



CORANGAMITE  
SHIRE



Environment,  
Land, Water  
and Planning

# Lake Bullen Merri Management Plan



DECEMBER 2017

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# Executive Summary

Lake Bullen Merri is a 450ha volcanic crater lake located on the southern edge of Camperdown. The lake is a site of National and International geological and hydrological significance. Two publicly accessible Crown land reserves adjoin the lake at North Beach and South Beach. South Beach is a popular destination for a range of water based recreation including fishing, water skiing, jet skiing, sailing and swimming. North Beach has a more natural aspect to the lake with limited facilities suitable for local fishing and walking.

Lake Bullen Merri is an important resource for Camperdown, the region and the state. It provides economic, social, recreational and environmental benefits for the local area and attracts visitors and tourism from the broader region, interstate and overseas. The lake is stocked with salmon and trout each year and is a popular inland fishing location in Victoria.

This plan was prepared to guide the future management and protection of Lake Bullen Merri and adjoining Crown land reserves by providing a balanced, realistic and achievable framework to guide future management. The plan aims to achieve a balance between recreation and ongoing protection of environmental, scientific and cultural heritage values.

Key objectives for management of the lake and reserves include:

- Protecting the unique natural geology and hydrology of the lake.
- Protecting and enhancing the lakes biodiversity values.
- Protecting and interpreting Aboriginal cultural heritage and european historical values.
- Providing for a variety of recreational activities at the lake.
- Supporting continued scientific research of the lake.
- Maintaining and upgrading recreational facilities.

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# 1. Introduction

## 1.1 Purpose of the plan

This plan was prepared to guide the future management and protection of Lake Bullen Merri and the adjoining Crown land reserves. The plan seeks to provide a realistic and achievable framework to guide future management and aims to achieve a balance between recreational use and the ongoing protection of environmental, scientific and cultural heritage values.

## 1.2 Plan development and consultation

The development of this management plan was overseen by a project control board comprising the Department of Environment, Land, Water and Planning (DELWP), Corangamite Shire Council and Fisheries Victoria, Department of Economic Development, Justice, Transport and Regions (DEDJTR).

A project team was convened to guide the plan development process. The team consisted of representatives from DELWP, Corangamite Shire Council, Fisheries Victoria (DEDJTR), Maritime Safety Victoria and the Corangamite Catchment Management Authority. A stakeholder reference group was also convened to provide the project team with advice and ideas on the plan's development, and included representatives from a large range of relevant organisations and landholders adjacent to the lake.

Community consultation on the Draft Master Plan was completed over a six week period from March to April 2016 including Easter. This included:

- On site signage display  
The draft plan was displayed on site using a sign at South Beach with hard copy questionnaires and a return box.
- Council Website  
The draft management plan and full report was displayed on Council's website for community feedback via the 'Have Your Say' online portal.

A community information session was held on Wednesday 6 April 2016 to provide an opportunity for interested people to attend and ask questions, provide direct feedback. The session was attended by 21 people with Councillors, Council and DELWP Officers on hand to answer queries and record community feedback as provided.

In response to the public submission period 41 responses via the online questionnaire and 14 written letter submissions were received. The key issues raised by the community include water quality and levels, weeds, managing competing user demands, especially at peak times; infrastructure needs and increasing access around the lake.

A second community information session was held on Tuesday 29 November 2016 to provide a summary of the feedback received from the community and stakeholders. The feedback has been summarised in a publicly available report titled Lake Bullen Merri Management Plan: Summary of Community Feedback on the Draft Management Plan July 2016.

The session was attended by 19 people with Councillors, Council and DELWP Officers on hand to discuss the feedback, how it has been addressed and to answer questions.

## 1.3 Location and planning area

Lake Bullen Merri is located on the southern edge of Camperdown in South West Victoria (Refer Figure 1). The lake is 450ha and is located within a deep volcanic crater. The lake provides for a range of water based recreation including fishing, waterskiing, jet skiing, sailing and swimming.



*Figure 1 – Lake Bullen Merri Locality Map*

There are two publicly accessible Crown land reserves adjoining the lake - North Beach and South Beach. South Beach (9ha) is the primary focus for recreational activities and access to water at Lake Bullen Merri as its north facing volcanic sand beach is gently graded into the lake, allowing easy access to the lake. The South Beach has expansive green lawns, public toilets, barbeque and picnic facilities make this a popular place for families over summer.

North Beach (50ha) is managed by Corangamite Shire Council and has a low key natural character with limited facilities providing for local fishing and walking. North Beach is less well used than the South Beach precinct, despite its closer proximity to Camperdown township, Lakes and Craters Holiday Park, Botanic Gardens and Camperdown Golf Club.

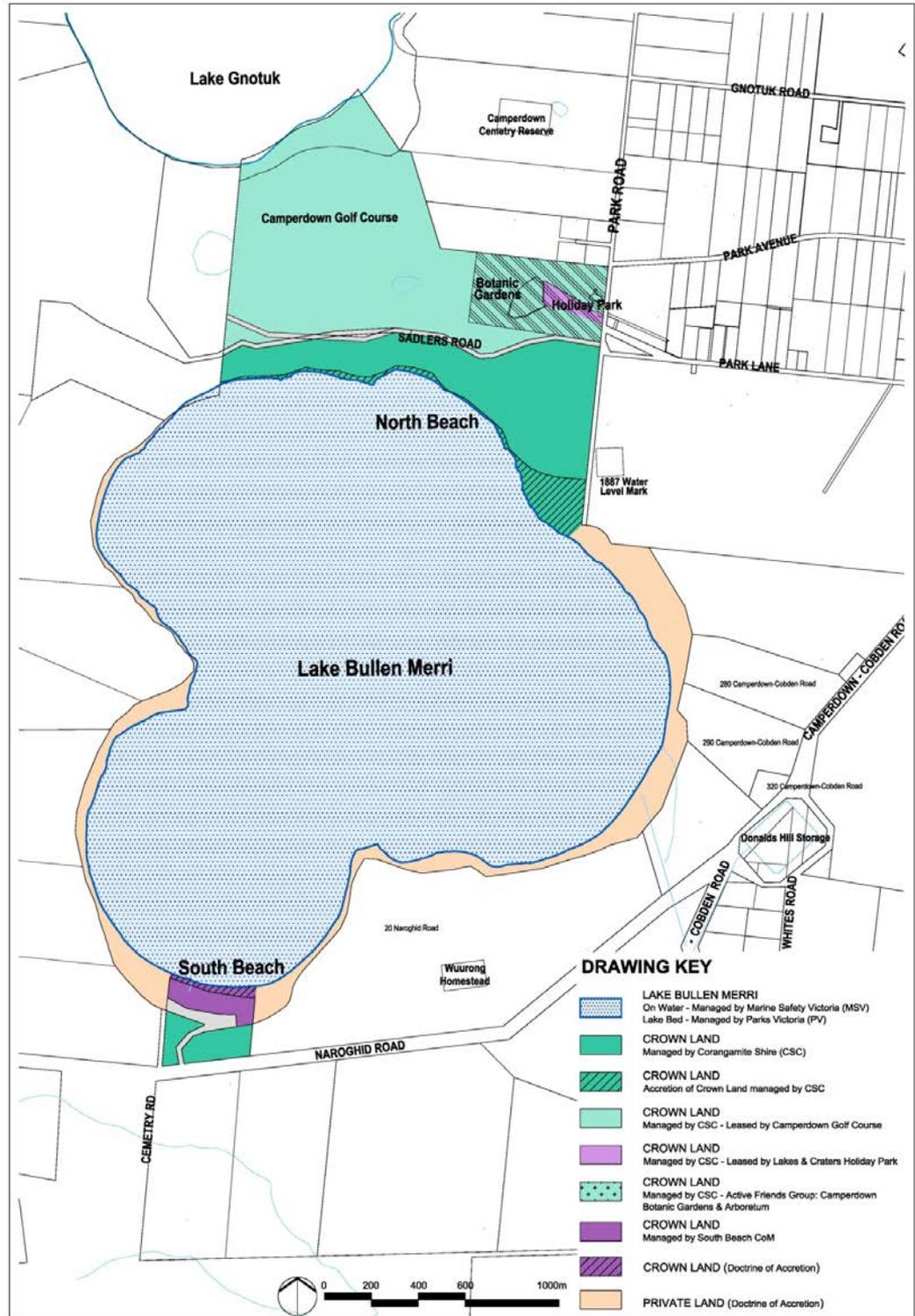
The remainder of the lake is surrounded by private land that extends to the edge of the water on the eastern and western sides of the crater.

## 1.4 Management responsibility

The Department of Environment, Land, Water and Planning (DELWP) acts as the landowner of Crown land and delegates the management responsibility to a Committee of Management (CoM). CoM are appointed to manage, improve, maintain and control the land for the purposes for which it is reserved. Committee members are selected through

an expression of interest process. Each Committee member is appointed for a term of three years.

DELWP provides advice and guidance to the CoM and assists to resolve issues and build relationships with key stakeholders. CoM are eligible to apply for various grants via DELWP. CoM are required to provide financial or audited statements to DELWP and can request assistance or advice as required.



**Figure 2 – Existing Crown Land Management**

The Lake Bullen Merri Recreation Reserve – South Beach is managed by the South Beach Committee of Management (SBCoM) and includes the car park, existing buildings,

boat ramp, piers, public toilets and grass areas adjoining the lake. The SBCoM was originally appointed on the 23 March 1960, under Section 221 of the *Land Act 1958* by the President of the Board of Land and Works (Govt. Gazette No. 23, page 1033). The SBCoM was incorporated on the 8 February 2001 and the current committee was appointed under the *Crown Land (Reserves) Act 1978* on the 23 March 2015.

Council is the delegated land manager for the southern section of the Lake Bullen Merri Recreation Reserve which adjoins South Beach and the road reserve that provides access to the South Beach Reserve. Council was originally appointed on the 4 February 1931, under Section 184 of the *Land Act 1928* by the President of the Board of Land and Works (Govt. Gazette No. 17, page 353).

The Corangamite Shire Council is also the delegated land manager for the Lakes Recreation Reserve, locally known as North Beach. The Shire of Hampden the successor in law to Corangamite Shire Council was originally appointed on the 24 August 1955, under Section 184 of the *Land Act 1928* by the President of the Board of Land and Works (Govt. Gazette No. 611, page 4534). North Beach was previously managed by a Committee of Management which was appointed on 17 September 1869 (Govt. Gazette No. 51, page 1479).

The lake bed is Crown land and is reserved for the Protection of the Bed and Banks of a Lake and is managed by Parks Victoria. The Director Transport Safety is the appointed waterway manager (under the *Marine Safety Act 2010*) for the lake.

The table below summarises the current management roles at Lake Bullen Merri and the adjoining Crown land reserves. (Refer Figure 2)

Agency	Current role at Lake Bullen Merri
Corangamite Catchment Management Authority (CCMA)	<ul style="list-style-type: none"> <li>• CCMA was established to ensure the protection and sustainable development of land, biodiversity and water resources.</li> <li>• CCMA is the waterway management authority for the region but does not have an active role at the lake.</li> </ul>
Corangamite Shire Council (CSC)	<ul style="list-style-type: none"> <li>• CSC is the delegated Committee of Management for: <ul style="list-style-type: none"> <li>– North Beach precinct (Lakes Recreation Reserve)</li> <li>– Two parcels of Crown land within the southern section of the Lake Bullen Merri Recreation Reserve (adjacent to Naroghid Road)</li> <li>– Road reserves within the South Beach Precinct</li> </ul> </li> <li>• CSC Assists SBCoM with waste collection from South Beach</li> </ul>
Department of Environment, Land, Water and Planning (DELWP)	<ul style="list-style-type: none"> <li>• The Department of Environment, Land, Water and Planning (DELWP) acts as the landowner of Crown land and delegates the management responsibility to Committees of Management and to Parks Victoria.</li> <li>• DELWP is the Statewide Coordinator for Blue-Green Algae Management.</li> </ul>
Fisheries Victoria (Department of Economic Development, Jobs, Transports and Resources (DEDJTR))	<ul style="list-style-type: none"> <li>• Fisheries Victoria is responsible for administration of fishing licenses across Victoria and undertakes restocking of the lake with salmon and trout.</li> <li>• Fisheries Victoria are a funding partner for redevelopment of facilities associated with fishing.</li> </ul>
Office of Aboriginal Affairs Victoria (AAV)	<ul style="list-style-type: none"> <li>• Responsible for administering the <i>Aboriginal Heritage Act 2006</i>.</li> </ul>

Parks Victoria (PV)	<ul style="list-style-type: none"> <li>PV is the delegated land manager of the lake bed but does not have an active management role at the lake.</li> </ul>
South Beach Committee (SBCoM)	<ul style="list-style-type: none"> <li>SBCoM is the delegated Committee of Management for Crown land lake frontage and recreational facilities at South Beach including: <ul style="list-style-type: none"> <li>Public toilets, amenities block and picnic facilities</li> <li>Car and boat trailer parking areas</li> <li>Boat ramps, jetties and signage</li> <li>Administration of the Camperdown Angling Club and Motorcycle Club building leases</li> </ul> </li> </ul>
Maritime Safety Victoria (MSV)	<ul style="list-style-type: none"> <li>A branch of Transport Safety Victoria, the maritime safety regulator and waterway manager appointed under the <i>Marine Safety Act 2010</i> for vessel safety and navigation at Lake Bullen Merri.</li> <li>The Director Transport Safety is able to appoint appropriate people as Transport Safety Officers to carry out compliance activities on Victorian waters. Waterway managers appointed under the <i>Marine Safety Act 2010</i> are able to apply to have appointed Transport Safety Officers for compliance purposes.</li> </ul>
Wannon Water (WW)	<ul style="list-style-type: none"> <li>WW is the Regional Coordinator for Blue-Green Algae Management.</li> </ul>

## 1.5 Policy and planning controls

Management responsibility for the lake, falls within a wide range of legislation and policy, and is guided by a range of key strategies and plans at a national, state and local level. Key external documents and legislation that direct management options for the reserve can be found in Appendix 4.

Lake Bullen Merri is governed by regulations which relate to the types of activities, uses, and behaviours permitted within the adjoining Crown land reserves. The following regulations govern the use of the two adjoining reserves:

- Regulations for the northern part of South Beach were declared in 1960 (Government Gazette 82 August 1960, page 2888)
- Regulations for the southern part of South Beach were declared in 1931 (Government Gazette 169, August 1931, page 2181)
- Regulations for the North Beach c. 1891

Delegated land managers have the authority to enforce these regulations, and may grant permits for specific uses, with the consent of DELWP. Copies of these regulations are attached as Appendix 5.

Lake Bullen Merri and the Crown land around the lake at South Beach and North Beach are zoned Public Park and Recreation (PPRZ). The freehold land surrounding Lake Bullen Merri is zoned Rural Conservation Schedule 2 (RCZ2). The Rural Conservation Zone places an emphasis on the natural, cultural and landscape values of the area.

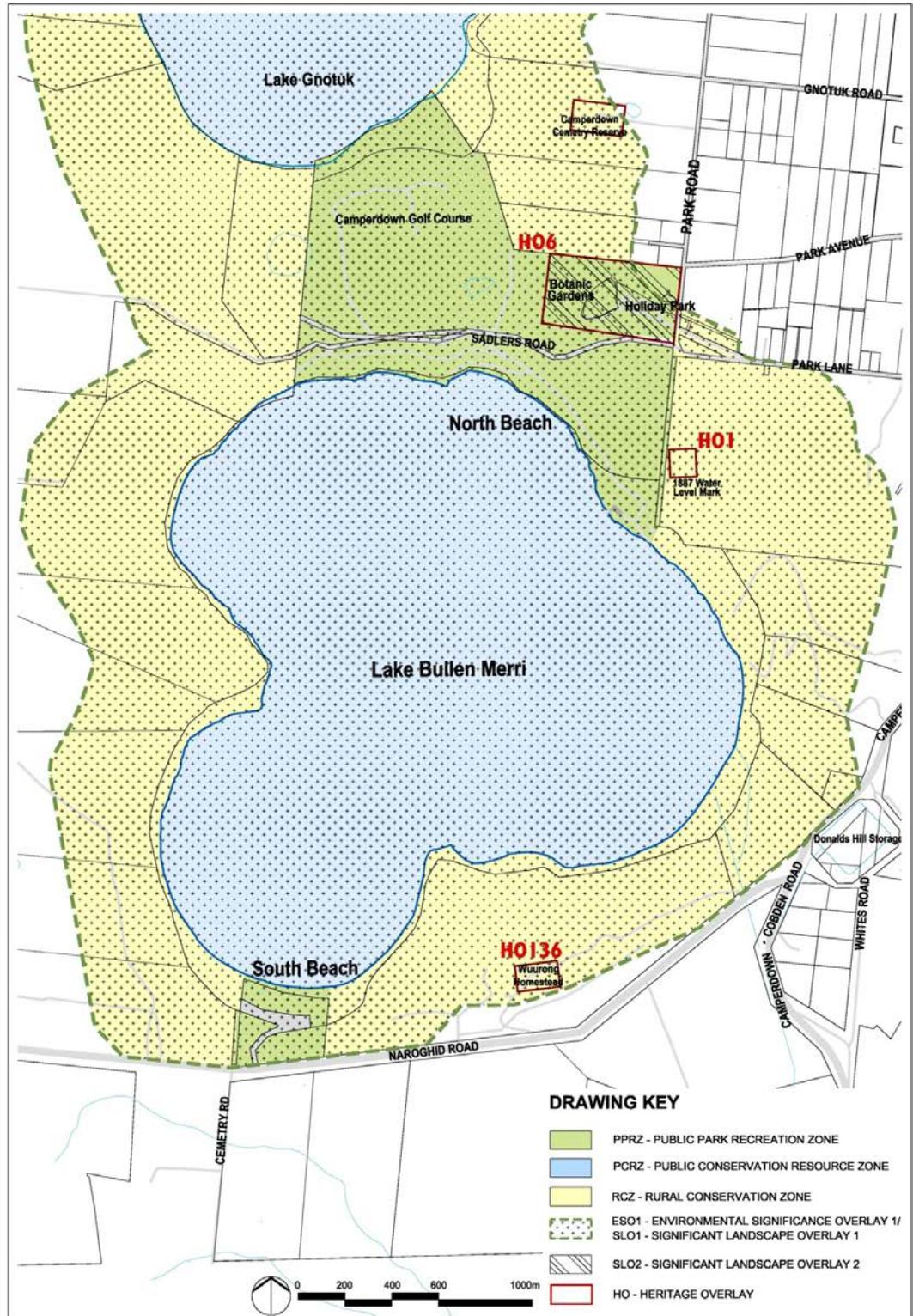
### Environmental Significance Overlay (ESO1)

This overlay applies to Lake Bullen Merri and the land surrounding the lake including both public and freehold land. The overlay aims to protect the environmental values at Lake Bullen Merri.

### Significant Landscape Overlays

- Schedule 1 (SLO1) This overlay applies to the same area as the ESO1. The overlay aims to protect the landscape values at Lake Bullen Merri.
- Schedule 2 (SLO2) This overlay applies to the Camperdown Botanic Gardens. The overlay aims to protect the landscape values of the Botanic Gardens.

Refer Figure 3 for further detail on existing planning controls.



**Figure 3 – Existing Planning Controls (Corangamite Shire Planning Scheme)**



## 2. Geology and Hydrology

### 2.1 Geology

Lake Bullen Merri is located in a volcanic crater called a “maar” created from the explosion when molten lava, on its way to the surface, came into contact with groundwater and produced a huge amount of volcanic steam. During the volcanic explosion, local rocks became pulverised and, in the process, were spread around the landscape and became mixed with volcanic ash and steam. The coarse grained residues and sediments settled from the explosion to form the walls of the crater and are visible in the lake shoreline. Occasional volcanic lava rock outcrops can also be found in among the layered sediments of the lake bed and in surrounding paddocks. The coarse volcanic sands are visible in beach areas around the lake and the volcanic lake bed geology is popular with divers. Lake Bullen Merri is classified by the Geological Society of Australia as of National Significance.

### 2.2 Hydrology

Lake Bullen Merri is unique within the region due to its depth and salinity. The lake is approximately 60 meters deep with steep flanks below water level down to its bottom. Rain falling directly into the lake and crater is the main source of water with relatively low levels of groundwater interaction. Water lost from the lake is as a result of evaporation; therefore, the lake functions as a climatic rain gauge.

The water level at Lake Bullen Merri peaked around 7,400 years ago, at this time Lake Bullen Merri and Lake Gnotuk were joined forming a single gigantic lake. In 1841 Lake Bullen Merri was observed to be overflowing into adjoining Lake Gnotuk, the lake was at a depth of 88.6m, almost 29m above the current lake water level (Refer Figure 4). While there has been other significant fluctuations in lake water levels over time, the lakes water level is in steady decline. (Jones 2001, Evans 2009).

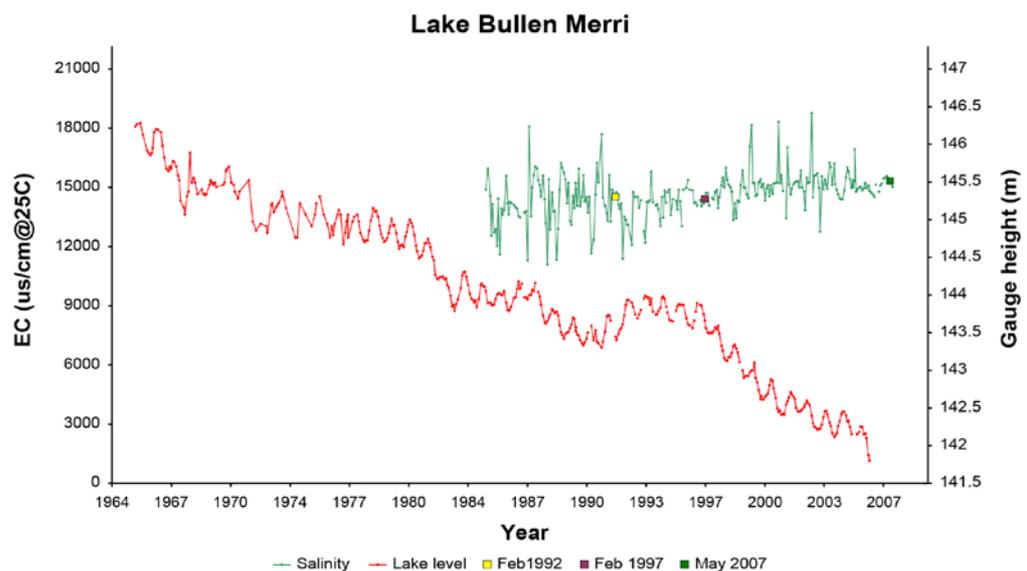
CSIRO climate modelling indicates that under all climate baselines that lake water levels will continue to decline. Even taking the wet period from 1945 to 1955 as the baseline climate, would not reverse the long-term decline in lake water levels that has been happening since about 1840 (Refer Figure 5).

The lake water level is currently falling on average 10-20 centimetres in depth annually under typical rainfall and evaporation conditions. This equates roughly to a shoreline change of 2-3 metres annually on the current South Beach shoreline profile but less on the steeper sections of North Beach.

Parameter	Unit	Lake Bullen Merri	Lake Gnotuk
Catchment Area	Ha	864.5	590.4
Current Lake Area	Ha	450.6	216.2
Area Lake/catchment		0.52	0.36
Current water level	m AHD	141.5	102
Level of lake base	m AHD	79.8	85.8
Maximum current depth	m	61.7	16.2
Maximum Height of catchment rim	m AHD	280.5	267.5
Level of Lake overflow Point	m AHD	169.5	162.8
Max lake depth at Overflow Point	m AHD	88.6	77.3
Average Fall (mm/annum)		167	143
Approximate depth change since 1990	m	-1.8	-1.6
Observed Salinity Range	mg/L	6500-9000	45,000-70,000
Observed pH		7.5-9.4	7.3-9.0
EC		10000-33700	54000--97000

**Figure 4 – Existing Lake Hydrology (Evans 2009)**

It is predicted that the water levels in the lake will reach an equilibrium that is much lower than the current depth. However the large volume of water in the lake means it will take hundreds of years to reach the equilibrium water level. (Leahy et al. 2010).



**Figure 5 - Historical lake level and electrical conductivity (Leahy et al. 2010)**

## 2.3 Scientific Research

Lake Bullen Merri and Lake Gnotuk are a significant resource in the scientific understanding of volcanic geology and past climate fluctuations. The lake and crater are subject to ongoing scientific research and their internationally recognised value as natural rain gauges may be compromised by any modification to their natural catchments.

## 2.4 Water quality

Lake Bullen Merri is contained within a volcanic crater, with no outflow or potential for flushing of the system. The lake is at high risk from accumulation of nutrients, salts and sediment as well as pollutants including herbicides, pesticides, litter and heavy metals that may impact on water quality.

The lake water quality is also affected by both climatic change and adjoining land use. Nutrient inflows are ongoing and add to the substantial nutrient store in the lake sediments.

Lake Bullen Merri is susceptible to thermal stratification of the water column. This is a natural condition that develops during the summer. Water at different depths and of different temperatures is prevented from mixing resulting in a lack of dissolved oxygen which is critical for the survival of fish. Thermal stratification also provides an ideal environment for phytoplankton including blue-green algae. Thermal stratification is common in deep lakes and is overcome as temperatures decrease in Autumn triggering 'overturn' and mixing of the different temperature layers.

As the volume of water in Lake Bullen Merri decreases, salinity will gradually increase, however the large volume of water in the lake means the rate of salinity increase will be slow and the large volume of water remaining will buffer any rapid changes in water quality. Refer Figure 5. It is projected that by 2030 the salinity of Lake Bullen Merri (measured as mg/L) is likely to increase by 2 ppt to approximately 10 ppt, this increase in salinity would have very little impact on the lake's ecosystem. (Leahy et al. 2010).

There have been a number of options suggested to improve water quality at Lake Bullen Merri that have been investigated or implemented including:

- *Redirecting additional water from external catchments*  
Additional water to the lake to address declining water levels and to reduce the steady increase in concentration of pollutants has been suggested on a number of occasions. None of these proposals have been implemented and diverting additional water into the lake is not recommended for the following reasons:
  - Any change in the natural catchment of the lake alters the unique geological, hydrological and scientific values of the lake system that has been capturing water in the same way for thousands of years.
  - The size of the lake means a huge volume of additional water is needed to have any effect on declining water levels from natural evaporation. There is no available local catchment or cost effective supply of water available to have a meaningful effect on declining water levels at Lake Bullen Merri.
  - The redirection of small external catchments, such as Naroghid Road into the lake will only provide a small volume of additional water but significantly increase risks to long term water quality from potential pollution.
- *Reinstatement of mechanical pumping systems to reduce stratification.*  
The use of mechanical pumps to attempt to overcome the natural stratification in the lake has been previously attempted. Various pumping systems have been deployed at Lake Bullen Merri in an attempt to mix water from different depths in

the lake to minimise loss of dissolved oxygen and overcome conditions favourable to production of blue green algae. Technical evaluation of these measures in 2009 found them to be ineffective and very expensive to run. Further use of mechanical pumping systems to attempt to overcome natural process at the lake is not supported based on currently available technology.

Lake water quality is a key risk for the health and future use of the lake and factors that may impact on these values should be managed as the highest priority. Restoration of the riparian zone around the lake with native trees and shrubs will help to reduce nutrient inputs, provide habitat and improve the aesthetic values of the lake.

## 2.5 Blue-green algae

During warmer spring and summer months Lake Bullen Merri can be affected by blue green algae, *Nodularia spumigena*. Blue-green algae can be dangerous to humans and animals and can cause a range of adverse health effects including skin rashes and itchiness; irritation of the eyes, ears and nose; respiratory irritation, liver damage and asthma like symptoms.

Low levels of blue-green algae are always present in the lake. When the conditions are favourable, usually when there are warm water temperatures, successive sunny days and adequate nutrients levels, blue-green algae cells can multiply quickly resulting in a bloom. Algal blooms may be more frequent under the effects of climate change.

As outlined in the Blue-Green Algae Circular 2016-17 the Department of Environment, Land, Water and Planning (DELWP) is the Statewide Coordinator for blue-green algae management. Wannon Water is the Regional Coordinator responsible for coordinating local planning and management of local and regional blue green algae blooms. Local Water Managers are responsible for managing blue-green algae blooms in their local water body. There is currently no appointed Local Water Manager for Lake Bullen Merri.

The main role of the Local Water Manager is to minimise impacts of the bloom including public health risks. The Local Water Manager is required to undertake water testing for blue green algae and when levels exceed a biovolume of 0.2mm<sup>3</sup> provide notification to DELWP and the Regional Coordinator. Blue-green algae blooms in a recreational water body such as Lake Bullen Merri pose a potential public health risk for recreational users through primary contact or the consumption of fish caught within the lake. The Department of Health and Human Services must be notified when a bloom is identified.

In the event of a blue-green algal bloom the Local Water Manager must also notify the local community, adjoining landowners and recreational users to avoid all contact with the water using on site signage and provide local media reports. Pets and livestock are also recommended to avoid all contact with the water. The Local Water Manager is required to continue to carry out regular inspections of the lake and collect samples for laboratory analysis if there is a noticeable change in water quality. Warning signs can only be removed when two consecutive results (7-10 days apart) from representative samples confirm that blue-green algae levels have fallen below alert levels.

In 2014 blue-green algae was detected in early October but was declared safe by end of December. In late September 2015 blue-green algae was detected at and warnings remained in place until February 2016. In January 2017 blue-green algae was detected at Lake Bullen Merri, the lake was declared safe for the Easter weekend in April 2017.

### Summary of key issues

- The factors impacting on water quality are predominantly the result of the lakes natural geology and hydrology.
- The frequency and duration of algal blooms is likely to increase.

- Stock access at the shoreline contributes additional nutrients and sediment into the lake.
- The lake is stocked with fish for recreational angling; this could impact negatively on water quality if the lake is overstocked.
- There is a lack of shoreline vegetation to intercept pollutants entering the lake from surface water runoff.
- Stormwater runoff from the existing roads and car parks is largely untreated and directs sediment and pollutants into the lake.
- The public amenities block and toilets at South Beach can become over whelmed during peak times.
- The condition of older septic systems at the Camperdown Angling Club and Motorcycle Club buildings is unknown.
- Vegetation management works including fuel reduction burns and weed eradication works may contribute additional sediment and pollutants into the lake through erosion.

## **Objectives and actions**

### ***Minimise public risk associated with blue green algae blooms in the lake***

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- WQ1** Support continued scientific research into blue-green algae at the lake.
- WQ2** Seek the appointment of a Local Water Manager to respond to blue-green algae blooms and minimise risks to lake users.
- WQ3** Raise community awareness of blue green algae blooms to minimise risks to community health.

### ***Reduce transfer of additional pollutants into the lake***

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- WQ4** As part of future upgrade or replacement of existing recreational facilities utilise best practice water sensitive urban design (WSUD) principles to capture and remove sediments and other pollutants from roads and car parking areas.
- WQ5** Monitor existing septic systems on Crown land within the lake catchment.
- WQ6** Liaise with adjoining landholders to investigate options to reduce transfer of nutrients into the lake from private land including the revegetation of the shoreline with indigenous species and restricting stock access.

### ***Protect the unique natural geology and hydrology at Lake Bullen Merri***

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- WQ7** Avoid change to the lake's catchment and hydrology that may impact on the unique scientific values of the system.
- WQ8** Ensure fish stocking levels are monitored to ensure there is no negative impact on the lake's water quality.

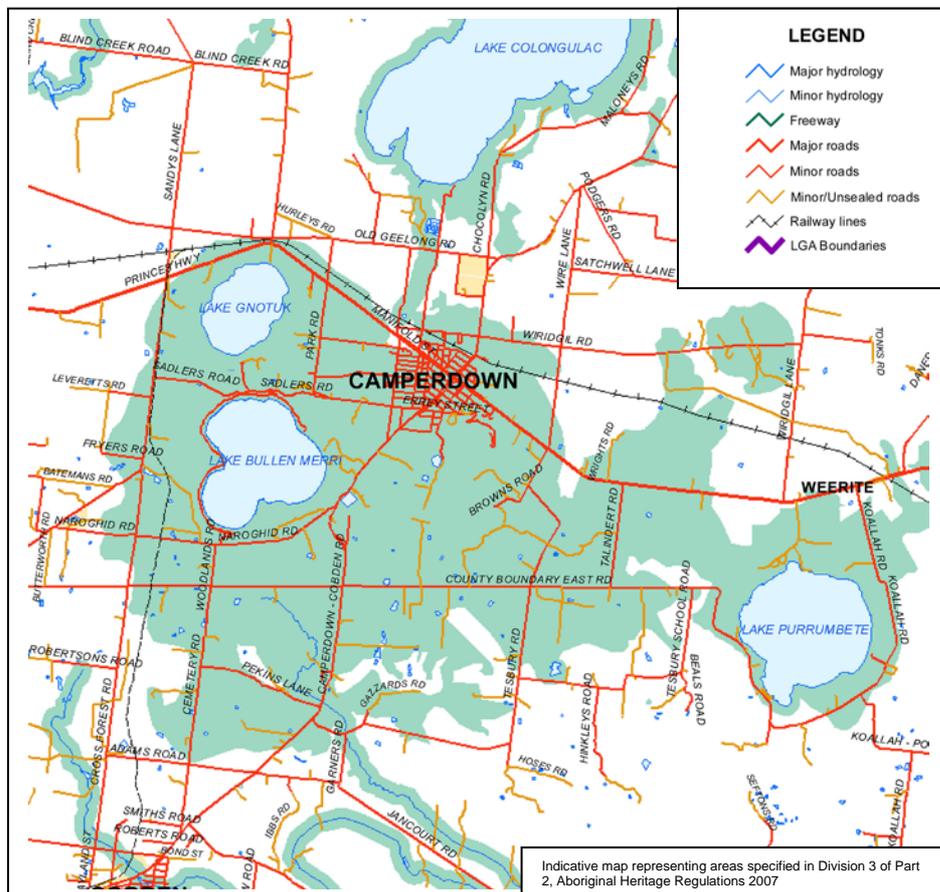


### 3. Cultural Heritage

#### 3.1 Aboriginal cultural heritage

Lake Bullen Merri is part of the traditional lands of the Liwura Gundidj clan, of the Djargurd Wurrung people. The name Bullen Merri refers to the two stony points that jut out on the eastern side of the lake. Lake Bullen Merri and its surrounding crater are of great cultural significance to the Djargurd Wurrung people and is listed as an area of cultural heritage sensitivity.

Ancestors of the Djargurd Wurrung camped in the crater alongside the lake and used the lake as a supply of freshwater and food. The Djargurd Wurrung removed bark from trees growing in the crater to make canoes, containers and shields and to build temporary shelters. Today the trees and the lake provide an important link to Djargurd Wurrung culture.



**Figure 6 Areas of cultural sensitivity**

Source: Extract 7521 Corangamite, Dept Premier and Cabinet Victoria October 2015

There is no Registered Aboriginal Party (RAP) yet appointed for the Lake Bullen Merri area under the *Aboriginal Heritage Act 2006*. The application of the Eastern Maar Aboriginal Corporation is currently being considered by the Victorian Heritage Council.

Any works or change in land status (including licensing or leases) on Crown land within the Management Plan area also need to be considered pursuant to the *Native Title Act 1993*. The Eastern Maar Traditional Owners Group is currently seeking to negotiate a Recognition and Settlement Agreement under the *Traditional Owner Settlement Act 2010* to be recognised as the native title holders of this area.

## 3.2 European history

The Camperdown Historical Society notes that after discovering the rich land of the Camperdown area during an exploratory trip in late 1838, the English born Manifold family settled on the north side of Lake Purrumbete in 1839. Other squatters soon followed and by the early 1840's, most of the land in the Western District of Victoria had been taken up. The township of Camperdown was named by Victoria Lieutenant-governor, Charles La Trobe in 1854, for the Scottish naval hero Admiral Adam Duncan, Earl of Camperdown.

The majority of the Lake Bullen Merri crater was historically cleared for grazing. As water levels decline in the lake, ancient tree stumps are often exposed indicating the crater was historically covered by woodland. Several water makers exist on adjoining private land and mark the lakes water levels at 1887, 1957 and 1987.

Views over Lake Bullen Merri and the crater from the nearby historic gardens are an important part of the landscape setting for the gardens. The views over the lake have been the subject of paintings by Eugene Von Guerard. In the 1800s the edge of the lake was marked by James Dawson using a stone marker. Dawson, a local farmer who lived on the edge of Lake Bullen Merri, was also local guardian of Aboriginal people. Von Guerard's paintings and the stone markers left by Dawson also record earlier lake levels.

Lake Bullen Merri has long been stocked with trout and salmon and as a result the lake has been a popular destination for fishing since the 1930s. There are anecdotal records of over 4,000 anglers lining up around the shoreline for the opening of the salmon season. These annual events have been popular at the lake since the early 1950s and form an important part of local history.



*Photo 1 - Salmon season opening at Lake Bullen Merri as shown in local newspaper article, 1978.*

There are three heritage overlays nominated in the Corangamite Shire Planning Scheme in the vicinity of the Lake and study area. Refer Figure 3.

- HO1: 1887 Water Level Marker (north west bank of Lake Bullen Merri located on private property indicates the historical water level in Lake Bullen Merri. Local significance.
- HO136: Wuurong Homestead, 20 Naroghid Road, Camperdown. The period homestead was the property of James Dawson and overlooks the Lake. It is privately owned. Local significance.
- HO6: Camperdown Botanic Gardens and Arboretum, Park Lane, Camperdown is located just outside the study area on the escarpment rising between Lake Gnotuk and Lake Bullen Merri. The Botanic Gardens are listed on the Victorian Heritage Register (VHR H2256) and are of State significance.

### **Summary of key issues**

- Aboriginal cultural heritage sites at Lake Bullen Merri have not been identified and are at risk from damage from management and visitors.
- The tangible and intangible Aboriginal cultural heritage of the lake needs to be recorded and interpreted.
- The historic water level markers for the lake need to be protected and interpreted.
- European history of the lake needs to be recorded and interpreted.

### **Objectives and actions**

#### ***Identify and protect Aboriginal cultural heritage values and archaeology***

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- H1** Ensure that the management of the lake or change in land status (including licensing or leases) complies with the requirements of the *Aboriginal Heritage Act 2006 and Native Title Act 1993* and are considered in consultation with The Office of Aboriginal Affairs Victoria and Traditional Owners.
- H2** Undertake a cultural heritage management plan for Lake Bullen Merri. The assessment will be used to determine protocols for management of areas of cultural heritage sensitivity and the need for any additional complex assessment for specific future projects if required.

#### ***Improve visitor appreciation and understanding of Lake Bullen Merri's cultural heritage and history***

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- H3** Research the Aboriginal cultural heritage, local history and historical recreational use of the lake and establish interpretive signage at South Beach and North Beach.
- H4** Research and establish water level markers on Crown land to indicate historical changes in lake water levels. Ensure water level marker design allows for ongoing update as lake levels continue to recede.
- H5** Protect and preserve the landscape views and the scenic amenity of Lake Bullen Merri and its environs.



## 4. Flora and Fauna

### 4.1 Flora

Historically the lake crater was covered by woodland; evidenced by the ancient tree stumps that are often exposed declining water levels. However, the majority of the Lake Bullen Merri crater was cleared by European settlers for grazing. The pre-1750 Ecological Vegetation Class (EVC) is Scoria Cone Woodland – EVC 894 and its conservation status is endangered within the bioregion.

Revegetation of the Crown land reserves managed by Corangamite Shire Council at North and South Beach have been undertaken by council and local community groups using local shrub and tree species, including Manna Gum *Eucalyptus viminalis* and Drooping Sheoak *Allocasuarina verticillata*, consistent with a Scoria Cone Woodland EVC. Indigenous tree and shrub cover is now well established at North Beach and the southern roadside areas at South Beach. The ground layer remains a mix of exotic pasture grasses with some natural regeneration of indigenous groundlayer species.

The vegetation at South Beach directly adjoining the lake includes a mix of planted native and exotic overstorey trees in a more formal parkland arrangement. The understorey is predominantly kikuyu and the areas that are used as part of existing recreational use are mown regularly. Refer Figure 7.

The revegetated woodland areas on the steep banks at North Beach may present a fire risk to the Lakes and Craters Holiday Park and adjoining private property. The completion of an ecological burn could reduce fuel loads if required and benefit biodiversity and regeneration of indigenous groundlayer species however the impacts of burns on the lake ecology are not well known. An ecological burning strategy for the North and South Beach should be developed and should consider:

- Burning in sections for biomass reduction, to allow for experimentation and controlling sediment,
- Operational mitigation measures to protect existing vegetation during the burn such as lower intensity, raking around trees, etc.
- Post-burn weed control and revegetation with native grasses and herbs.

There is extensive infestation of Spiny Rush *Juncus acuta* along the shoreline at North Beach. *Juncus acuta* is a declared noxious weed (DSE 2008) and is regionally controlled. Once established it completely covers shoreline areas excluding all other vegetation with

sharp spines that also restrict access to water. At South Beach the shoreline is free of Spiny Rush however shoreline areas require ongoing herbicide control to prevent establishment as water levels recede. The southern section of South Beach at the top of the crater is infested with *Pittosporum* sp.



*Photo 2 and 3 - Spiny Rush infestation at North Beach*

There has been some indigenous revegetation using trees and shrubs within the crater on private land on the eastern side of the lake however the shoreline and western side remains mostly introduced pasture grass. Restoration of the shoreline with indigenous vegetation would enhance bird habitat and reduce the input of nutrients into the lake (section 2.4).



*Photo 4 - South Beach Pre revegetation (Photo G.Farmer 1997)*



*Photo 5 - South Beach 2015*

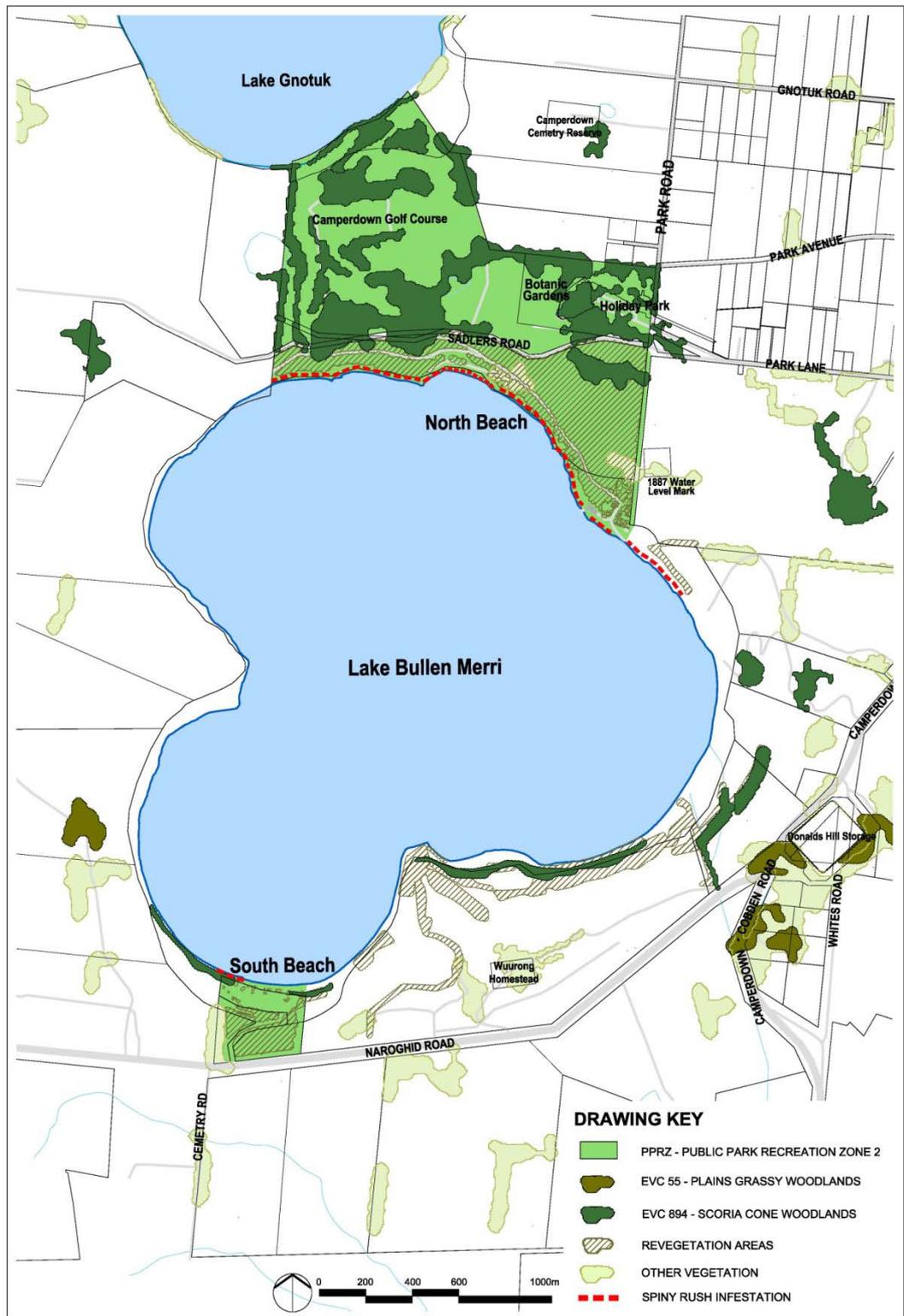


Figure 7 – Existing Vegetation



*Photo 6 - North Beach Pre revegetation (photo G.Farmer 1997)*



*Photo 7 - North Beach 2015*

## 4.2 Fauna

Lake Bullen Merri provides an important permanent source of water and habitat for birds, especially when many shallower saline lakes in the Western District may dry out. This may be more frequent under the effects of climate change. (Leahy et al 2010). The Victorian Biodiversity Atlas (VBA) indicates the lake and surrounds are used by a range of birdlife including Australasian Shoveler (Blue Winged Duck), Hardhead, Musk Duck and Grey Goshawk, all listed as vulnerable in Victoria.

Other common bird species found at the lake include as well as Australian Shelduck, Silver Gull, Hoary-headed Grebe, Eurasian Coot, Black Swan, Masked Lapwing, White-faced Heron, Little Black Cormorant, Little Pied Cormorant, Pacific Black Duck, Great Crested Grebe, Great Cormorant, Australian Pelican, Australian Magpie, Common Starling, European Skylark, Magpie-lark, Willie Wagtail, Long-billed Corella, Nankeen Kestrel, Peregrine Falcon, Red Browed Finch, Eastern and Crimson Rosella, Black-shouldered Kite, Whistling Kite, White-necked Heron, Wedge-tailed Eagle, Grey shrike thrush, Superb Fairy-wren, White-plumed honeyeater and Yellow-faced honeyeater.

Eastern Grey Kangaroo are commonly found on farmland around the crater and in the established revegetation areas at North Beach and South Beach where Black Wallaby and Brushtail Possum can also be seen. Introduced species including rabbits, hares and foxes are also common.

The lake is known to contain large populations of galaxiids, gudgeon and invertebrates, particularly caddis, on which trout and salmon feed. Victorian Biodiversity Atlas (VBA) records indicate Lake Bullen Merri still provides habitat for a range of native fish including Common Galaxias, Southern Pygmy Perch and Flathead Gudgeon.

The lake is stocked with introduced recreational angling species including Rainbow Trout, Chinook Salmon and Brown Trout and these are the most commonly found fish in the lake. Historically the stocking program for Lake Bullen Merri has focused principally on Rainbow Trout with Chinook Salmon periodically released between 1936 and 1946, 1952, 1954 and in 1978. Other species that have been trialled in the lake include Atlantic Salmon, Golden Perch and Silver Perch. In 2016, 5,000 Brown Trout, 5,000 Rainbow Trout and 20,000 Chinook Salmon were released into the lake by Fisheries Victoria.

### **Summary of key issues**

- Spiny Rush *Juncus acuta*, is widespread along the northern shoreline on both the Crown land and private land.
- Revegetated woodland areas on the steep north lake bank may present a fire risk to adjoining private property.
- The lack of indigenous shoreline vegetation reduces bird habitat values at Lake Bullen Merri.

### **Objectives and actions**

#### ***Reduce fire risk and enhance biodiversity values in established woodland revegetation areas***

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- E1** Develop an ecological burn strategy for North and South beach to reduce fuel loads and benefit biodiversity and regeneration of indigenous species. Protect slow growing species by burning in sections and include lower intensity mitigation measures to protect existing vegetation during the burn.
- E2** Undertake post-burn weed control and understory planting with local indigenous species.

#### ***Contain the spread of Spiny Rush *Juncus acuta* and other pest plants and animals***

- E3** Investigate management options for containment and staged eradication of Spiny Rush *Juncus acuta* at North Beach. Initial works to target areas where there is already a secondary vegetation buffer established on the lake side to reduce potential for increased sediment and herbicide transfer into the lake.
- E4** Prevent the establishment and spread of Spiny Rush *Juncus acuta* at South Beach with annual herbicide control.
- E5** Liaise with adjoining landholders to control the spread of Spiny Rush *Juncus acuta* on private land.
- E6** Monitor and control other pest plants and animals including rabbits and foxes by implementing integrated local control programs where required.

#### ***Maintain the open grass parkland character of recreational areas at South Beach***

- E7** Provide additional indigenous overstorey shade trees at South Beach while retaining a more formal arrangement consistent with existing recreational use.



## 5. Recreation

There are two publicly accessible Crown land reserves adjoining Lake Bullen Merri — North Beach and South Beach. South Beach is a popular destination for a range of recreation activities including fishing, waterskiing, jet skiing, sailing, picnicking and swimming. North Beach has a more natural aspect to the lake with limited facilities suitable for local fishing and walking. Refer Figure 8.

Visitation to the lake is weather dependent and drops significantly in extreme weather conditions and/or when the lake is affected by blue-green algae blooms. The South Beach Committee of Management estimate that in good weather conditions the lake is visited by over 200 visitors on typical summer weekend. During Christmas, Easter and other public holidays including Australia Day and Labour Day visitor numbers can reach over 400. Visitor numbers can also increase significantly during extended drought conditions when boating and water access is restricted at other shallower lakes in the region.

Summer events including the Victorian Yachting Council Regatta can attract around 350-400 spectators and competitors and the Mars Corporate Fun Day attracts approximately 200 visitors.

Recreational activities at North Beach and South Beach are governed by regulations which relate to the types of activities, uses, and behaviours permitted within reserves. The regulation of events on the lake and at North Beach and South Beach is managed through a permit obtained from the relevant land manager.

### 5.1 Access and parking

#### South Beach

##### Vehicle access

Almost all visitors arrive to South Beach by car. Vehicle access to the South Beach is from Nargohid Road approximately 6km west of the Camperdown town centre via a sealed two-way entry road. The road grades down to South Beach and connects to the boat ramp and car parking areas via a one-way loop system and provides access for boat trailers, long vehicles, caravans and bus/coach access. Refer Figure 9.

Separate road access to the Camperdown Angling Club is also provided from the main entry road, however, access is constricted and vehicles with boat trailers are required to

complete a three point turn in the unsealed car park in front of the angling club to turn around.



Figure 8 – Existing Lake Bullen Merri Recreation Facilities and Access



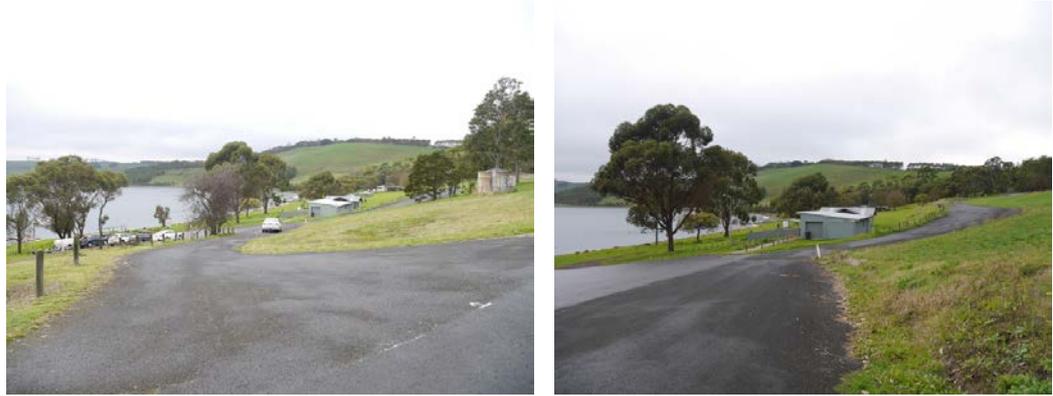
**Figure 9** –South Beach Existing Conditions

### **Parking arrangements**

The main car park at the South Beach boat ramp is the most frequently used car park. Sealed with asphalt it provides parking and waiting areas for cars and boat trailers. The narrow width and steep cross fall on adjoining grass areas restrict use for boat trailer parking and other long vehicle parking (except parallel) in these areas.

The Camperdown Angling Club car park is unsealed is located on the north and south sides of the club building. The club has indicated they would like to seal the car park in the near future.

The grass bank on the lake side of the Camperdown District Motorcycle Club is used for overflow boat trailer and car parking on busy days. Shade annexes and other picnic facilities are often erected there during peak summer periods.



*Photo 8 and 9 South Beach sealed roadway and car parking areas*

### **Pedestrian access**

At South Beach there is a graded all ability concrete path from the main boat ramp car park to the toilet block however there are no other formal pedestrian paths and pedestrians must use the road network or grass areas.

There is graded ramp access onto the jetties at the main boat ramp however declining lake water levels can increase grades on the ramps to levels beyond capacity for persons with limited mobility.

### **Emergency and maintenance access**

At South Beach there is clear emergency vehicle access to the main boat ramp, pontoons/jetties, toilet facilities and club buildings. The central grass area, picnic facilities and swimming beach are protected from vehicles access by timber bollards and barriers. Maintenance access points are located at either end of the grassed area.

### **Summary of key issues**

- There is extensive parking at South Beach and the area only exceeds capacity at peak periods.
- Lack of line marking and signage means cars frequently occupy parking areas best utilised for boat trailer parking reducing effective capacity.
- There are no marked disabled parking bays in areas accessible to the toilet block or lake edge.
- There is no designated boat launching/retrieval waiting area. This reduces safety and increases congestion if the car park is filled with parked cars and trailers.
- Ineffective parking along the road can impact on vehicle and pedestrian safety.
- Access to grass overflow parking areas is not well defined.
- The falling water levels of the lake presents ongoing access issues and costs associated with retention of all ability access to the lake.

## **North Beach**

### **Vehicle access**

Access to North Beach is via Sadlers Road, approximately 5kms west of Camperdown town centre. There is an unsealed (2WD) road access track down to the former North Beach boat ramp site and an informal unsealed car parking area. There is an extensive secondary network of 4WD and trail bike tracks providing access to the shoreline in numerous locations (Refer Figure 10). These are used by local anglers who drive as close to the shoreline as possible for fishing access. As lake levels decline additional informal tracks are added as anglers seek new access routes to the shoreline for fishing.



Photo 10 – Informal shoreline access



Photo 11 – Existing vehicle access tracks

## Parking arrangements

The car parking area at North Beach is informal and unsealed.

## Summary of key issues

- Informally established mountain bike tracks on the steep slopes run directly across the roads and tracks creating a public safety risk.
- Uncontrolled vehicle access to the north beach shoreline and informally established tracks impact on vegetation management and increase the transfer of sediment into the lake after rainfall.

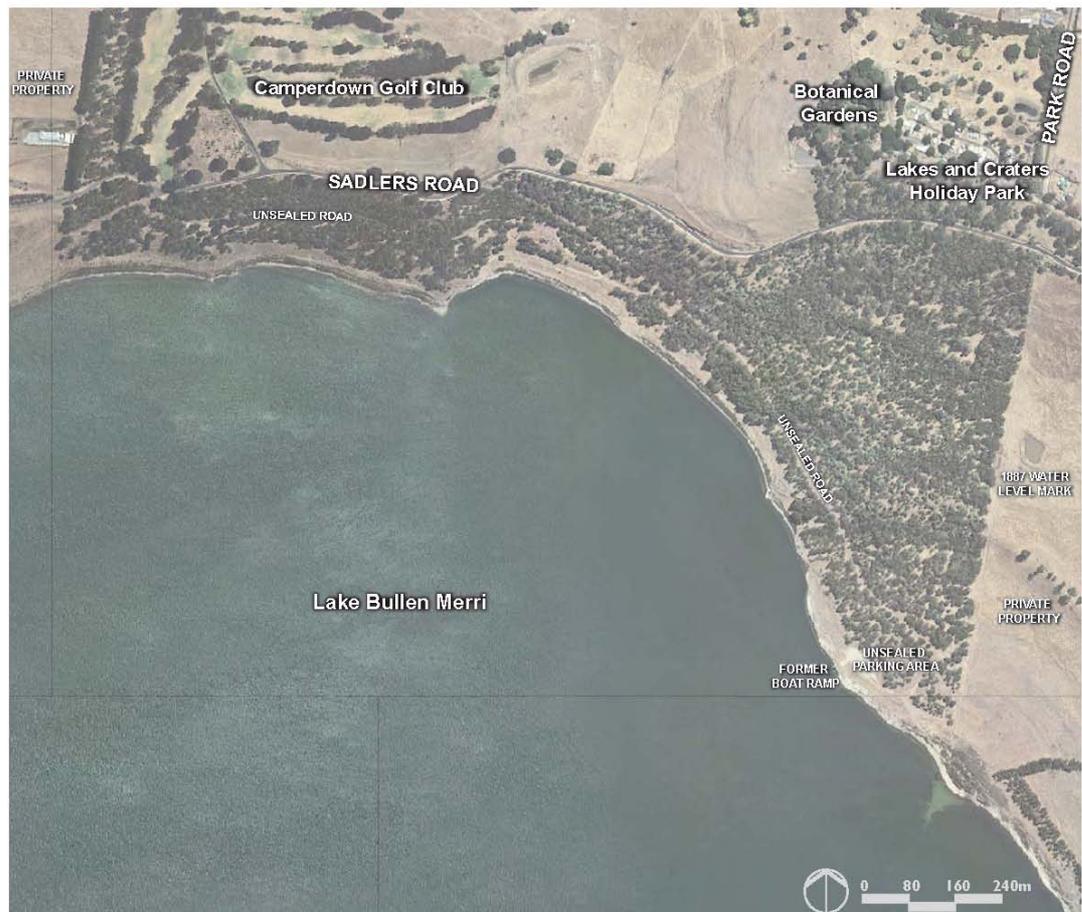


Figure 10 – North Beach Existing Conditions

## Public access to private land around the lake

Previously a road provided public access around the western side of the lake for many years however; the road was on adjoining freehold land and crossed several titles. The road was closed in 2011 and is no longer available for public access.

The lack of shoreline access around the lake, particularly for fishing, has been identified in numerous public meetings and petitions as a key issue for the local community and contributed to the cancellation of the popular Lake Bullen Merri Classic Angling event.

Issues raised by private landowners around the lake regarding the use of private land for access include:

- Boats mooring and landing on beaches within private property areas without permission from the landowner.
- Fishers and other users lighting fires, leaving litter and damaging fences and vegetation.
- Declining water levels require ongoing extension of boundary fencing to contain stock and prevent them moving onto public reserves.

## **Objectives and actions**

### ***Maintain safe, equitable and environmentally sustainable public access to Lake Bullen Merri and facilities***

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- R1** Ensure that all tracks and access points to the lake are managed to ensure public safety and minimise the impact of access on the natural and cultural values of the lake.
- R2** Monitor safety and erosion impacts from informal bike tracks in North Beach. Close, fence and rehabilitate tracks where they cross vehicle access tracks in areas with poor sightlines and limited capacity to stop on steep downhill gradients.
- R3** Investigate opportunities with private landowners for public access to private property for shoreline fishing and walking around the lake to link the rail trail and the Mt Leura Reserve.

### ***Improve safety and efficiency of vehicle access and car parking***

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- R4** Review and upgrade signage and line marking to improve efficiency of existing boat trailer and car parking at South Beach in accordance with Australian Standards.
- R5** Establish line marking and signage to designate a boat launching-retrieval waiting area adjacent to the main boat ramp at South Beach in accordance with Australian Standards.
- R6** Establish line marking and signage for the designated disabled parking bay adjacent to the existing public toilets and Camperdown Angling Club access ramp at South Beach.
- R7** Seal the Camperdown Angling Club car park at South Beach and maintain the pedestrian ramp to ensure all ability access to the beach and jetty.

- R8** Restrict vehicle access to roads and tracks where possible at both South Beach and North Beach to reduce erosion and impacts on shoreline vegetation.

***Improve access and the provision of overflow car and boat trailer/ parking areas for major events and use peak periods***

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- R9** Investigate establishment of a grass overflow parking and boat trailer parking area on the north side of Naroghid Road to provide additional car and boat trailer parking for major events at South Beach.

## 5.2 Boating facilities

### South Beach

There are two boat ramps at South Beach. The main ramp is a double boat ramp which is the only operational boat ramp at the lake. The ramp is concrete, well-lit and is served by two jetties with floating pontoons and a fish cleaning table. It has capacity to launch/retrieve approximately 20-30 boats per hour. It caters for the majority of lake boat launching only becomes congested at peak summer access periods or when subject to strong northerly winds that make landing/launching more difficult. Boating access on the lake is also affected by the availability of boat trailer parking at South Beach (refer section 5.1).

The surface and pontoons at the main boat ramp were upgraded and extended in 2011 and again in late 2015. This is a regular and ongoing requirement due to the declining water levels.

The boat ramp at the Camperdown Angling Club is no longer functional. The ramp is difficult to use as the turning circle to access the ramp is too small. The ramp is managed by the Camperdown Angling Club. The Club has advised that the boat ramp will be removed.



*Photos 12 and 13 South Beach Boat Ramp*

### Summary of Key Issues

- Boat ramps and jetties and other edge of lake infrastructure require substantial modification or replacement every 5-10 years to remain safe and functional due to declining lake water levels (in the order of 10-15 cm/year).
- Access ramps to the pontoons also need to be extended and lowered in height to reduce the grade.

### North Beach

The boat ramp at the North Beach which was built in 1994 and is no longer functional and is subject to significant wave action under prevailing south westerly wind conditions. The inability to establish adequate piling in the rocky lake bed led to failure of the pontoons alongside the ramp.

A boat ramp located on the North Beach would help to provide alternative access in northerly winds and during peak times. Relocation of the boat ramp to a more suitable location on the North Beach may make the ramp easier to use and to continue to provide access to the lake. Road access to the ramp would also need to be upgraded to provide safe access for vehicles with trailers.



*Photo 14 Former North Beach Boat Ramp*

### **Summary of key issues**

- The boat ramp is no longer functional. The rocky shoreline and increased wave action make the establishment of jetties and pontoons to assist boat launching difficult.

### **Objectives and actions**

#### ***Maintain safe and sustainable boat launching and water access to the lake***

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- R10** Maintain the double boat ramp and the jetties at South Beach by undertaking ongoing maintenance and modifications as required to maintain safe and cost effective boat launching facilities.
- R11** Remove the Camperdown Angling Club boat ramp and rehabilitate the shoreline to reduce erosion.
- R12** Review the location the boat ramp at North Beach and if necessary relocate to a new location to provide a new safer boat launching facility at North Beach. Remove the old boat ramp at North Beach and rehabilitate the shoreline to reduce erosion.
- R13** Ensure designs for future lake edge facility upgrades consider the future modification requirements to cost effectively retain safety and functionality when lake water levels become lower. Each design should clearly indicate how and at what water level the structure will need to be modified to enable funding and future works to be planned in advance.

## **5.3 Fishing and water based activities**

In the warmer months the lake is popular for water-based recreation activities including water skiing, jet skiing, sailing, swimming, fishing and scuba diving.

The lake is used for boating events including the Lake Bullen Merri Easter Regatta. The regatta, run by Yachting Victoria's western region and is in its 55<sup>th</sup> year of operation. The regatta is well attended and entrants to the regatta camp on the South Beach reserve.

Fishing occurs all year round and is the dominant lake use over winter and peaks when salmon fishing conditions are at their best. Boat-based fishing is permitted in all areas of the lake and shoreline fishing is permitted at North and South Beach, including the designated swimming area.

The lake is stocked with introduced species including Rainbow Trout, Chinook Salmon and Brown Trout and these are the most commonly found fish in the lake. In 2016 5,000 Brown Trout, 5,000 Rainbow Trout and 20,000 Chinook Salmon were released into the lake by Fisheries Victoria.

The Lake Bullen Merri Fishing Classic was first run in 2003 culminating in a tenth anniversary in 2013. The event attracted around 150 competitors annually and was promoted as a family event that provided high quality fishing and placed a strong emphasis on promoting junior anglers. Reduced access for shoreline fishing on the adjoining freehold land resulted in a lack of interest in the event and the classic stopped running in 2013.

During summer the lake experiences high levels of on-water recreation use with fishing vessels, sailing boats, water ski and jet skis and swimmers compete for limited space. The lake has several boating zones to provide for public safety including a designated swimming area (no boating zone), a waterski access lane and 5 knot speed around the lakes edge and in the northern section of the lake.

By default Marine Safety Victoria has assumed waterway management responsibility (under the *Marine Safety Act 2010*) for the lake when the previous waterway manager (South Beach CoM) was not reappointed. However, MSV do not have sufficient staff to resource day to day management and enforcement of on-water safety rules and regulations at a local level in regional areas.

### **Summary of key issues**

- The concentration and diversity of on water recreational use concentrated at South Beach including fishing, sailing, water skiing, jet skiing, swimming and scuba diving present ongoing challenges to water safety.
- The designated swimming area (no boating zone) constrains boat access at the south beach frontage in peak periods.
- Declining lake water levels expose steep submerged ledges, rocks and historical debris/litter on the lake bed. These can create ongoing hazards to boating, swimming and fishing in shallow water.
- Limited access for shoreline fishing due to the majority of the shoreline being in freehold ownership.
- The Lake Bullen Merri Fishing Classic was a popular event but better financial support and shoreline access is needed for the event to be viable.

### **Objectives and actions**

#### **Provide for fishing and water based activities**

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- R14** Ensure that fishing and water based activities are managed to minimise their impact on the natural and cultural values of the lake and adjoining reserves.
- R15** Support water-based events at Lake Bullen Merri including the Easter Regatta and the Lake Bullen Merri Fishing Classic.
- R16** Monitor the swimming and boating launching areas to minimise risk to public safety.
- R17** Review the boating zones at the lake to improve public safety for all users of the lake.
- R18** Seek the appointment of a locally based waterway manager under *Marine Safety Act 2010* for on water management and enforcement of vessel regulations.

## 5.4 Shore based activities and facilities

### South Beach

The South Beach area is popular to visit for walking, picnicking and for access to the lake and has a number of facilities including a rotunda, picnic shelters, electric barbeque facilities and picnic tables. The existing formal landscape character at South Beach, includes extensive areas of mown grass and scattered planting of native and exotic trees. There are limited facilities for smaller children.

Camping is not permitted at South Beach but is occasionally allowed by SBCoM through agreement with selected user groups. Campfires may be lit in designated areas.

The main public toilets at South Beach were upgraded in 2010. They provide for disabled access and utilise a best practice septic infiltration system. There are also toilet facilities within the Camperdown Angling Club and Camperdown District Motorcycle Club buildings. These are on older septic systems.

### Summary of key issues

- The popularity and numbers of visitors to South Beach over summer require a high level of on ground operational management expertise to maintain public safety and access to the lake for activities.
- The existing toilet facilities cater for normal levels of use at South Beach only. At peak periods including Christmas, Easter and during major events, the systems can become overwhelmed and increase risk of contamination of the lake environs.
- Cleaning and routine maintenance costs for toilets, BBQs and other facilities are higher than average as the site is isolated, unsupervised and subject to high levels of peak seasonal use.
- Unauthorised camping may increase fire risks and is difficult to regulate at the site with current resources and limited enforcement capability.
- Household rubbish is dumped at South Beach and North Beach and is expensive to remove.
- Regulations to manage the reserve are outdated and don't reflect current uses.
- Illegal fires on Total Fire Ban days may increase fire risk across the reserve and for adjoining private property owners.



*Photos 15 and 16 South Beach Public Toilet Facilities*



Photo 17 South Beach picnic facilities



Photo 18 South Beach picnic facilities



Photo 19 Rubbish bin station



Photo 20 Information board

## North Beach

The North Beach has a natural character with limited recreational facilities. The North Beach bank is steep and rocky in many areas and difficult to use for shore-based recreation. The roads are also used by locals for dog walking. There is an extensive secondary network of informal 4WD and trail bike tracks on the steep bushland slopes. Some provide access to the shoreline in numerous locations. These are used by visitors who drive as close to the shoreline as possible for fishing access and there is evidence of small camp fires and other visitor debris along the lake shoreline.

### Summary of key issues

- Camping is not permitted at North Beach but despite the lack of facilities illegal camping occurs and is difficult to police.
- There are limited recreational facilities at North Beach. There are no seats, picnic infrastructure or lake access facilities to encourage visitors to visit this side of the lake.

### Objectives and actions

#### ***Provide for shore-based activities at South Beach and retain existing low key natural character at North Beach***

- R19** Review and upgrade existing reserve regulatory and risk/warning signage at South Beach and North Beach.
- R20** Review and update reserve regulations for North Beach and South Beach.
- R21** Investigate provision of additional seats/picnic tables and the establishment of a small children's playground facility at South Beach.

- R22** Relocate picnic tables and seating closer to the lake edge as water levels recede.
- R23** Investigate provision of additional seats/tables in support of existing local fishing and walking use at North Beach.
- R24** Prepare an effluent management plan to assess options for provision of cost effective and environmentally sustainable new amenities infrastructure to cater for existing peak period use and in support of future uses.

## 5.5 Existing leases

There are two sporting clubs based at South Beach. Their occupation is formalised by Crown land leases issued by the SBCoM and attested by the Minister for Energy, Environment and Climate Change or delegate. The clubs are responsible for the ongoing maintenance and upkeep of their respective buildings.

### **Camperdown Angling Club**

The club has a twenty one year lease for the club building with a 21 year licence for the surrounding car parking area through to June 2036. The club has 30-35 local members and around 280 from across the region. The club provides onsite accommodation for club members and other guests, reporting that the facility is popular and booked most weekends in advance.



*Photo 21 Camperdown Angling Club*

### **Camperdown District Motorcycle Club**

The club has a ten year lease for the building and surrounding grass area. The club has around 60 local members and has occupied the former yacht club building for over 10 years. The motorcycle club building is utilised by the club and South Beach CoM for meetings. The building has a prominent position with elevated views out over the lake.



*Photo 22 Camperdown and District Motorcycle Club*

### **Summary of key issues**

- The Camperdown and District Motorcycle Club will likely require significant repairs/upgrade at the end of the existing lease in order to remain operational. Major repairs/upgrades to the existing building may not be cost effective.

### **Objectives and actions**

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- R25** Ensure lease holders maintain the buildings in accordance with their lease conditions.



## 6. Resourcing and revenue

Lake Bullen Merri is an important resource for Camperdown and the region. It provides economic, social, recreational and environmental benefits for the local area and attracts visitors from the broader region, interstate and overseas. Resources to manage Lake Bullen Merri have historically been provided by SBCoM and Council, with grant funding provided for a range of capital works through different State Government funding programs.

A financially sustainable source of revenue for management of Lake Bullen Merri is required to protect existing geological, environmental and cultural values and provide and maintain recreational facilities at the lake for local and regional visitors.

### 6.1 Seasonal camping

There is currently no formal camping at South Beach. Establishment of seasonal camping at South Beach could provide a potential source of additional revenue however costs to establish and operate camping sites and to provide additional amenity facilities are high. Revenue is also likely to be significantly affected if blue green algal blooms force the closure of water access over the peak summer school holiday period as occurred in 2015/2016.

SBCoM currently allow limited camping for one off events with organisers providing temporary amenity facilities. Proposals for seasonal camping outside of events will not be progressed at this time.

### 6.2 Commercial facility development

The Lake Edge Café at Lake Purrumbete east of Camperdown provides a local example of a commercial facility lease on a lake edge. Visitors to the Lake Edge Café value the lake aspect and the views. Lake Bullen Merri could provide an even more spectacular backdrop for a café facility.

The existing motorcycle club building is in a prime location at South Beach. However, the building is structurally in poor condition and provides only basic shelter and limited facilities. A new replacement building could provide opportunities for additional multi use recreational, commercial and educational facilities without increasing built development at the lake.

Proposals for a permanent commercial facility development at the motorcycle club room will not be progressed at this time. Pop up cafés can provide a unique lakeside experience with minimal establishment costs and would provide an alternative to a permanent facility.

## 6.3 Other user pays fees and charges

Public access to Lake Bullen Merri is controlled via only two access points, one at North Beach and one at South Beach. Restricting public access to the lake and the potential use of boat launching and parking fees outside the context of a major event has been suggested in consultation but is not recommended due to the following:

- The regulations for South Beach stipulate that entry to the reserve shall be free of charge except on days when the reserve is set apart for special events (not exceeding 12 per year).
- The lake is not supervised and remote access infrastructure such as gates, meters and signage are likely to be easily bypassed, compromised and targeted by vandalism.
- Collection of fees requires maintenance of infrastructure and on site staff costs are likely to exceed the revenue collected.
- Fees for boat launching and parking may deter visitors to the lake and impacts on tourism and the local economy.

### Summary of key issues

- SBCoM have very little income and rely on grant funding and the Corangamite Shire Council for recurrent and in-kind financial support along with extensive volunteer labour and donated machinery to maintain and manage Crown land and existing facilities at South Beach.
- SBCoM does not have the resources to develop income raising commercial opportunities.
- Access to funding for maintenance of existing and new assets once established is very limited.
- In the context of rate capping Corangamite Shire Council have indicated they are unwilling to continue to fund and provide operational and maintenance support for areas in which they are not already the delegated Crown land or the role of Local Water Manager under the Regional Blue-Green Algae Response Plan.

### Objectives and actions

#### ***Establish sustainable new sources of revenue to fund ongoing lake environmental and recreational management***

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- M1** Investigate the provision of a pop up café at South Beach.
- M2** Consider seasonal camping and commercial facility development when funding is available for establishment.
- M3** Investigate establishment of a single delegated land manager with responsibility for all parcels of Crown land within the lake catchment to minimise management costs and improve effective service delivery.



## 7. Implementation

The actions which follow in Sections 7.1 to 7.3 are presented within an overall recommended implementation framework to guide prioritisation and staging of works, and include high, medium and low priority actions. The indicative timing on priorities is as follows:

- High (1-3 years)
- Moderate (4-6 years)
- Low (7-10 years)

The availability of funding to delivery items is subject to the success of potential grant applications. The success of these measures will influence the timeline and ability of land and lake managers to deliver the proposed works.

## 7.1 High Priority Actions

Item No	Action Description	Priority	Lead Agency	Partners
<b>THE LAKE</b>				
WQ1	Support continued scientific research into blue-green algae at the lake.	High	DELWP	CSC DEDJTR CCMA
WQ2	Seek the appointment of a Local Water Manager to managing blue-green algae blooms and minimise risks to lake users.	High	DELWP	WW CCMA
WQ3	Raise community awareness of blue green algae blooms to minimise risks to community health.	High	DELWP	CSC WW CCMA
WQ5	Monitor existing septic systems on Crown land within the lake catchment.	High	SBCoM	DELWP CSC
WQ6	Liaise with adjoining landholders to investigate options to reduce transfer of nutrients into the lake from private land including the revegetation of the shoreline with indigenous species and restricting stock access.	High	CCMA	Landholders DELWP
WQ7	Avoid change to the lake's catchment and hydrology that may impact on the unique scientific values of the system.	High	CCMA	CSC DELWP
WQ8	Ensure fish stocking levels are monitored to ensure there is no negative impact on the lake's water quality	High	FV (DEDJTR)	DELWP
<b>CULTURAL HERITAGE</b>				
H1	Ensure that the management of the lake or change in land status (including licensing or leases) comply with the requirements of the Aboriginal Heritage Act 2006 and Native Title Act 1993 and are considered in consultation with Aboriginal Victoria and Traditional Owners.	High	DELWP	AV CSC SBCoM
<b>FLORA AND FAUNA</b>				
E1	Develop an ecological burn strategy for North and South beach to reduce fuel loads and benefit biodiversity and regeneration of indigenous species. Protect slow growing species by burning in sections and include lower intensity mitigation measures to protect existing vegetation during the burn.	High	DELWP	CSC CFA SBCoM
E2	Undertake post-burn weed control and understory planting with local indigenous species.	High	CSC SBCoM	DELWP

Item No	Action Description	Priority	Lead Agency	Partners
E3	Investigate management options for containment and staged eradication of Spiny Rush <i>Juncus acuta</i> at North Beach. Initial works to target areas where there is already a secondary vegetation buffer established on the lake side to reduce potential for increased sediment and herbicide transfer into the lake.	High	CSC CCMA	DELWP SBCoM
E4	Prevent the establishment and spread of Spiny Rush <i>Juncus acuta</i> at South Beach with annual herbicide control.	High	SBCoM	DELWP CCMA CSC
E5	Liaise with adjoining landholders to control the spread of Spiny Rush <i>Juncus acuta</i> on private land.	High	CCMA	Adjoining Land Owners DELWP CSC
<b>RECREATION</b>				
<b>SOUTH BEACH</b>				
R1	Ensure that all tracks and access points to the lake are managed to ensure public safety and minimise the impact of access on the natural and cultural values of the lake.	High	SBCoM CSC	DELWP
R4	Review and upgrade signage and line marking to improve efficiency of existing boat trailer and car parking at South Beach in accordance with Australian Standards.	High	CSC SBCoM	DELWP MSV
R5	Establish line marking and signage to designate a boat launching-retrieval waiting area adjacent to the main boat ramp at South Beach in accordance with Australian Standards.	High	SBCoM	DELWP MSV
R6	Establish line marking and signage for the designated disabled parking bay adjacent to the existing public toilets and Camperdown Angling Club access ramp at South Beach.	High	CAC SBCoM	DELWP
R10	Maintain the double boat ramp and the jetties at South Beach by undertaking ongoing maintenance and modifications as required to maintain safe and cost effective boat launching facilities.	High	SBCoM	DELWP MSV
R19	Review and upgrade existing reserve regulatory and risk/warning signage at South Beach and North Beach.	High	SBCoM CSC	DELWP
<b>NORTH BEACH</b>				
R2	Monitor safety and erosion impacts from informal bike tracks in North Beach. Close, fence and rehabilitate tracks where they cross vehicle access tracks in areas with poor sightlines and limited capacity to stop on steep downhill gradients.	High	CSC	DELWP

Item No	Action Description	Priority	Lead Agency	Partners
<b>LAKE AND LAND MANAGEMENT</b>				
R3	Investigate opportunities with private landowners for public access to private property for shoreline fishing and walking around the lake to link the rail trail and the Mt Leura Reserve.	High	FV	SBCoM DELWP
R14	Ensure that fishing and water based activities are managed to minimise their impact on the natural and cultural values of the lake and adjoining reserves.	High	SBCoM CSC	FV DELWP
R15	Support water-based events at Lake Bullen Merri including the Easter Regatta and the Lake Bullen Merri Fishing Classic.	High	FV	SBCoM CSC DELWP
R18	Seek the appointment of a locally based waterway manager under Marine Safety Act 2010 for on water management and enforcement of vessel regulations.	High	MSV	PV DELWP
R16	Monitor the swimming and boating launching areas to minimise risk to public safety.	High	SBCoM	DELWP MSV
M1	Investigate the provision of a pop up café at South Beach.	High	SBCoM	DELWP CSC

## 7.2 Moderate Priority Actions

Item No	Action Description	Priority	Lead Agency	Partners
<b>THE LAKE</b>				
WQ4	As part of future upgrade or replacement of existing recreational facilities utilise best practice water sensitive urban design (WSUD) principles to capture and remove sediments and other pollutants from roads and car parking areas.	Moderate	SBCoM CSC	DELWP CCMA
<b>CULTURAL HERITAGE</b>				
H2	Undertake a cultural heritage management plan for Lake Bullen Merri. The assessment will be used to determine protocols for management of areas of cultural heritage sensitivity and the need for any additional complex assessment for specific future projects if required.	Moderate	DELWP CSC SBCoM	AV
H3	Research the Aboriginal cultural heritage, local history and historical recreational use of the lake and establish interpretive signage at South Beach and North Beach.	Moderate	CSC SBCoM	AV DELWP Camperdown Historical Society
H4	Research and establish water level markers on Crown land to indicate historical changes in lake water levels. Ensure water level marker design allows for ongoing update as lake levels continue to recede.	Moderate	CSC SBCoM	DELWP
H5	Protect and preserve the landscape views and the scenic amenity of Lake Bullen Merri and its environs.	Moderate	CSC SBCoM	DELWP
<b>FLORA AND FAUNA</b>				
E6	Monitor and control other pest plants and animals including rabbits and foxes by implementing integrated local control programs where required.	Moderate	CSC SBCoM	CCMA DELWP
E7	Provide additional indigenous overstorey shade trees at South Beach while retaining a more formal arrangement consistent with existing recreational use.	Moderate	SBCoM	CCMA DELWP
<b>RECREATION</b>				
R8	Restrict vehicle access to roads and tracks where possible at both South Beach and North Beach to reduce erosion and impacts on shoreline vegetation.	Moderate	CSC SBCoM	DELWP
R13	Ensure designs for future lake edge facility upgrades consider the future modification requirements to cost effectively retain safety and functionality when lake water levels become lower. Each design should clearly indicate how and at what water level the structure will need to be modified to enable funding and future works to be planned in advance.	Moderate	DELWP	SBCoM CSC
R17	Review the boating zones at the lake to improve public safety for all users of the lake.	Moderate	DELWP	MSV SBCoM
R20	Review and update reserve regulations for North Beach and South Beach.	Moderate	DELWP	CSC SBCoM

Item No	Action Description	Priority	Lead Agency	Partners
<b>SOUTH BEACH</b>				
R7	Seal the Camperdown Angling Club car park at South Beach and maintain the pedestrian ramp to ensure all ability access to the beach and jetty.	Moderate	CAC	SBCoM
R9	Investigate establishment of a grass overflow parking and boat trailer parking area on the north side of Naroghid Road to provide additional car and boat trailer parking for major events at South Beach.	Moderate	CSC	SBCoM
R22	Relocate picnic tables and seating closer to the lake edge as water levels recede.	Moderate	SBCoM	DELWP
<b>NORTH BEACH</b>				
R12	Review the location the boat ramp at North Beach and if necessary relocate to a new location to provide a new safer boat launching facility at North Beach. Remove the old boat ramp at North Beach and rehabilitate the shoreline to reduce erosion.	Moderate	CSC FV	DELWP MSV

## 7.3 Low Priority Actions

Item No	Action Description	Priority	Lead Agency	Partners
<b>RECREATION</b>				
<b>SOUTH BEACH</b>				
R11	Remove the Camperdown Angling Club boat ramp and rehabilitate the shoreline to reduce erosion.	Low	Camperdown Angling Club	SBCoM DELWP
R21	Investigate provision of additional seats/picnic tables and the establishment of a small children's playground facility at South Beach.	Low	SBCoM	DELWP
R24	Prepare an effluent management plan to assess options for provision of cost effective and environmentally sustainable new amenities infrastructure to cater for existing peak period use and in support of future uses.	Low	SBCoM	DELWP CSC
R25	Ensure lease holders maintain the buildings in accordance with their lease conditions.	Low	SBCoM	DELWP
<b>NORTH BEACH</b>				
R23	Investigate provision of additional seats/tables in support of existing local fishing and walking use at North Beach.	Low	CSC	DELWP
<b>LAKE AND LAND MANAGEMENT</b>				
M2	Consider seasonal camping and commercial facility development when funding is available for establishment.	Low	SBCoM	CSC DELWP
M3	Investigate establishment of a single Lake Bullen Merri Committee of Management with delegated responsibility for all parcels of Crown land within the lake catchment to minimise management costs and improve effective service delivery.	Low	DELWP	CSC SBCoM

## 7.4 Average Annual Expenditure

Provisional estimate only prepared by TBLD P/L 28/1/2016 using information provided by SBCoM and CSC

Item No.	Description	Annual Maintenance
<b>SOUTH BEACH (Corangamite Shire)</b>		
A1	Toilet and amenity block facility maintenance	\$10,000
A2	BBQ area cleaning and maintenance	\$1,500
A3	Road and car parking maintenance	\$2,500
A4	Blue green algae water quality testing and response	\$17,000
SOUTH BEACH ANNUAL MAINTENANCE COSTS		\$31,000
<b>NORTH BEACH (Corangamite Shire)</b>		
A5	Gravel roads - annual inspection and grading when required	\$600
A6	Fencing, signage - routine repairs/maintenance	\$400
A7	Bushland Management	\$500
A8	North beach boat ramp	N/C
NORTH BEACH ANNUAL MAINTENANCE COSTS		\$1,500
<b>SOUTH BEACH COMMITTEE OF MANAGEMENT</b>		
A9	Boat ramp and jetty	\$10,000
A10	Picnic shelters, tables, fencing and signage	\$1,000
A11	Utilities incl electricity, water license	\$1,100
A12	Miscellaneous repairs fences and signage	\$1,500
A13	Rubbish removal	\$900
A14	Fuel (Equipment hire incl tractor and loader donated N/C)	\$500*
A15	Volunteer labour for grass mowing and weed control	N/C*
SOUTH BEACH ANNUAL MAINTENANCE COSTS		\$15,000

Annual allocation allowing for resurfacing every 10-12 years

Council provision of services no longer provided

Does not include \$7,500 annual funding allocation to SBCoM

Annual allocation as required for major extension modification every 5-10yrs

SBCoM estimate 40hrs @\$100/hr - approx value \$4,000/yr

SBCoM estimate approx 800hrs/yr @\$25/hr – approx value \$20,000/yr

## 7.5 Average Annual Income

Provisional estimate only prepared by TBLD P/L 28/1/2016 using information provided by SBCoM

Item No.	Description	Revenue 2015/16
<b>SOUTH BEACH COMMITTEE OF MANAGEMENT</b>		
B1	Camperdown Angling Club lease	\$104
B2	Camperdown & District Motorcycle Club lease	\$104
B3	Corangamite Shire Annual Funding Allocation	\$7,500
B4	Events and fundraising (i.e. MARS Corporate Fun Day)	\$1,600
SOUTH BEACH AVERAGE ANNUAL INCOME		\$9,308

NOTE: Does not include one off funding grants such as that received for recent boat ramp replacement

# Bibliography

DELWP – Blue-Green Algae Circular 2015-2016 Co-ordination Framework, DSE 2008

Evans, T. (2009) Hydro geological Study – Lakes Bullen Merri and Gnotuk. Report for Lakes Bullen Merri and Gnotuk Advisory Committee Corangamite Shire, Terra Geoscience Pty Ltd

Jones, R. N., McMahon, T. A., & Bowler, J. M. (2001) Modelling historical lake levels and recent climate change at three closed lakes, Western Victoria, Australia (c. 1840 - 1990). *Journal of Hydrology*, 246, 159-180

Leahy, P., Robinson, D., Pattern, R., & Kramer, A. (2010) Lakes in the Western District of Victoria and Climate Change. EPA Victoria Scientific Report, Pub. No. 1359 November 2010

Mitch Chapman (Nov 2013) – Fishing Monthly Magazine (Fish species information)

# APPENDIX 1 Glossary

The following abbreviations and terms are used in this report.

Abbreviation/Term	Definition for the Lake Bullen Merri Management Plan
Doctrine of Accretion	This is defined as ' <i>The process where the boundary between land and water alters so slowly that the change is not readily noticeable.</i> ' At Lake Bullen Merri declining water levels have resulted in loss of Crown land as the lake bed is gradually exposed with accretion of areas to adjoining freehold properties. <i>Source: DSE Guidance Note 6 Principles of Re-establishment</i>
Blue-green algae	'Blue-green algae' or cyanobacteria are a type of microscopic, algae-like bacteria which inhabit freshwater, coastal and marine waters. Cyanobacteria photosynthesise like plants and have similar requirements for sunlight, nutrients and carbon dioxide to grow and produce oxygen. There are many different varieties of blue-green algae. While often a green or blue-green colour, they can also be white, brown, blue, yellow-brown, or red. <i>Source: Australian Government, Department of Sustainability, Environment, Water, Population and Communities, 2012.</i>
Biodiversity	Biodiversity (biological diversity) is the variability among living organisms from all sources, including terrestrial, aquatic, marine and other ecosystems and the ecological complexes of which they are part, at all levels of organisation, including genetic diversity, species diversity and ecosystem diversity. <i>Source: Australia's Biodiversity Conservation Strategy 2010-2030.</i>
CCMA	Corangamite Catchment Management Authority
CSC	Corangamite Shire Council
Cultural significance	Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups. The term cultural significance is synonymous with cultural heritage significance and cultural heritage value. <i>Source: The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013 edition</i>
DEDJTR	Department of Economic Development, Jobs, Transport and Resources
DELWP	Department of Environment, Land, Water and Planning
OAAV	Office of Aboriginal Affairs Victoria
RAP	Registered Aboriginal Party
PV	Parks Victoria
SBCoM	South Beach Committee of Management
Stratification	Thermal stratification in the water column of the lake is a natural condition that may develop during the summer in which the water of different temperature is prevented from mixing resulting in a lack of dissolved oxygen critical for survival of fish. Thermal stratification is common in deep Lakes and is overcome as temperatures decrease in Autumn triggering 'overturn' and mixing of the different temperature layers.
MSV	Maritime Safety Victoria (a branch of Transport Safety Victoria) is the maritime safety regulator for Victorian waters.
WSUD	Water sensitive urban design (WSUD) is a philosophical approach to urban planning and design that aims to minimise the hydrological effect of urban development on the surrounding environment (Source: WSUD Engineering Procedures, CSIRO).

## APPENDIX 2 Land status and management responsibilities

*Land status and management responsibilities The reserve is Crown land, reserved as follows:*

Parcel	Size (Ha)	Crown allotment	Section	Parish	Reservation	Reserve Name	Reservation purpose	Land Manager
P080295	480.78	6	7	Colongulac	Temporary	Lake Bullen Merri	Protection of the Bed and Banks of a Lake (Gov Gazette 1983, p.2384)	Parks Victoria
P363649	44.27	4D	7	Colongulac	Permanent	The Lakes Recreation Reserve	Public Park (Gov Gazette 1879, p.2133)	Corangamite Shire Council
P080296	3.6	C	8	Colongulac	Temporary	Lake Bullen Merri Recreation Reserve – South Beach	Public Recreation (Gov Gazette 1955, p. 4162)	South Beach Committee of Management
P080297	1.97	D	8	Colongulac	Permanent	Lake Bullen Merri Recreation Reserve	Recreation and Amusement of the People (Gov Gazette 1931, p.38)	Corangamite Shire Council
P080298	3.6	E	8	Colongulac	Permanent	Lake Bullen Merri Recreation Reserve	Recreation and Amusement of the People (Gov Gazette 1931, p.39)	Corangamite Shire Council
Government Road							Road	Corangamite Shire Council

The above described Crown land is reserved pursuant to the *Crown Land (Reserves) Act 1978*. The reserve reference number is 1201815.

## APPENDIX 3 Tenures

Tenure number	Tenure type	Parcel	Expiry date	Use	Licensor
2021842	Lease	P080296	2036	Angling club	SBCoM
2021843	Licence	P080296	2036	Angling club	SBCoM
2014680	Lease	P080296	2025	Motorcycle Club	SBCoM

# APPENDIX Management Context

**Table 1. Relevant Legislation**  
**Commonwealth legislation**

THEME	ACT	PROVISION	LEAD AGENCY
Biodiversity	<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Commonwealth assessment of proposals with impacts on issues of national environmental significance Protects species of national significance	Department of Sustainability, Environment, Water, Population and Communities (DSEWPC)
Cultural Heritage	<i>Aboriginal and Torres Strait Islander Heritage Protection Act 1994</i>	Protection of Aboriginal heritage	DSEWPC
	<i>Native Title Act 1993</i>	Native Title	National Native Title Tribunal (NNTT)
Human Rights	<i>Disability Discrimination Act 1992</i>	To eliminate discrimination based on disability	Australian Human Rights and Equal Opportunity Commission

## **State legislation**

THEME	ACT	PROVISION	LEAD AGENCY
Planning	<i>Planning and Environment Act 1987</i>	Establishes land use planning regime for private and public land	DELWP Local Governments
Land Status / Management	<i>Crown Land (Reserves) Act 1978</i>	Establishes power to reserve Crown land for a range of public purposes and to appoint Committees of Management to manage reserved Crown land	DELWP
	<i>Land Act 1958</i>	Establishes and manages land title and land transfer system	DELWP
	<i>Local Government Act 1989</i>	Provides legislative backing for local government and provision for local laws	Local Governments Department of Transport, Planning and Local Infrastructure
Environmental Protection	<i>Environmental Protection Act 1970</i>	Provides a framework for environment protection in Victoria	Environment Protection Agency (EPA)
	<i>Environment Effects Act 1978</i>	Provides a framework for major project environmental impact assessments	DELWP
Biodiversity	<i>Flora and Fauna Guarantee Act 1988</i>	Protection of rare and endangered flora and fauna	DELWP
	<i>Wildlife Act 1975</i>	Regulates the management and protection of native wildlife	DELWP Parks Victoria
Cultural Heritage	<i>Aboriginal Heritage Act 2006</i>	Protection of Aboriginal heritage in Victoria	Aboriginal Affairs Victoria (within Department of Premier and Cabinet)
	<i>Heritage Act 1995</i>	Protection of heritage sites in Victoria	Heritage Victoria (within Department of Transport,

			Planning and Local Infrastructure)
Resource / Waterway Management	<i>Catchment and Land Protection Act 1994</i>	Provides for the coordinated management of catchments and water resources	DELWP Melbourne Water Catchment Management Authorities
	<i>Fisheries Act 1995</i>	Management of coastal and inland fisheries	Fisheries Victoria (within DEDJTR)
Vessel / Port Management	<i>Marine Safety Act 2010</i>	Regulates vessel safety and vessel operations in Victorian waters	Transport Safety Victoria Parks Victoria
Vehicles	<i>Road Management Act 2004</i>	Provides for the management of roads and vehicles	VicRoads DELWP Local Governments
	<i>Road Safety Act 1986</i>	Provides for safe, efficient and equitable road use	VicRoads
	<i>Land Conservation (Vehicle Control) Regulations 2013</i>	Provides for the management of vehicles on public land, prevention of soil erosion and damage to public land	DELWP Parks Victoria Local Governments
Emergency Response	<i>Country Fire Authority Act 1958</i>	Provides for the establishment and management of rural fire fighting services	CFA
	<i>Emergency Management Act 1986</i>	Provides a structure for coordinating emergency response	Emergency Services Commissioner (within Department of Justice)
Human Rights	<i>Disability Services Act 1991</i>	Sets out the principles to be furthered by service providers with respect to disabled persons	Department of Human Services (DHS)

### **Committee of Management Responsibilities and Good Practice Guidelines (2015)**

was prepared by the Department of Environment, Land, Water and Planning to assist people appointed to a Victorian Crown land reserve committee of management. All committees manage their reserve on behalf of the Minister for Energy, Environment and Climate Change and have a responsibility to manage, improve, maintain and control their reserve.

### **Corangamite Regional Catchment Strategy (2013-2019)**

The strategy provides a vision for the integrated management of natural resources in the Corangamite region. It is a blueprint for catchment health in the future and builds on the achievements and lessons from the past.

# APPENDIX 5 Reserve Regulations

## REGULATIONS FOR THE CARE, PROTECTION AND MANAGEMENT OF THE NORTHERN PART OF LAKE BULLEN MERRI RECREATION RESERVE.

(Extract from the *Victorian Government Gazette*, No. 82, dated 24<sup>th</sup> August 1960.)

Whereas by section 218 of the *Land Act 1958*, power is given to the Board of Land and Works to make Regulations in respect to the care, protection and management of any Crown land which has been reserved under the Land Acts for any public purpose whatsoever and which has not been conveyed to or vested in Trustees, and for the purpose enacted: Now therefore the Board of Land and Works in pursuance of the power conferred aforesaid, doth hereby make the following Regulations in respect of the land in the Parish of Colongulac temporarily reserved by Order in Council dated 26<sup>th</sup> July 1955, as a site for Public Recreation and known as the "Reserve". The said land is hereinafter referred to as the "Reserve" and has been placed under the control of a Committee of Management, hereinafter referred to as the "Committee".

### REGULATIONS.

1. The Reserve shall be open to the public free of charge, except on such days (not exceeding twelve in any one year) holiday amusements, when a sum not exceeding Six shillings may be charged and taken for the admission of every adult person entering the reserve.
2. No person shall enter or remain in the Reserve who may offend against decency as regard dress, language, or conduct.
3. No person shall damage in any way the trees, shrubs, or flowers in the Reserve, nor stick bills or cut names on or in any way damage or injure the buildings, gates, fences, seats, swings, or other structures, fixtures, or improvements in the Reserve, or in any way damage or injure any buildings, boats, fences, springboards, or other structures in the Reserve, and no person shall leave or deposit any glass, or paper, or other rubbish of any kind except in the receptacles provided for such rubbish.
4. No person shall erect any buildings or structure of any kind in the Reserve without the written permission of the Committee first obtained.
5. No person shall sell or offer for sale any article or any food provisions, or drinks of any kind in the Reserve without the written permission of the Committee.
6. No person shall bet publically in any part of the Reserve without the written permission of the Committee.
7. No person shall light a fire in any part of the Reserve except in the proper fireplaces provided for the purpose without the written permission of the Committee.
8. No person shall remove, displace or damage any notice or any board, plate or fitting, for the exhibition of any Regulations set up by the Committee.
9. No person shall engage in any races or games of any kind within the space enclosed by the fence enclosing the beach without the written permission of the Committee.
10. No person shall bring into the Reserve any dog unless controlled by a suitable lead or chain, and no person shall allow any dog to enter the water from the Reserve.
11. No person shall indulge in sunbathing unless clad in a proper and suitable costume, or otherwise offend against decency in the Reserve.
12. No person shall dig or remove any sand, soil or other material from any part of the Reserve.
13. No person shall spit or expectorate in any part of the Reserve or on any structure or erection in the Reserve.
14. No person shall deliver any public address in the Reserve without the written permission of the Committee.
15. No person shall be in a state of intoxication in the Reserve, or behave in a disorderly manner, or create or take part in any disturbance therein, or use insulting words, or interfere with any person or persons engaging in any game or sport therein.
16. No person shall wilfully obstruct, disturb, interrupt, or annoy any person in the proper use of the Reserve, or any part thereof or wilfully obstruct or interrupt any servant of the Committee.
17. The Committee may from time to time select and set apart any portion of the Reserve for the parking of cars and vehicle and the tethering of horses, and no car, vehicle or horse shall be parked or tethered in any portion of the Reserve other than the portion set apart for that purpose.
18. Persons renting or hiring any stand, building, erection or enclosures on the occasion of any sports or holiday amusement may be required to deposit any sum which the Committee may at any time determine, not exceeding Twenty-five pounds, by way of guarantee, that due care shall be taken of

such stand, building, erection or enclosure, or anything contained therein, and such Committee in its absolute discretion, may make good any damage or injury sustained by such stand, building, erection or enclosure, or anything contained therein, during such occupancy or hiring, and deduct the cost of making good such loss or damage from the sum of money deposited by way of guarantee, and all persons so renting or hiring shall abide by these Regulations, any by any order given by the Committee.

19. No person shall put in the Reserve any cattle, horses, sheep, goats, pigs or other animals without permission, in writing, of the Committee first obtained, provided always that the moneys received for agistment shall be expended in the maintenance and improvements of the Reserve, and that an account thereof shall be furnished annually to the Board of Land and Works.— (Rs.4075.)

The common seal of the Board of Land and Works was hereto affixed this eleventh day of August, 1960, in the presence of — KEITH TURNBULL, President., J. WALSH, Member.

Every person who contravenes or fails to comply with these Regulations shall, in accordance with the provisions of section 218 of the *Land Act 1958*, for each offence be liable to a penalty of not more than Five pounds, and every person who contravenes or fails to comply with any such Regulations, and who, after he has been warned by any Bailiff of Crown lands or by any member of the Police Force, does not desist therefrom, may be forthwith apprehended by such Bailiff or member of the Police Force and taken before some justice to be dealt with according to the law and shall be liable to a penalty of not more than Ten pounds.

## **REGULATIONS FOR THE CARE, PROTECTION AND MANAGEMENT OF A RESERVE FOR THE RECREATION AND AMUSEMENT OF THE PEOPLE IN PARISH OF COLONGULAC, AT LAKE BULLEN MERRI.**

(Extract from the *Victorian Government Gazette*, No. 196, dated 5<sup>th</sup> August 1931.)

Whereas by the 181<sup>st</sup> section of the *Land Act 1928*, power is given to the Board of Land and Works to make Rules and Regulations in respect to the care, protection and management of all Public Parks and Reserves not conveyed to and vested in trustees, and for the preservation of good order and decency therein, and also for the collection and receipt of tolls, entrance fees and other charges for entering therein or thereupon: Now therefore the Board of Land and Works in pursuance of the power conferred aforesaid, doth hereby make the following Regulations in respect of the land permanently reserved by Order in Council of 31<sup>st</sup> December 1930, as a site for Recreation and Amusement of the People in Parish of Colongulac, at Lake Bullen Merri.

### **REGULATIONS.**

1. The Reserve shall be open to the public free of charge, except on such days (not exceeding twelve in any one year) as the Reserve may be set apart for fetes, sports, or other holiday amusements, when a sum not exceeding Two shillings and sixpence (2s.6d.) may be charged and taken for the admission of every adult person entering the reserve.
2. No person shall enter or remain in the Reserve who may offend against decency as regard dress, language, or conduct.
3. No person shall damage in any way the trees, shrubs, or flowers in the Reserve, nor stick bills or cut names on or in any way damage or injure the buildings, gates, fences, seats, swings, or other structures, fixtures, or improvements in the Reserve, or in any way damage or injure any buildings, boats, fences, springboards, or other structures in the Reserve, and no person shall leave or deposit any glass, or paper, or other rubbish of any kind in the Reserve.
4. No person shall erect any buildings or structure of any kind in the Reserve without the written permission of the Committee of Management and the Board of Land and Works first obtained.
5. No person shall sell or offer for sale any article or any food provisions, or drinks of any kind in the Reserve without the written permission of the Committee of Management.
6. No person shall bet publically in any part of the Reserve without the written permission of the Committee of Management.
7. No person shall light a fire in any part of the Reserve except in the proper fireplaces provided for that purpose.
8. No person shall remove, displace or damage any notice or any board, plate or fitting, for the exhibition of any Regulations set up by the Committee of Management.
9. No person shall engage in any races or games of any kind within the space enclosed by the fence enclosing the beach without the written permission of the Committee of Management.
10. No person shall bring into the Reserve any dog unless controlled by a cord or chain, and no person shall allow any dog to enter the water from the Reserve.
11. No person shall indulge in sun-bathing unless clad in a proper and suitable costume, or otherwise offend against decency anywhere in the Reserve.
12. No person shall dig or remove any sand, soil or other material from any part of the Reserve.
13. No person shall spit or expectorate in any part of the Reserve or on any structure or erection in the Reserve.
14. No person shall deliver any public address in the Reserve without the written permission of the Committee of management.
15. No person shall be in a state of intoxication in the Reserve, or behave in a disorderly manner, or create or take part in any disturbance therein, or use insulting words, or interfere with any person or persons engaging in any game or sport therein.
16. No person shall wilfully obstruct, disturb, interrupt, or annoy any person in the proper use of the Reserve, or any part thereof or wilfully obstruct or interrupt any servant of the Committee of Management.
17. The Committee may from time to time select and set apart any portion of the Reserve for the parking of cars and vehicle and the tethering of horses, and no car, vehicle or horse shall be parked or tethered in any portion of the Reserve other than the portion set apart for such purpose.
18. Persons renting or hiring any stand, building, erection or enclosures on the occasion of any sports or holiday amusement may be required to deposit any sum which the Committee of Management may at any time determine, not exceeding Ten pounds, by way of guarantee, that due care shall be taken of such stand, building, erection or enclosure, or anything contained therein, and such Committee in its absolute discretion, may make good any damage or injury sustained by such stand, building, erection or enclosure, or anything contained therein, during such occupancy or hiring, and deduct the cost of making good such loss or damage from the sum of money deposited by way of guarantee, and

all persons so renting or hiring shall abide by these Regulations, any by any order given by the Committee of Management.

19. No person shall put in the Reserve any cattle, horses, sheep, goats, pigs or other animals without permission, in writing, of the Committee of management first obtained. Provided always that the moneys received for agistment shall be expended in the maintenance and improvements of the Reserve, and that an account thereof shall be furnished annually to the Board of Land and Works.

20. The Committee of Management shall have full power and authority to impound any cattle found trespassing on the reserve, and shall be taken to be the occupier of the reserve (with all power incidental to that status) within the meaning of any law for the time being in force relating to the impounding of cattle.

For the purpose of this clause "Cattle" shall mean cattle as interpreted by section 3 of the *Pounds Act 1928*.

Every person offending against these Regulations shall, in accordance with the provisions of section 181 of the *Land Act 1928*, for each offence be liable to a penalty of not more than Five pounds (£5), and every person who knowingly and willfully offends against any such Regulations, and who, after he has been warned by any bailiff of Crown lands or by any member of the Police Force, does not desist from so offending, may be forthwith apprehended by such bailiff or member of the Police Force and taken before some justice to be dealt with according to the law, and shall be liable to a penalty of not more than Ten pounds (£10).

This Reserve has been placed under the control of the Council of the Shire of Hampden as a Committee of Management, with power and authority to enforce the foregoing Regulations.

The common seal of the Board of Land and Works was hereto affixed this 28th day of July, One thousand nine hundred and thirty-one, in the presence of — H. S. Bailey, President., F. T. A. FRICKIE, Member.

(Corr. Rs.4075.)

**REGULATIONS FOR THE CARE, PROTECTION AND MANAGEMENT OF THE PUBLIC PARK,  
PARISH OF COLONGULAC, KNOWN AS CAMPERDOWN PUBLIC PARK.**

**REGULATIONS c. 1891**

1. The park shall be open to the public from sunrise to sunset.
2. No person shall enter or remain in the park who may offend against decency as regards dress, language or conduct.
3. No person shall pluck any of the flowers, walk on the beds or borders, or climb upon or get over the fence or remove any of the labels or disturb, damage or destroy any property or thing in the park.
4. No person shall light fires in any portion of the park except in the fireplace provided for the purpose.
5. No person shall engage in any game or sport within the floral enclosure.
6. Children under the age of ten years, not under the control of some competent person, shall be liable to be removed from the floral enclosure.
7. All dogs, goats and poultry found within the floral enclosure shall be liable to be destroyed.
8. No person shall erect any dwelling in the park, nor any booth or other structure for the purpose of offering for sale any article, without the consent in writing of the Committee of Management first obtained.
9. No person shall except laborey and workmen employed on the Park, shall enter any plots therein which may be enclosed for plantatiory of young trees or shrubs. Every person offending against these regulations shall in accordance with Section 136 of the Land At 1890 on conviction before any justice, forfeit and pay a penalty not exceeding £5 for each offence; and every person who knowingly and willfully offends against such Regulations, and who, he has been warned by any bailiff of Crown lands or any constable, and taken before some Justice of the Peace, and shall, on conviction, forfeit and pay a penalty not exceeding £10.