE PARKS, BCSC	High	Short term	Not started.
	Plan for a future trail link using open space contributions taken with new subdivision of land between Newhaven to Churchill Island Road. Locate the route on higher land at the perimeter of the mangrove swamp and saltmarsh environs to avoid impacts on habitat and above expected inundation levels accompanying sea level rise.	NATURE PARKS, BCSC	Low	Long term	Initial consultation with developers conducted.
	Adopt a strategic approach to the monitoring and management of predicted changes due to sea level rise.	NATURE PARKS, BCSC	Ongoing	Long term	Not started.

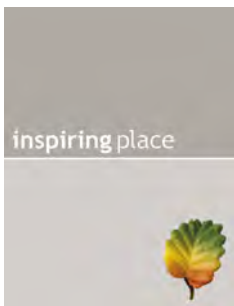
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No	Recommended Action	Responsibility	Priority	Timing	Status
18	Newhaven Swamp				
	Maintain conservation values within the reserve.	NATURE PARKS, DELWP	Ongoing	Short term	Completed and ongoing.
	Continue to restrict public access to the reserve.	NATURE PARKS, DELWP	Ongoing	Short term	Completed and ongoing.
	Allow access by Nature Parks permit for nature-based tourism purposes, educational research and by environmental and community groups.	NATURE PARKS, DELWP	Ongoing	Long term	Limited access permitted through Nature Parks permit process.
	Undertake hydrological study of drainage flows to assess the flows required to sustain the wetland.	NATURE PARKS, DELWP	High	Ongoing	Not completed.
	Monitor environmental impacts with the waste treatment ponds servicing the new residential subdivision in Woolamai.	NATURE PARKS, DELWP	High	Ongoing	Not completed.
19	Minor review of the KAP Implementation Strategy in 5 years	NATURE PARKS	Moderate	mid term	Progress report completed January 2020
20	Major review of the KAP Implementation Strategy in 10 years	NATURE PARKS	Moderate	Long term	Due in 2026.



Phillip Island
Woodlands & Wetlands
KEY AREA PLAN





**Phillip Island
Woodlands and Wetlands
Key Area Plan**

November 2016

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Nature Parks have a primary responsibility for conservation of the woodlands and wetlands reserves that have considerable natural and cultural values. At the same time, people seek access to many of these reserves for recreational use and other activities. The purpose of the KAP is to identify how Nature Parks and other stakeholders can work together to achieve an environmentally sustainable management of the reserve values.

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1 | INTRODUCTION



Phillip Island, located 140 kilometres southeast of Melbourne, is approximately 100 square kilometres in area and supports a diversity of environments and human activities. Phillip Island Nature Parks (the Nature Parks) have management responsibility for ~ 85 kilometres of coastline and other reserves (including woodlands and wetlands) totalling over 1,805 hectares of Crown Land.

The Nature Parks is a not-for-profit body created by the State Government of Victoria in 1996 to manage its lands under the Crown Land (Reserves) Act 1978 “for the conservation of areas of natural interest or beauty or of scientific, historic or archaeological interest”. Day to day management of the public crown land is delegated to Nature Parks as the Committee of Management appointed under the Crown Land (Reserves) Act 1978.

Nature Parks’ charter is to prepare and implement policies and practices to conserve and enhance the Nature Parks’ environment while providing authentic experiences for all.

Nature Parks have a comprehensive strategic policy framework for management of the Crown land under its care. The strategic framework provides the basis for consistency in decision-making, for engagement with the community/stakeholders and for the physical planning of assets such as the coastal, woodland and wetland areas. At the heart of the framework are a series of Key Area Plans (KAPs) that provide specific strategic direction for major reserves under Nature Parks control.

WHAT IS THE KEY AREA PLAN?

The Woodlands and Wetlands Key Area Plan (the KAP) is a high level strategic framework looking at the long-term management of public land on Phillip Island managed under the aegis of Nature Parks.

The KAP is one of many important steps towards achievement of Nature Parks’ vision to make Phillip Island a world-recognised place of conservation significance.

WHAT AREA DOES IT COVER?

Map 1 shows the areas within the scope of the KAP and includes 15 management units previously defined by the Nature Park in its Environmental Plan 2012-2017 designated herein as ‘woodlands and wetlands’ or the ‘reserves’.

The KAP does not address issues and management on private land. However, adjacent land managers and the community have been consulted in its development to ensure integrated management across boundaries and participation in the processes required to achieve the vision for the reserves.

The KAP does not provide detailed master plans or management plans for individual sites.

HOW WILL IT BE USED?

The purpose of the KAP is to:

- analyse existing use of the woodlands and wetland and articulate a sustainable management strategy for the reserves;
- minimise the impact on the reserves while maximising the efficient management of Crown land; and
- develop a strategic framework that illustrates a contemporary long-term management strategy and philosophy that best integrates the aspirations of Nature Park, adjacent land managers, the community and visitors.

The KAP will be used to:

- inform Nature Parks strategic planning activities;

- inform and guide other land managers; guide future planning, infrastructure, services and management by Nature Parks, the Bass Coast Shire Council and others;
- generate support from public and private stakeholder groups; and
- seek funding partners through grant applications.

WHAT PROCESS WAS USED TO PREPARE THE KAP?

The KAP has been prepared under the guidance of Nature Parks and in consultation with the community and significant stakeholders, including the Bass Coast Shire Council (BCSC) and the Department of Environment, Land, Water and Planning (DELWP).

The tasks involved included:

- review of relevant Acts, reports, policies and other information pertaining to the reserves;
- identification of known natural and cultural values;
- examination of existing infrastructure;
- consultation with key land manager including Nature Parks, BCSC and DELWP;
- engagement with stakeholder groups and the wider community ;
- extensive fieldwork and site inspections;
- development of the strategic planning framework to guide the implementation of the KAP; and
- preparation of an implementation strategy.

¹ Consultation and engagement included forums with Nature Parks' staff, targeted community groups active in conservation, the Phillip Island community and individuals. The BCSC, DELWP and Nature Parks formed the Project Steering Committee who were involved in project review meetings during the course of the project. Presentations of the draft KAP were made to the BCSC and the Nature Parks' Board.

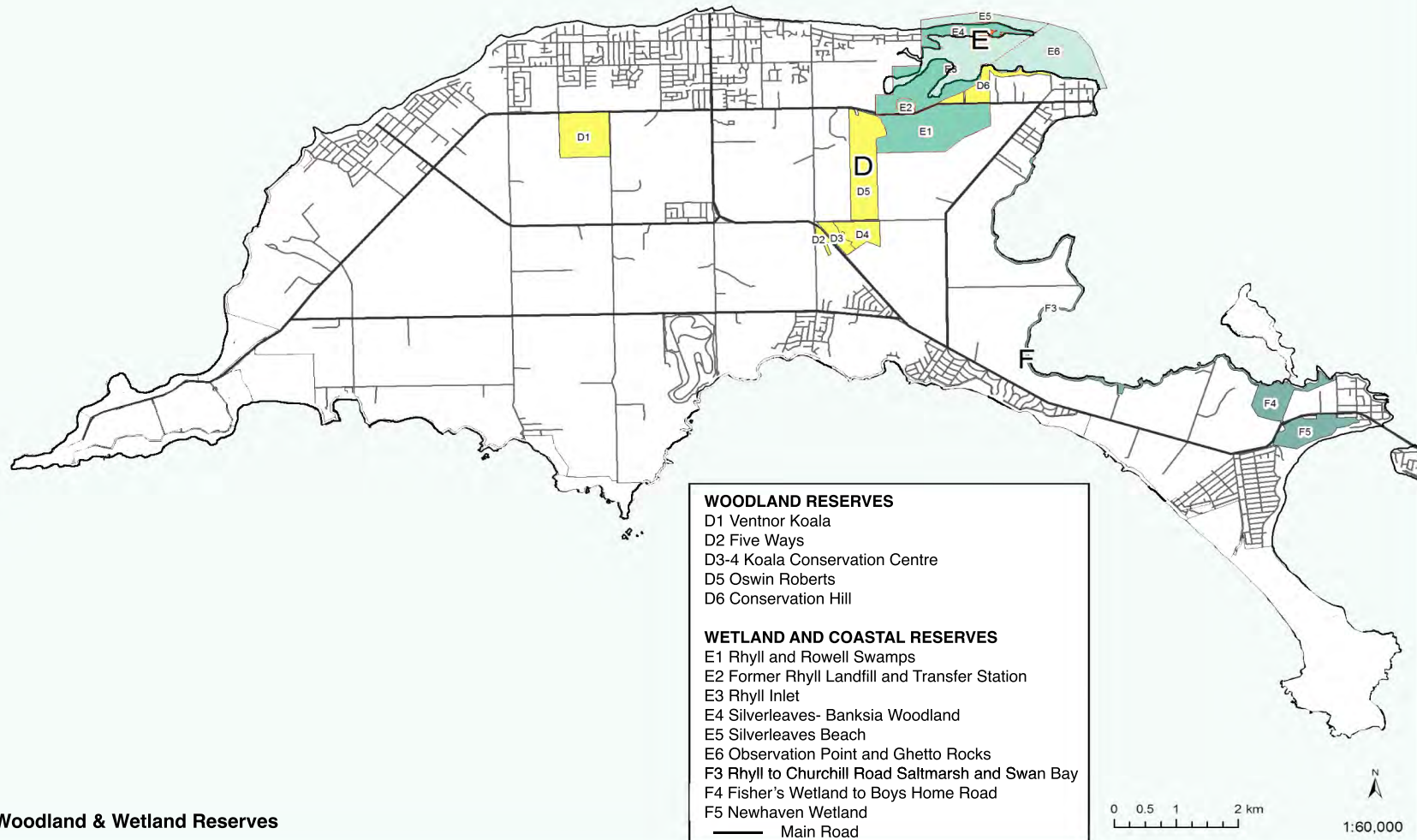


The wetlands, beaches and mudflats are more naturally occurring landscapes that support internationally significant populations of wetland birds including migratory shorebirds. Most of the Nature Park wetland reserves are included in the Western Port Ramsar site and fauna are protected under a number of international treaties, Federal and State legislation.



All the woodland reserves were previously farmed lands and were either part of fully donated or purchased by the local community with the assistance of the former Phillip Island Shire Council and/or the State Government. The main purpose of the land acquisitions was to provide increased habitat for koalas on the island and thus these areas have been revegetated using Australian native species.

**WOODLANDS AND WETLANDS
KEY AREA PLAN 2016**



Map 1 Woodland & Wetland Reserves

2 | CONTEXT



All the woodland reserves were previously farmed lands and were either part of fully donated or purchased by the local community with the assistance of the former Phillip Island Shire Council and/or the State Government. The main purpose of the land acquisitions was to provide increased habitat for koalas on the island and thus these areas have been revegetated using Australian native species.

The wetlands, beaches and mudflats are more naturally occurring landscapes that support internationally significant populations of wetland birds including migratory shorebirds. Most of the Nature Park wetland reserves are included in the Western Port Ramsar site and fauna are protected under a number of international treaties, Federal and State legislation.

No matter, their origins, the woodlands and wetlands are diverse environments with significant natural and cultural values of world, national, state and regional importance.

NATURAL AND CULTURAL VALUES

Notable example of the significant values of the reserves include:

- complex geo-diversity with an array of coastal landforms several of which are listed on the State register of Sites of Geological and Geomorphological Significance²;
- high degree of bio-diversity and conservation priority³ as evidenced by:
- inclusion in the Western Port as a Ramsar site and in the Australian Wetlands data base;
- the listing of the area by BirdLife International as an Important Bird Area (IBA) containing globally significant populations of six species of birds (i.e. > 1% of total world population);

- the protection of numerous migratory bird species and their habitat under various international agreements including JAMBA, CAMBA, RoKAMBA and the Bonn Convention;
- the listing of numerous rare or threatened plant and animal species and their habitats for protection at the Federal level under the Environmental Protection and Biodiversity Conservation Act 1999 (the EPBC Act), the State level under the Victorian Flora and Fauna Guarantee Act 1988 and/or the regional level through their presence on the Victorian Advisory List; and
- the protection from removal or disturbance, without exemption, of all native vegetation by the Bass Coast Shire Council, including ubiquitous species and habitats as well as those that are rare or threatened;
- high scenic quality and aesthetic significance of some areas arising from the interplay of the coastal landforms shaped by wind and waves, framed by coastal native vegetation and sloping pastures strengthened by large populations of a diverse suite of native fauna and extensive areas lacking sign of man-made structures, the absence of which evoking a sense of isolation and remoteness⁴;
- Aboriginal heritage values related to widespread evidence of pre-European occupation of the Island and their value to the contemporary Aboriginal community arising from their linkages to their history and culture and because of the rarity of remaining evidence due to the impacts of disturbance (natural and anthropocentric) since European settlement;
- historic heritage value as part of the evolution of the island's landscape including its role in the chicory industry as represented by the chicory

2 See http://vro.agriculture.vic.gov.au/dpi/vro/portreg.nsf/pages/port_lf_ppsites_sig

3 See A Biosis 2016. Phillip Island Nature Parks (Woodlands and Wetlands: Review of ecology values. Report to Inspiring Place Pty Ltd (Phillip Island Nature Parks). Author: Biosis Pty Ltd, Port Melbourne, Project 21779.

4 Victoria Coastal Council 2006. Coastal Spaces Landscape Assessment Study for the Department of Sustainability and Environment.

5 Bass Coast Municipal Recreation Plan 2009-2014

6 page 87 Nature Parks Environment Plan 2012-2017



Evidence of Aboriginal occupation, such as this granite scraper, may be found in many places, including the coastline and wetland reserves. As a result, a considerable part of the Study Area is within an area of cultural heritage sensitivity as defined by the Aboriginal Heritage Regulations 2007.

kiln in Harbison Road;

- value to tourism as part of the Phillip Island offer; and
- recreation value particularly for the local community.

Beyond formal recognition by various legislative registers or agreements, the woodlands and wetlands are of significant social value to the local community for their importance to the economy and for their role in defining the community and what it means to live on Phillip Island. The strength of these attachments is seen in the strong and frequent community activism and debate over approaches to sustainable management and land use along the coast.

USE VALUES

Whilst the woodland and wetland reserves are important natural and cultural heritage assets for the Phillip Island, access to these reserves is mainly by local residents (including holiday home residents) rather than interstate and international visitors. The exception is the Koala Conservation Centre, which has been developed as a major tourism attraction with an average of 195,000 visitors per annum, of which 60% are international visitors.

Most of the reserves have no developed recreation facilities and several (e.g. Ventnor Koala Reserve, Rhyll and Rowell Swamp, Rhyll landfill) have restricted public access.

Reserves such as Oswin Roberts, Conservation Hill and foreshore to Rhyll, Scenic Estate Conservation Reserve and Fisher's Wetland have shared use tracks that are predominately used for walking, bike riding and running. A recent survey identified that the two most desired facilities by the Bass Coast community wanted were improvement of bike paths and walking trails⁵.

The woodland and wetland reserves also contain natural values that attract bird observers, botanists and others interested in nature study (e.g. photographers, artists, landscape painters).

Phillip Island is located in one of Australia's fastest growing regions with the population of Bass Coast Shire Council expected to grow by 40% by 2036 from an estimated current population of 32,784. On the island, the greatest expected population growth is in the Cowes – Ventnor district (34%) as compared with the remainder of Phillip Island (15%). The resident population on the Island jumps dramatically over the summer months when 38% of annual domestic visitors, primarily from Victoria, come to the Island for a holiday.

The ageing profile of the community will generate greater demand for improved accessibility to reserves and their facilities by people with

mobility difficulties and/or for shared tracks and trails for more active retirees seeking recreation opportunities in their increased leisure time.

The wetlands also provide important ecosystem services including their role in the management of stormwater runoff.

Fisher's Wetland, for instance, was reclaimed in 1998 as a wetland and a system of levee banks and weirs were installed to control surface water levels. Stormwater drainage from the Cape Woolamai housing estate traverses private land before reaching the wetland. A second drain located to the southwest joins into the main drain. The construction of the drainage system and roads in the housing estate has greatly increased the flow of water due to increased hard surfaces⁶.

Other utilitarian uses of include the use of the former Sandgate farmhouse at Conservation Hill as accommodation for a conservation service provider (fox eradication specialist).

The study area also includes the former Rhyll landfill and transfer station site (E2). The site is no longer in use, has been closed and is being re-vegetated in line with a post closure plan. There are strict guidelines to protect the capping of the site that limit the kinds of activities that can occur there and that restrict vegetation to shallow rooting, low growing species. At present the area is fenced, prohibiting public access to the site.

ISSUES

Several major issues affect the management of the entirety of the woodlands and wetland reserves. These are:

- the potential impacts of climate change on the reserves;
- the effects of increased pressures arising from growth in visitation to and in the base population of Phillip Island; and
- resourcing of ongoing land management.



Rising sea levels and increased storm events are expected to lead to significant coastal erosion and inundation along the northern coastline. Growth in visitor numbers and the base population on Phillip Island will place increased pressure for access and use of the reserves.

Impacts of climate change

Rising sea levels and increases in the frequency and intensity of major weather events are expected to cause some parts of the Phillip Island coastline to be inundated causing coastal vegetation such as mangroves and saltmarsh to retreat inland.

The Western Port Local Coastal Hazard Assessment 2016 (WPLCHA) is a comprehensive hazard assessment focusing on inundation and erosion hazards around all shorelines of Western Port including the northern shorelines of Phillip Island and the surrounds of French Island. The expected changes will dramatically change the shoreline of the wetland and coastal reserves leading to significant recession and loss of coastal wetlands or retreat further landward in Rhyll Inlet. Sea level rises in conjunction with high storm tides will add to the extremes of inundation of the coastline, other than close to Rhyll where some hard rock occurs on the foreshore.

Human Pressures are intensifying

Market research conducted for the Phillip Island and San Remo Tourism Strategy 2035⁷ indicates an outlook of continuing growth in visitor numbers to Phillip Island due to:

- expected growth in both the domestic market and international market to Australia over the next decade with Phillip Island being one of Victoria's key tourism destinations;
- the high appeal of Phillip Island attractions to the growing visitor markets from China and other Asian countries; and
- proximity to Melbourne's rapidly growing population.

The Tourism Strategy projected that with a growth of 4.3% per annum, Phillip Island and San Remo could reach 3 million visitors and 4 million visitor nights by 2035. This is 1.4 million visitors and 1.7 more million visitor nights than today.

The population of Bass Coast Shire Council is expected to grow to 46,038 by 2036, an addition of 13,254 persons to the forecasted 2016 population of 32,784. The projected growth represents a 40.43% change over the period between 2016 and 2036. A 37% increase in the resident population of Phillip Island and San Remo is further projected for this period (i.e. additional 4,241 residents). Of this growth, the greatest increase is expected to be in the Cowes – Ventnor district (34%) as compared with the remainder of Phillip Island (15%).

Growth in human populations will bring change in the frequency, intensity and types of uses affecting the reserves leading to potential increases in the scale, number, geographic spread and/or complexity of the impacts on values. Amongst the issues of concern are the loss of vegetation, fragmentation of habitats, invasion of vegetation communities by weeds, domestic and feral animal species impacts, erosion and on the visitor experience of the place as a eco-tourism destination due to crowding.

It is also expected that growth in the base population and visitors numbers will place increased pressure on existing recreation trails and include a push for access to and through additional locations that are currently off limits. These pressures are already being seen at:

- Ventnor Koala Reserve because of its close proximity to the residential developments between Cowes and Ventnor, the desirability of the bushland setting as a venue for activities such as walking, running and bike riding;
- Oswin Roberts Reserve where evidence of off trail access is being seen as people stray from the formed trails;
- along the Cowes-Rhyll Road where there is an existing and growing interest in completing a shared trail connections between Cowes and Rhyll; and

⁷ Earthcheck and TRC 2016. Phillip Island and San Remo Tourism Strategy 2035

- shared trail connections between Newhaven and Churchill Island and along the foreshore from Scenic Estate Conservation Reserve eastwards to Churchill Island.

Resourcing of ongoing land management

On the surface the reserves would appear to be relatively stable, self-sustaining systems that flourish and support a diversity of native plant and animal species including those of conservation significance and other, no less valuable, ubiquitous physical and biological attributes .

The relative stability of these systems points to the success of revegetation efforts on previously cleared sites or to the retention of wetland systems little altered since colonisation in contrast with massive changes to other habitats.

This apparent stability, however, belies the active management and enforcement role of the Nature Parks in protecting the Reserve's values including tasks such as:

- weed and feral animal control and eradication;
- endangered species recovery plans;
- erosion control and track management;
- fire management to reduce fuels to protect adjacent properties and for ecological purposes to stimulate age diversity within the various vegetation types;
- the monitoring of wildlife populations and ecological conditions; and
- general maintenance activities such as fencing and rubbish removal.

The KAP recognises the importance of these tasks and the necessity for long term funding by Nature Parks as part of its ongoing responsibilities for conservation management while providing for sustainable use of these Reserves.

Amongst the greatest threats to the stability of the natural systems of the Reserves and to the protection of their cultural heritage values is damage from disturbance. Removal of vegetation is known to reduce habitat values and enable weed invasion. Diminution of vegetation can also lead to erosion and with it the loss of evidence of Aboriginal occupation or in some cases to landslip or rock fall.

Conservation outcomes will be further affected by long-term human impacts such as climate change. As sea level rises, extreme weather events become more intense and frequent and temperatures increase, species composition and local ecosystems will be further altered.



Existing shelter on the popular foreshore trail from Rhyll to Conservation Hill and new shared trails recently constructed at Fisher's Wetland .

3 | A PLANNING FRAMEWORK



The framework establishes a vision, guiding principles, management areas and a hierarchy for activity and recreation nodes.

THE VISION OF THE KAP

The woodlands and wetlands reserves of Phillip Island will exemplify Nature Parks' mission to conserve the values of these reserves in a world-class manner while providing for recreation and tourism experiences commensurate with the exceptional environmental, social and economic opportunities available through their appropriate management.

GUIDING PRINCIPLES

The guiding principles in the *North and South Coast Key Area Plan 2014* have been reviewed and revised to suit the long term management of the woodland and wetland reserves. The four principles are the foundation of the KAP and stipulate that the values of the reserves are to be understood and conserved. Sustainable use should be allowed where these values can be protected.

Principle 1. Conservation has primacy

The KAP respects the primacy of nature conservation as an over-arching objective of Nature Parks and places this as a central tenet the KAP for the woodlands and wetlands reserves.

The woodland and wetland reserves have international, national, state, regional and locally significant biological and cultural aspects that are intrinsically valuable, that is, they are important for their own sake independent of human use. Protection of the intrinsic value of biological systems emphasises the rights of nature to be self-sustaining and the role of ecosystems in helping to maintain life support functions for the whole of

the biosphere. Protection of cultural values speaks to the retention of sites that are a significant part of the local community identity, that is, sites that have significance for cultural, scientific, Aboriginal or historical heritage importance that define a sense of place.

Land management and long-term research are addressed in Nature Parks' *Environment Plan 2012-2017* and are supported by impact specific management plans for such things as fire, feral animals, weeds and research and monitoring programs.

Land use decisions in support of on-going natural processes, habitats and species and or cultural significance to mitigate human impact on these values are an essential focus of the KAP.

Principle 2. Allow reasonable and safe access

The reserves have significant natural and cultural values that are important to visitors, residents and a variety of communities of interest. Natural systems underpin the range of people's experience, enjoyment and relationship to the reserves, therefore, access must avoid or mitigate potential impacts on values whilst meeting expectations for safe, convenient and easy access. This means in some reserves, as occurs now, public access may be restricted to limit the potential impacts.

The KAP identifies where access to and within the reserves can be managed on a sustainable basis and where facilities will be provided to assist access. The focus is on directing non-dependent uses of the reserves to modified or resilient settings where impacts can be managed. Equal access is considered wherever possible, and reasonable recognising that the landform of some of the reserves makes access to all locations extremely difficult and/or prohibitively costly.

Where possible, all abilities access to major site features or infrastructure should be considered.



The coasts have international, national, state, regional and locally significant biological and cultural aspects that are intrinsically valuable independent of human use. The Nature Parks primary mission is ensure these values are understood and conserved.



A number of opportunities have been identified within the KAP to utilize the existing trails on or adjacent to some woodland and wetland reserves to provide an enhanced experience of Nature Parks assets, and to provide new links that will improve the connection of shared recreation trails across the Island. There are some reserves where public access should remain restricted for conservation management purposes or where it would be impracticable to provide trails.



The KAP identifies the Koala Conservation Centre as a primary activity centre and recreation node. This is the only reserve where considerable infrastructure and facilities are required to cater for high levels of visitors.

Principle 3. Provide quality experiences

Many of the reserves attract low numbers of interstate and international visitors. Nonetheless, they attract regular use from the local island community especially for the use and enjoyment of the trails that abut or traverse some of the reserves.

One exception to the local interest in the reserves is the Koala Conservation Centre (the KCC) with its resident koala population and its well established visitor infrastructure. The KCC is a major visitor attraction for international, interstate and intrastate visitors.

In either case, whether providing for locals or visitors, there is an expectation for sophisticated quality experiences where access is provided. People's experience of the reserves should be of a standard that reflects the importance of these areas as natural environments and cultural landscapes of considerable value to the nation and state. This is consistent with the mission of Nature Parks charter is to prepare and implement policies and practices to conserve and to enhance the Nature Parks' environment while providing authentic experiences for all.

The quality of the user experience is underpinned by quality infrastructure that is sensitively located and designed to a high aesthetic standard and to meet sustainability objectives. The KAP puts an emphasis on why and where existing infrastructure is to be upgraded and/or additional infrastructure provided.

The KAP also addresses services and interpretation that will maximise the quality of the user experience and the on-going benefits to be derived by having an informed audience.

Principle 4. Manage with partners

Parks' actions play an important role in reserve management but their impact is lessened without a holistic approach being adopted by all land managers across the island. Involvement of land managers and stakeholders strengthens the understanding and engagement of the community towards achieving sustainability of the reserves.

The KAP examines the roles of various stakeholders in the management of the reserves, focusing on the responsibilities and actions of the Nature Parks, the BCSC, DELWP, community and stakeholder groups including private landowners and how they might be best integrated. Consideration is given throughout to the net benefits to be achieved and the capacity and available resources of all parties to take action and maintain infrastructure.

Engagement of the community in the ongoing planning, development, management and maintenance of the reserves is vital to achieving sustainability of the known values.

Reserve Management Areas

The coastal management areas identified in the *North and South Coast Key Area Plan 2014* have been reviewed and adapted for the woodland and wetland reserves as shown in Table 1. The categorisation of the reserves in Map 2 assumes the recommendations presented later in the KAP for changes to current use being adopted.

The former tip site has been excluded from the categorisation due to its unique situation – limited conservation values and that access will remain restricted into the long-term to ensure post closure objectives are met.

The Conservation Areas would include:

- southern part of Ventnor Koala Reserve
- Rhyll and Rowell Swamps
- Rhyll Inlet

- Silverleaves – Banksia Woodland
- Silverleaves Beach
- Observation Point and Ghetto Rocks
- Newhaven Swamp

The Conservation - Rural Interface Areas would include Rhyll to Churchill Road Saltmarsh and Swan Bay (except the foreshore at Scenic Estate Conservation Reserve).

The Reserve Access Areas would include:

- Oswin Roberts Reserve
- Conservation Hill
- Foreshore at Scenic Estate Conservation Reserve
- Fisher's Wetland to Boys Home Road
- Five Ways Reserve
- Koala Conservation Centre
- northern part of Ventnor Koala Reserve



A 200 year old tree located outside the Koala Conservation Centre is a remnant of the past vegetation on Phillip Island.

Table 1: Proposed Reserve Management Areas

Conservation Areas	Conservation – Rural Interface Areas	Reserve Access Areas
Intent		
<p>To protect and manage biological, ecological, geological, geomorphological and cultural values of significance.</p>	<p>To provide integrated management of the natural and cultural values on public lands adjoining privately owned land.</p>	<p>To provide and manage public access and development of appropriate facilities consistent with maintenance of the reserve values.</p>
Key Management Directives		
<ul style="list-style-type: none"> • Protect, improve and restore values of significance • Identify and protect threatened species and their habitats • Avoid interference with natural processes • Retain largely inaccessible parts of the reserves to preserve their significant biodiversity and ecological integrity • Conserve sites and landscapes of cultural, scientific, historical and aesthetic significance • Identify, protect and manage Aboriginal cultural heritage in partnership with Aboriginal communities 	<ul style="list-style-type: none"> • Protect, improve and restore natural values that extend over different land tenures • Identify, protect and manage heritage values that extend over different land tenures • Recognize operational requirements of rural land managers • Consider opportunities for public access where there is landowner support, safe access and where the potential for impacts can be avoided or substantially mitigated • Foster partnership management arrangements and resource sharing between parties 	<ul style="list-style-type: none"> • Identify suitable locations with safe and convenient access where the potential for impacts can be avoided or substantially mitigated • Enhance community use, enjoyment and experience of the reserve values • Ensure development is consistent with identified activity recreation nodes • Ensure the development on reserves is functionally dependent upon the location • Ensure the development of facilities on and adjacent to the reserve are appropriately designed and sited

Activity and recreation nodes

The North and South Coast Key Area Plan 2014 also defined a hierarchy of four types of activity and recreation nodes as a way of differentiating the level of infrastructure that may be required at locations on Nature Parks' land. The levels of the hierarchy were:

- primary activity and recreation nodes;
- secondary activity and recreation nodes;
- local access and recreation sites; and
- natural areas.

Table 2 shows the application of the hierarchy to the woodland and wetland reserves.

Attachment A provides a description of each level of the hierarchy and identifies a set of guidelines for the provision of access and facilities.

Most of the reserves fit within the Natural Area category with five reserves being designated as Local Access and Recreation Sites primarily due to the provision of shared recreation trails within these reserves. This does not infer less significant natural and cultural values, but rather the need to manage these values knowing there is regular recreational access and use. No reserve was considered to be a Secondary Activity and Recreation Node. The Koala Conservation Centre is the only reserve considered to be a Primary Activity and Recreation Node given the high level of visitation to the site and consequent requirement for well-developed visitor infrastructure.

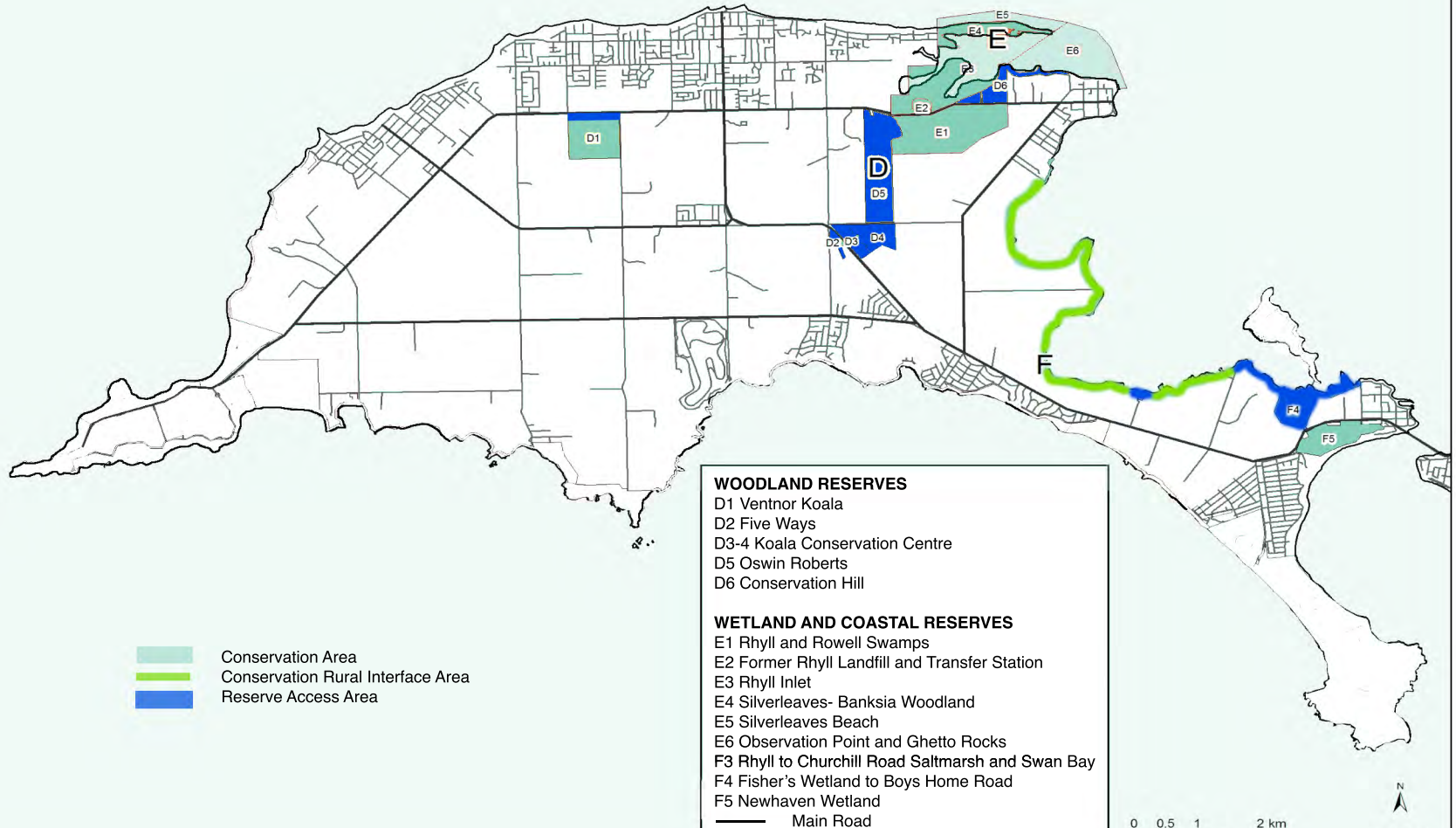
The Mangrove Walk along the Rhyll Inlet foreshore of Conservation Hill Reserve is a popular shared trail used by the local community and visitors.

Table 2: Hierarchy of Woodland and Wetland Reserves

Natural Areas	Local Access and Recreation Sites	Secondary Activity and Recreation Nodes	Primary Activity and Recreation Nodes
Southern part of Ventnor Koala Reserve	Oswin Roberts Reserve	No reserves listed	Koala Conservation Centre
Five Ways Reserve	Conservation Hill		
Rhyll & Rowell Swamps	Foreshore at Scenic Estate Conservation Reserve		
Rhyll Inlet	Fisher's Wetland to Boys Home Road		
Silverleaves – Banksia Woodland	Northern part of Ventnor Koala Reserve		
Silverleaves Beach			
Observation Point & Ghetto Rocks			
Rhyll to Churchill Road Saltmarsh & Swan Bay (except foreshore at Scenic Estate Conservation Reserve)			
Newhaven Swamp			



**WOODLANDS AND WETLANDS
KEY AREA PLAN 2016**



Map 2 Management Areas

4 | STRATEGIC PRIORITIES



The mission of Nature Parks is to manage the conservation values of the coasts for their intrinsic values. Land management activities at Nobbies (pictured) and elsewhere demonstrate a commitment to achieving their aim.

The management directions for each of the woodland and wetland reserves has been prepared based on information gathered by:

- review of the *Nature Parks Environment Plan 2012-2017*;
- review of other background information reports including vegetation plans, fire management plans and management plans that have been prepared for some reserves;
- research and selected site visits undertaken by Biosis for the preparation of the ecology values and cultural heritage values of the reserves (refer to Attachment B and C in the Technical Report);
- site visits with Nature Parks' staff; and
- engagement with a range of stakeholders including the Phillip Island community, key community and interest groups, Nature Parks' staff and other land managers.

The Technical Report provides a detailed assessment of each of the 14 woodland and wetland reserve. This includes:

- a description of the reserve;
- a summary of the known reserve values and uses;
- an outline of the management issues and opportunities; and
- recommended management directions (these are listed in the Action Plan).

The strategic priorities for future action were identified as:

- Prepare for rising sea levels
- Connect recreation shared trails
- Foster nature based tourism opportunities
- Improve visitor awareness of conservation values and the need for proper use of the reserves

- Maintain resources for conservation management
- Undertake further studies

Strategy Priority 1 - Prepare for rising sea levels

The *Western Port Local Coastal Hazard Assessment 2016* predicted that the potential impacts of rising sea levels are likely to cause significant erosion of the northern shoreline of Phillip Island and inundation of the lower lying area along it. These changes will result in the loss of the existing mangrove and saltmarsh vegetation with the recession of the shorelines beyond the current reserve boundaries onto private land. It will also lead to the significant loss of the current Nature Park wetland and foreshore land reserves from Silverleaves to Rhyll Inlet and potentially from Rhyll to Churchill Island.

More specifically, the report summary of the coastal hazards for the Rhyll Inlet and Silverleaves coastal area were outlined for the years of 2040, 2070 and 2100. By the year 2100 it was assessed as being likely that:

- the scale of impact of storm tide inundation hazards is expected to be extreme
- there will be significant shoreline variability with possibly very significant changes to the eastern end of the contemporary spit alignment and configuration;
- there will be major recession of the shoreline due to sea level rise;
- there will be significant loss of coastal wetlands but with potential ability for coastal wetlands to migrate landward in Rhyll inlet; and
- there is a possibility of major slope instability.

The report makes the following recommendations for the Silverleaves – Rhyll Inlet area:

- Dating of the sediments and individual dune ridge sequences of the Sandy Spit landforms

would enable the evolutionary trajectory and underlying variability of these landforms to be understood with much greater confidence and may provide the ability to refine hazard extents on these landforms.

- Improved understanding of the drivers and processes involved in genesis and transport of these sand lobes could be gained through additional study of the morphological dynamics of Middle Bank (in the western entrance of Western Port). However, such a study would require a significant field monitoring program and may not result in further refinement of the predicted erosion hazards along the sandy shorelines.
- Collation of further local information, such as oblique photographs, community history and recollections could inform an understanding of how these sand lobes have varied.
- Long term monitoring of the condition and stability of the coastal structures could be implemented and further detailed assessment of design conditions including their effectiveness in managing coastal erosion hazards undertaken prior to future adaption works.

Specific measures to manage coastal hazards due to sea level rise could include the following:

- A strategic approach to the management and future adaptation of the existing shoreline protection works;
- Planning measures to provide adaptation space for the landward migration of saltmarsh and mangrove fringed shorelines in Rhyll Inlet;
- Planning measures to minimise the risks within the hazard overlays developed in the WPLCHA; and
- Refer future proposed development along

the bluffed backed shorelines that lie within the erosion hazard overlays developed in the WPLCHA for specialist geotechnical assessment.

These recommendations are supported by this KAP and are identified as being a major strategic priority for it, especially given the predicted extent of inundation and likely loss of wetlands and coastal reserves.

In particular, it is recommended that Nature Parks be a partner involved to future negotiations with landowners to help ensure that conservation values are managed as the shoreline recedes.

Strategy Priority 2 - Connect recreation shared trails

A number of opportunities have been identified to utilize the existing trails on or adjacent to some woodland and wetland reserves to provide an enhanced experience of Nature Parks assets, and to provide new links that will improve the connection of shared recreation trails across the Island.

The identified priorities are to investigate the potential for:

- a shared trail link through Five Ways Reserve to provide a safe and convenient link from Smiths Beach Road to the designated crossing point on Phillip Island Road at the KCC;
- a shared trail use on the management road within the Koala Conservation Centre to create a safe and convenient link from the crossing at Phillip Island Road through to the trails within Oswin Roberts Reserve;
- safer option for experienced bike riders using a proposed on-road path on Cowes – Rhyll Road at the northern end of Oswin Roberts Reserve;
- new short trail link at the northern end of Oswin Roberts Reserve to provide a more convenient connection between the existing shared trails along Cowes – Rhyll Road east and west of the reserve;



The proposed shared trail link through Five Ways Reserve would provide a connection from Smiths Beach Road trail to the crossing point on Phillip Island Road and then to Koala Conservation Centre.



The proposed shared trail link from the Koala Conservation Centre to Oswin Roberts Reserve would utilise the internal management road.

- assess the feasibility for a foreshore trail between Churchill Road and Fishers Wetland Reserve using recent land tenure survey; and
- a future inland trail link between Newhaven and Churchill Island Road using open space contributions arising from future land subdivision.

Stakeholder consultations indicated significant community concern with the lack of a safe crossing point at the Phillip Island Road, Smiths Beach Road and Harbisons Road intersection. This was seen as a major concern for school groups and recreational bike riders. The proposed alternative of establishing a safe shared trail connection via Five Ways Reserve and the Koala Conservation Centre will help overcome these concerns. Importantly it will provide a safer south-north shared trail on Phillip Island from Smiths Beach to Rhyll.

Strategy Priority 3 - Foster nature based tourism opportunities

The woodland and wetland reserves were reviewed with the potential for future nature based tourism opportunities. Overall there appears to be limited prospects for attracting high quality nature based tourism development within the reserves due to:

- the lack of suitable sites within the reserves that are sufficiently attractive (as compared with many other sites on Phillip Island) for investment in higher quality nature based tourism development;
- the significance of the identified natural values and the potential for some developments to create adverse impacts on these values; and
- the potential for major impact from rising sea levels and increased storm events on many of the wetland and coastal reserves.

It is considered that the woodland and wetland reserves are more suited to be managed as places where future nature based tourism activities can occur without the need for major investment in visitor facilities and infrastructure.

Nature based tourism developments such as visitor accommodation may be better located outside of the Nature Park reserves where there is less risk of adverse impacts on natural and cultural values. Nonetheless, Nature Parks may give consideration to future development of accommodation that can demonstrate beneficial integration with the KCC while incorporating development of a standard befitting of the brand of Nature Parks

The KAP identified the opportunity for adding new nature based tourism attractions/experiences to the Koala Conservation Centre. These options included:

- adding an additional koala viewing area; and/or
- a premium product experience allowing visitors to have a more personalized guided tour with a KCC Ranger; and/or
- developing a large woodland aviary within the reserve to enable the development of conservation programs involving the breeding and re-release of endangered or threatened species on to the island.

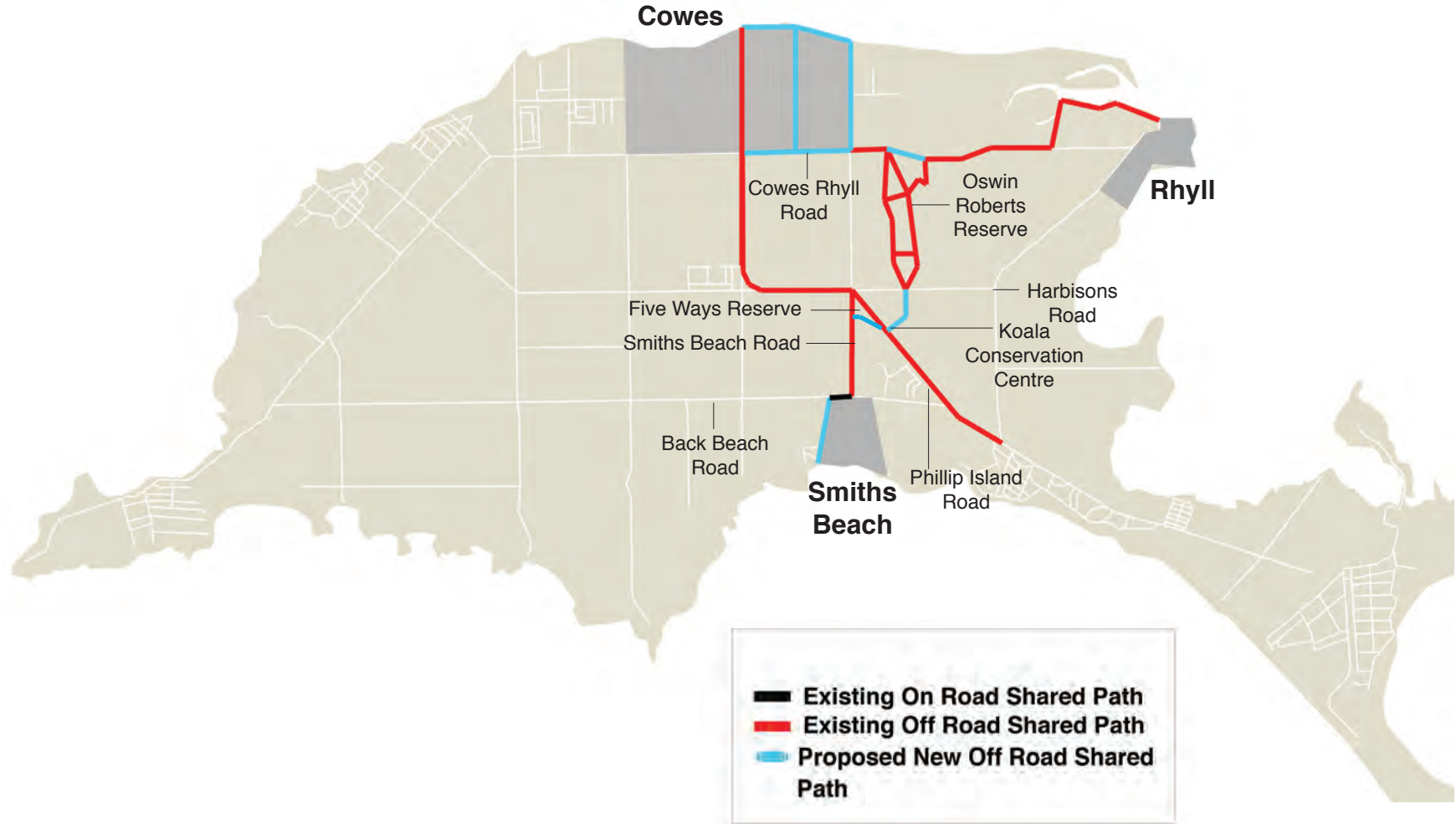
Of these proposals, the concept of a large woodland aviary is considered to have substantial conservation benefits, while strengthening and diversifying the attraction base at the KCC. Similar conservation tourism experiences have been successfully developed around the world (e.g. Birds of Eden, South Africa), and subject to a detailed feasibility assessment, may help create a new visitor market and strengthen the financial sustainability of the KCC attraction in the future. Such an attraction would have the potential to appeal to a wider visitor market than those currently visiting the KCC.

It is recommended that the conservation brief be further developed in parallel with a business feasibility study to determine the full potential and costs associated with such a project to guide further investment by Nature Parks.



A number of options were identified for adding to the nature based visitor experiences at the Koala Conservation Centre including adding an additional koala viewing area, personalised guided tours and the development of a large woodland aviary in support of Nature Parks' conservation charter.

**WOODLANDS AND WETLANDS
KEY AREA PLAN 2016**



**Map 3 Concept Shared Trail Links
Smiths Road-Rhyll-Cowes**



Strategy Priority 4 - Improve visitor awareness of conservation values and the need for proper use of the reserves

Whilst the Phillip Island community members have demonstrated a strong passion and commitment to conservation management, it is necessary to continue efforts to improve awareness about the area's values and the need for continued diligence in conservation management. This can be achieved by establishing a consistent conservation theme or message through the promotion, marketing, product delivery, information and interpretation opportunities being provided.

This message now needs to be translated to the existing woodland and wetland reserves through:

- adoption of consistent messages on entry signs and trackhead signs;
- interpretation at key visitor locations;
- consistent messaging in the print media and social media including download apps;
- consultation with recreation user groups about access and understanding of a code of practice when using the woodland and wetland reserves;
- enforcement and compliance of regulations with offenders including the application of fines for offenders;
- building co-operative communications with the local community to report illegal activities within the reserves; and
- working closely with Victoria Police and other land managers to assist in limiting illegal access and use of the reserves.

Many of these tasks are already adopted to some degree by Nature Parks, as recognised leaders in creating visitor education and improving awareness of the natural and cultural values on Phillip Island. There is, however, always room for improvement.

Strategy Priority 5 - Maintain resources for conservation management

The growing base population and visitors to Phillip Island will place increased pressure on the existing Nature Parks reserves and in particular the levels of use on the popular shared recreation trails.

The active management and enforcement role of the Nature Parks in protecting the Reserve's values will continue to be necessary and will include tasks such as:

- weed and feral animal control and eradication;
- development and implementation of endangered species recovery plans;
- erosion control and track management;
- fire management to reduce fuels to protect adjacent properties and for ecological purposes to stimulate age diversity within the various vegetation types; and
- the monitoring of wildlife populations.

These ongoing responsibilities require long term funding commitments independent of the pressures for economic returns on the provision of access and the use of the reserves.

The potential impacts of rising sea levels on Nature Parks wetland and coastal reserves will require a substantial shift in management resources towards planning for coastal change and where possible, managing the landward migration of saltmarsh and mangrove fringed shorelines.

Strategic Priority 6 – Undertake Further Studies and Investigations

One of the key performance outputs from the Project was to identify any future studies or investigations that may be required. Table 3 lists a number of studies and investigations that have been identified at this point in the preparation of the KAP.



Observation Point is one of the most important roosting areas for migratory birds in Western Port and is BioSite of national significance due to the number of Bar-tailed Godwit, Whimbrel and Pied Oystercatcher that use the area. However these values are threatened by human activities such as illegal walking of dogs on Silverleaves Beach and marine craft landing on the Point or creating noise disturbing the habitat.



Visitor signs providing information about reserve values and impacts are important management tools for helping conservation management.

5 | IMPLEMENTATION STRATEGY



It isn't realistic to expect that the recommended actions can be all implemented over a short period of time. It is important, therefore, to examine short term, mid-term and long-term scenarios for implementing the recommended actions.

The following Table identifies the recommended actions from the KAP, who needs to be involved and the timing for implementation. The Action Plan is based on a 10 Year timeframe using the following:


- short-term – commence within 2 years (2016-2017);
- mid-term – commence within 5 years (2016 – 2020); and
- long-term – commence within 10 years (2016 – 2026).

It is recognised that the timing will be very dependent upon available funding, partnership support with other land managing agencies and the level of community support. In some cases the implementation may require development and approval processes being negotiated between different agencies before a recommendation can be acted upon. Further, whilst an action may have priority within this Key Area Plan, there may be other higher priorities on Phillip Island for Nature Parks or BCSC that may necessitate that actions be delayed.

Concept plans were prepared for some of the woodland and wetland reserves to demonstrate the recommended management directions for the reserves. These plans are included in Attachment B.

Action Plans often become less relevant after 5 years, generally requiring review and updating in relation to what has been achieved and the impact of emerging issues or new opportunities. Such reviews generate the need for a rolling Five Year Action Plan for 2015-2019 and then a revised action plans for 2020-2024.

Table 3: Further Studies and Investigations

Identified Future Study and Investigations	Rationale	Identified Future Study and Investigations	Rationale
Preparation of voluntary cultural heritage management plans for proposed development within the woodland and wetland reserves.	<p>Whilst there are no large scale ground works recommended within the KAP, it would be appropriate to prepare voluntary cultural heritage management plans for projects with relatively smaller impacts such as:</p> <ul style="list-style-type: none"> the proposal for a Community Bushland Reserve in the northern portion of Ventnor Koala Reserve; the proposed shared trail through Five Ways Reserve; any large future site works at KCC e.g. koala viewing boardwalk, aviary; upgrading the small car park and trail connections near Cowes-Rhyll Road in the northeast corner of Oswin Roberts reserve; foreshore trail connections at Scenic Estate Conservation Reserve; and foreshore trail connections between Fishers Wetland and Churchill Road. 	Support the review and preparation of planning measures to provide adaptation space for the landward migration of saltmarsh and mangrove fringed shorelines.	The potential risks of erosion and inundation have been identified as a major issue for the long term management of the wetland and coastal reserves.
Further investigate the status of one identified threatened ecological flora community listed as Plains Grassland (South Gippsland)	The Ecology Report in Attachment B of the Technical Report indicates that EVC Brackish Grassland was recorded by Bennet and Cook (2008) at Ventnor Koala Reserve and Rowell Swamp. The survey could determine whether there are remnants or incorrect recording.	Assessment of the potential impacts on ecological values resulting from increased acidity and drainage flow issues at Rhyll Inlet.	Consultations with community expected that this may be caused by limited control of cattle in the foreshore environs to the west of the former Rhyll landfill and transfer station.
Conduct a hydrological study of the ideal flows to sustain the Newhaven Swamp, Rhyll Swamp and Fishers Wetland	DELWP are conducting a Groundwater Environment Plan in 2017 and this should include investigations into the hydrological flows.	Local community support and willingness to partner with Nature Parks in the proposed for a small Community Bushland Reserve within Ventnor Koala Reserve.	The management directions for Ventnor Koala Reserve are intended to provide some capacity for local recreational trail activities whilst securing the sustainable management of the values within the larger part of the woodland reserve.
Prepare a local coastal hazard assessment of the shoreline from Rhyll to Newhaven	This area was not included in the Western Port Local Coastal Hazard Assessment 2016. The assessment would indicate the likely risks of erosion and inundation in the medium to long term.		

The preparation of local coastal hazard assessments of the shoreline from Rhyll to Newhaven need to be undertaken to address potential coastal erosion and inundation risks, and to allow planning for the retreat of the shoreline over time.

No	Recommended Action	Responsibility	Priority	Timing
1	Adopt the Woodlands and Wetlands KAP as part of the overall Nature Parks Strategic Planning Framework 2012-2017	NP Board	high	short-term
2	Seek support in principle for the adoption of the Woodlands and Wetlands KAP from key land managing agencies	NP, BCSC, DELWP	high	short-term
3	Support the preparation of planning measures to provide adaptation space for the landward migration of saltmarsh and mangrove fringed shorelines	NP, BCSC, DELWP, PV	moderate and ongoing	mid term – long term
4	Prior to implementing recommended works in the Woodlands and Wetlands KAP, undertake environmental and cultural assessment to help eliminate, mitigate or minimize any impacts on the natural and cultural values.	NP	ongoing	ongoing
5	<p>Seek funding to allow further studies and investigations as listed in this report:</p> <p>a) Preparation of voluntary cultural heritage management plans for proposed development within the woodland and wetland reserves.</p> <p>b) Further investigate the status of one identified threatened ecological flora community listed as Plains Grassland (South Gippsland)</p> <p>c) Conduct a hydrological study of the ideal flows to sustain the Newhaven Swamp, Fishers Wetland and Rhyll Swamp</p> <p>d) Prepare a local coastal hazard assessment of the shoreline from Rhyll to Newhaven</p> <p>e) Support the review and preparation of planning measures to provide adaptation space for the landward migration of saltmarsh and mangrove fringed shorelines.</p> <p>f) Assessment of the potential impacts on ecological values resulting from increased acidity and drainage flow issues at Rhyll Inlet.</p> <p>g) Local community support and willingness to partner with Nature Parks in the proposed for a small Community Bushland Reserve within Ventnor Koala Reserve.</p>	<p>a) NP</p> <p>b) NP</p> <p>c) DELWP</p> <p>d) NP, BCSC, DELWP, PV</p> <p>e) NP, BCSC, DELWP, PV, landowners</p> <p>f) NP</p> <p>g) NP, BCSC</p>	<p>a) moderate</p> <p>b) moderate</p> <p>c) high-moderate</p> <p>d) high-moderate</p> <p>e) moderate and ongoing</p> <p>f) high</p> <p>g) high-moderate</p>	short term – long term as funding permits

No	Recommended Action	Responsibility	Priority	Timing
6	<p>Ventnor Koala Reserve</p> <p>a) Investigate the potential for establishing a community bushland reserve to allow for approved recreational activities and partnership management arrangements between Nature Parks and the local community.</p> <p>b) The balance of the reserve to continue to have restricted public access and be managed primarily for conservation values.</p> <p>c) Remove 'Koala' from the reserve name.</p> <p>d) Consider the potential to link the community bushland reserve with future trail network for Phillip Island.</p>	NP	all moderate	short to mid term
7	<p>Five Ways Reserve</p> <p>a) Investigate the potential for a new shared trail link through the reserve to improve safety in crossing Phillip Island Road.</p> <p>b) Investigate the potential for a shared trail in the road reserve from the motel to the designated road crossing near the entry to the KCC.</p>	NP, BCSC and VicRoads	high to moderate	short to mid term
8	<p>Koala Conservation Centre</p> <p>a) Improve the layout, functionality and safety of the entry road and parking areas to the KCC.</p> <p>b) Plan for the replacement and/or relocation of the elevated boardwalk used for koala viewing.</p> <p>c) Undertake feasibility assessments into the potential benefits of:</p> <ul style="list-style-type: none"> • adding an additional koala viewing area; and/or • a premium product experience allowing visitors to have a more personalized guided tour with a KCC Ranger; and/or • developing a large woodland aviary within the reserve to support conservation programs involving the breeding and re-release of endangered or threatened species on to the island. <p>d) Retain Crooks Paddock for ongoing operational purposes by Nature Parks.</p> <p>e) Allow for a shared trail on the management road connecting the KCC parking area to Harbisons Road during operating hours of the KCC.</p>	NP	a) high b) – d) moderate e) high	a) + e) short term b) – d) mid term

No	Recommended Action	Responsibility	Priority	Timing
9	<p>Oswin Roberts Reserve</p> <p>a) Maintain the existing standard of the network of recreational trails within the reserve.</p> <p>b) Inform and educate trail users at the trackhead entry points of the shared rights of use on the existing trails.</p> <p>c) Cooperate with the BCSC to develop a new direct route, shared path along Cowes -Rhyll Road at the northern boundary of the reserve to improve the safety for riders.</p> <p>d) Undertake environmental assessments to investigate the potential for a trail link around the southern side of the freehold title on the northern boundary of the reserve.</p> <p>e) Investigate formalising the small car parking area off Cowes – Rhyll Road and install trackhead signage for Owen Roberts reserve.</p>	All NP with c) BCSC	<p>a) – b) ongoing</p> <p>c) moderate</p> <p>d) moderate</p> <p>e) moderate</p>	mid term
10	<p>Conservation Hill</p> <p>a) Continue to maintain the reserve and existing visitor trail and facilities.</p> <p>b) Investigate the junk/thrash located near the former quarry as to whether these have any heritage value or should be removed.</p> <p>c) Agree a course of action to remove or replace the lookout. If it is to be replaced it should incorporate interpretation of the conservation values of Rhyll and Rowell Swamps (E1). In any event, explore the development of a high quality, at grade viewing area on Conservation Hill as a location for telling the story of the effects of sea level.</p> <p>d) Upgrade and repair the existing pontoon structure on the Mangrove Boardwalk.</p>	NP	<p>a) ongoing</p> <p>b) moderate</p> <p>c) moderate</p> <p>d) high</p>	<p>a) ongoing</p> <p>b) – c) mid term</p> <p>d) short term</p>
11	<p>Rhyll and Rowell Swamps</p> <p>a) Maintain conservation values within the reserve.</p> <p>b) Continue to restrict public access to the reserve.</p> <p>c) Allow access by Nature Parks permit for nature based tourism purposes, educational research and by environmental and community groups.</p> <p>d) Remove the old bird hide and install signs at known illegal entry points to inform users of the conservation values and limited public access requirements.</p> <p>e) Continue to support the linking of the reserve to developing wildlife corridors on surrounding properties.</p>	NP	<p>a) –c) ongoing</p>	<p>a) – c) ongoing</p> <p>d) mid term</p> <p>e) on-going</p>

No	Recommended Action	Responsibility	Priority	Timing
12	<p>Rhyll Former LandFill Site</p> <p>a) Continue to implement and monitor the Post Closure Plan.</p> <p>b) BCSC to continue to restrict public access to the reserve.</p>	BCSC	ongoing	ongoing
13	<p>Rhyll Inlet</p> <p>a) Support the recommendations of the WPLCHA including the need to explore planning measures to provide adaptation space for the landward migration of saltmarsh and mangrove fringed shorelines in Rhyll Inlet.</p> <p>b) Maintain and enforce compliance with regulations (e.g. prohibit dogs, restrict access by marine craft, impose fines) to help reduce impacts on the breeding and migratory birds.</p> <p>c) BCSC continue to monitor the landfill site and NP to ensure that leachate does not impact on the reserve.</p>	NP as partner with BCSC, DELWP, PV	ongoing	ongoing
14	<p>Silverleaves – Banksia Woodland</p> <p>a) Support the recommendations of the WPLCHA including the need to adopt a strategic approach to the monitoring, management and future adaptation of the shoreline including planning measures to minimise the risks.</p> <p>b) Continue fire management planning and practices and other on-going conservation programs.</p>	NP as partner with BCSC, DELWP, PV	ongoing	ongoing
15	<p>Silverleaves Beach</p> <p>a) Support the recommendations of the WPLCHA including the need to adopt a strategic approach to the monitoring, management and future adaptation of the shoreline including planning measures to minimise the risks.</p> <p>b) Maintain and enforce compliance of regulations (e.g. prohibit dogs, restrict access by marine craft, impose fines) to help reduce impacts on the breeding and migratory birds.</p>	NP as partner with BCSC, DELWP, PV	ongoing	ongoing
16	<p>Observation Point and Ghetto Rocks</p> <p>a) Support the recommendations of the WPLCHA including the need to adopt a strategic approach to the monitoring and management of predicted changes.</p> <p>b) Enforce existing regulations, in particular, maintain a ranger presence during active summer boating months to provide education and interpretation to visitors and to enforce regulations when necessary.</p> <p>c) Encourage development of legislative measures that will enable enforcement of restrictions on marine activities such as vehicle speed, mooring, access and/or use of fires) in the waters surrounding the reserve.</p>	NP as partner with BCSC, DELWP, PV	ongoing	ongoing

No	Recommended Action	Responsibility	Priority	Timing
17	<p>Rhyll to Churchill Road Saltmarsh and Swan Bay</p> <p>a) Support the recommendations of the WPLCHA including the need to adopt a strategic approach to the monitoring and management of predicted changes.</p> <p>b) Continue to protect the shoreline bird habitat values and to restrict public access to the foreshore reserve to the west and north of Scenic Estate Conservation Reserve.</p> <p>c) Extend the existing foreshore trail westwards along the foreshore at Scenic Estate Conservation Reserve initially to a lookout point on the small coastal bluff and eventually to Fishers Wetland.</p> <p>d) Investigate the feasibility of creating a foreshore recreation trail from Scenic Estate Conservation Reserve to Churchill Road in the long term.</p>	NP as partner with BCSC, DELWP	ongoing	ongoing
18	<p>Fisher's wetland to Boys Home Road</p> <p>a) Complete current works for new trail links and the construction of a bird hide at Fisher's Wetland with interpretation.</p> <p>b) Review feasibility of a recreation trail link between Churchill Road and Fisher's Wetland based on the recent land tenure survey.</p> <p>c) Plan for a future trail link using open space contributions taken with new subdivision of land between Newhaven to Churchill Island Road. Locate the route on higher land at the perimeter of the mangrove swamp and saltmarsh environs to avoid impacts on habitat and above expected inundation levels accompanying sea level rise.</p> <p>d) Adopt a strategic approach to the monitoring and management of predicted changes due to sea level rise.</p>	NP, BCSC	<p>a) high</p> <p>b) high</p> <p>c) low</p> <p>d) on-going</p>	<p>a) – b) short term</p> <p>c) long term</p> <p>d) on-going</p>
19	<p>Newhaven Swamp</p> <p>a) Maintain conservation values within the reserve.</p> <p>b) Continue to restrict public access to the reserve.</p> <p>c) Undertake hydrological study of drainage flows to assess the flows required to sustain the wetland.</p> <p>d) Monitor environmental impacts with the waste treatment ponds servicing the new residential subdivision in Woolamai.</p>	a) - b) NP, c) - d) DELWP	<p>a) – b) ongoing</p> <p>c) - d) high</p>	<p>a) – c) short term</p> <p>d) on-going</p>
18	Minor review of the KAP Implementation Strategy in 5 years	NP	Moderate	mid term
19	Major review of the KAP Implementation Strategy in 10 years	NP	Moderate	long term

ATTACHMENT A

Guidelines for Activity
and Recreation Nodes

No	Natural Areas	Local Access and Recreation Sites	Secondary Activity Centre and Recreation Nodes	Primary Activity Centre and Recreation Nodes
General Description				
	Many of the woodland and wetland reserves have outstanding natural and cultural values that require protection. The areas can attract regular local community access and use where shared trails cater for walking, running and bike riding. Some of the reserves have restricted public access.	These locations are likely to attract regular use by local residents for recreational walks, running and bike riding. In addition to the trails, there is often limited parking, directional signs, interpretation and shelters provided at these sites.	These locations tend to receive more moderate levels of use and are more likely to attract a higher proportion of local residents than visitors. The sites can be overcrowded at times of peak use but not to the extent of the primary activity and recreation hubs. The level of existing infrastructure and facilities varies between different locations but are generally less developed than the primary activity and recreation hubs.	These locations are promoted as key visitor attractions on Phillip Island. The locations already have considerable infrastructure and facilities in place to cater for current use levels. These locations attract regular and often high levels of use, or have the potential to do so in the future.
Access Guidelines				
Roads	Sealed or well constructed gravel road	Sealed or well constructed gravel road	Sealed or well constructed gravel road	Sealed road
Walkways	Walkways designed to handle use e.g. constructed walkways, formed tracks, signed routes	Constructed walkways and stairs or formalized tracks	Constructed walkways and stairs or formalized tracks. All abilities access to visitor facilities would be desirable.	Constructed walkways and stairs. All abilities access to facilities (e.g. toilets, lookout points, paths) should be sought.
Bike paths	Generally not provided but if approved then only on designated tracks	Existing shared use tracks or approved new tracks	Desirable but no specified need to be provided.	Desirable to have bike paths to all of these sites
Public transport	Desirable but no specified need to be provided.	Desirable but no specified need to be provided.	Whilst the future public transport network may not directly access these sites, it may provide opportunities that allow walking to the sites.	The recommended future public transport network would provide access to all sites other than Pyramid Rock.

	Natural Areas	Local Access and Recreation Sites	Secondary Activity and Recreation Nodes	Primary Activity and Recreation Nodes
Facility Guidelines				
Directional signs	Limited use of directional signs required	Directional signs required for shared use trails and access to any visitor facilities	Directional signs leading to the location	Directional signs leading to the location
Car park	Limited need for car parking	Sealed or gravel car parking area with capacity for meeting regular use levels (not necessary peak use times)	Sealed car park with minimum capacity of 20 spaces	Sealed car park with minimum capacity of 50 spaces
Car park layout	No specified need to be provided	Desirable but no specified need to be provided.	Designated car parking spaces e.g. line marking, wheel stops	Designated car parking spaces e.g. line marking, wheel stops. Allow for bus turning.
Arrival area	No specified need to be provided	Desirable but no specified need to be provided.	Defined arrival area near walkway and facilities (to provide pedestrian safety) with barriers to restrict vehicle access	Defined arrival area near walkway and facilities (to provide pedestrian safety) with barriers to restrict vehicle access
Site signs	Only as may be required to inform visitors of conservation and management requirements	Small sign to indicate access and restrictions applying	Site signs to inform visitors of the site, facilities, features of interest and restrictions applying to access and use of the site	Site signs to inform visitors of the site, facilities, features of interest and restrictions applying to access and use of the site
Public toilets	No specified need to be provided	No specified need to be provided	Public toilets required if there is evidence of human waste despoiling the site over time	Required in high visitor use locations but no specified need in low visitor use areas
Interpretation	Desirable in some locations but no specified need in low visitor use areas	Desirable but no specified need to be provided	Interpretation experience about values may be provided (e.g. may include information, signs, seasonal programs, artwork etc)	Interpretation experience about values should be provided (e.g. may include information, signs, seasonal programs, artwork etc)
Lookout	No specified need to be provided	No specified need to be provided	Safe viewing area provided outside of the road and car parking area	Desirable depending on location but no specified need to be provided

Natural Areas	Local Access and Recreation Sites	Secondary Activity and Recreation Nodes	Primary Activity and Recreation Nodes	
Facility Guidelines (continued)				
Seating	No specified need to be provided	Desirable along walking tracks	No requirement but should be provided on coastal walks	Seating should be provided near the arrival area, within the centre and along longer trails
Picnic tables	No specified need to be provided	No specified need to be provided	No requirement but should be provided on coastal walks	Picnic tables should be provided near the arrival area
Proposed Classification				
	Part Ventnor Koala Reserve Five Ways Reserve Rhyll and Rowell Swamps Rhyll Inlet Silverleaves – Banksia Woodland Silverleaves Beach Observation Point and Ghetto Rocks Rhyll to Churchill Road Saltmarsh and Swan Bay (except foreshore at Scenic Estate Conservation Reserve) Newhaven Swamp	Oswin Roberts Reserve Conservation Hill Foreshore at Scenic Estate Conservation Reserve Fisher’s Wetland to Boys Home Road Part Ventnor Koala Reserve		Koala Conservation Centre

ATTACHMENT B
Concept Plans



phillipisland
nature parks

Phillip Island
Woodlands and Wetlands
KEY AREA PLAN
November 2016