



WATER QUALITY

The lake is fed by stormwater runoff from a large catchment extending back past Presidents Avenue. There are also secondary local drainage catchments on the north and south side of the lake which contribute stormwater runoff from local streets and adjoining residential properties. Water levels in the lake are controlled by a weir plate under the existing footbridge

The lake discharges through a narrow open channel to culverts under Blue Waters Drive.

The lake is shallow (up to 1.5m deep) and untreated stormwater along with Willow and Ash trees at the inlet zone contribute significant nutrients, causing algal blooms and poor water quality over summer.

- 1 Monitor water quality, water levels and health of aquatic vegetation in the lake. Review sediment accumulation at the eastern end of the lake and adjust water levels using the weir plate under the footbridge as needed to optimise water quality and bird habitat values. (H)

- 2 Investigate establishment of a sediment pond and ephemeral wetland downstream of the existing concrete inlet structure. The sediment pond will enable ongoing removal of coarse sediment. A densely planted shallow ephemeral wetland will remove nutrients and other pollutants before water enters the lake. Several large Willow trees can be retained to the edge of the new wetland in the short term to maintain landscape amenity while new indigenous planting becomes established. (M)

- 3 Investigate establishment of densely vegetated submerged earthen embankments constructed to trap sediments and pollutants from local drainage catchments prior to entering the lake. The vegetated collection areas will require clearance every 10-15 years but will naturally revegetate following sediment removal. (L)

- 4 The lake outfall channel can be reinvestigated for potential upgrades which could assist with better maintaining water levels within the lake during and following rainfall events. (L)

ENVIRONMENT

The steep slopes of the north eastern embankment contains remnant Grassy Woodland vegetation including a stand of rare Bellarine Yellow Gums. Other native species include Lightwood, Golden Wattle, Coast Beard-heath and occasional Moonah with an understorey of Kangaroos Grass, Wallaby Grass, Bower Spinach, Seaberry Saltbush and Kidney Weed.

Areas of Tall Marsh, dominated by Common Reed and Cumbungi, occur at the eastern end of the lake provide habitat for rare and threatened bird life.

The scattered planted mature trees around the lake include Red Gums and Swamp Gums providing habitat for possums and many birds while the Willow and Ash trees contribute to the overall landscape amenity. Nankeen Night Herons have been seen nesting in one of the large Willows for many years.

- 5 The Grassy Woodland conservation area is actively managed by the CoGG Nature Reserves Team who complete ongoing weed control and maintain fire breaks while monitoring the quality and cover of significant indigenous vegetation. (O)

- 6 Establish fencing at either end of the path handrail on the north eastern bank to restrict dog access to reed and sedge wetland areas which provide important habitat for waterbirds. Prioritise removal of woody weeds such as Ash and Willow trees in this area out of season. (H)

- 7 Relocate/replace the existing community noticeboard closer to the footbridge and establish interpretive signage to improve community awareness of environmental cultural heritage values, and dog on lead requirements at the lake. (M)

- 8 Re establish indigenous vegetation along the edge of the lake and inlet zone. As plants grow and provide habitat, remove willows. The aim will be to retain and actively manage remaining willows until their health declines. Suckers and dead wood will be removed and new Red Gums will be planted to maintain canopy cover for when these trees eventually require removal. Placement of new trees will carefully consider views from adjoining properties. (M)

COMMUNITY ACCESS

The popular 1.6 km unsealed compacted granitic gravel circuit pedestrian walking path provides all ability access around the lake for both pedestrians and maintenance vehicles.

- 9 Retain maintenance vehicle access along the existing lake circuit path to Barwon Water sewer mains. (H)
- 10 Retain mown grass along the south bank and establish a small local picnic area with two timber picnic tables near the existing timber platform. (H)
- 11 Establish a bench seat and interpretive signage providing information regarding the significant Bellarine Yellow Gum stand and ongoing protection of bird habitat values in this section of the lake. (M)
- 12 Investigate options to improve on street car parking at the Bluewaters Drive entry. (M)

Overall Design Intent

The Masterplan seeks to protect ecological and cultural heritage values while improving water quality, landscape amenity and community access.

Key objectives include:

- Protect areas of significant indigenous vegetation, including remnant Grassy Woodland and rare Bellarine Yellow Gums.
- Protect and enhance habitat and community awareness of significant species including Latham's Snipe.
- Maintain and improve all ability access and seating areas along the popular lake circuit walking path.
- Investigate opportunities to improve water quality and improve habitat and biodiversity values within the lake and inlet zone.
- Retain the existing landscape character while managing the staged removal and replacement of willows with new trees as their health declines.

INDICATIVE PRIORITIES (SUBJECT TO FUNDING)			
(H) HIGH	(L) LOW		
(M) MEDIUM	(O) ONGOING		

- 13 Establish a new seating area on the exposed promontory while retaining maintenance vehicle access to the gross pollutant trap (GPT). (M)
- 14 Investigate options to improve pedestrian links and safety at Blue Waters Drive crossing to across Lake Reserve. (M)
- 15 Monitor the existing timber handrail and retaining wall which are now over 20 years old and will need significant repair/ replacement within the next 10 years to maintain public access around the lake. (O)
- 16 Retain only local access via Cuthbertson Drive due to the lack of car parking. (O)
- 17 Improve/Upgrade path to allow all-ability all season access. (O)

CULTURAL HERITAGE

The Ocean Grove township is located along the Barwon River estuary and the natural wetlands at what is now Blue Waters Lake would have been an ideal location for Aboriginal people to obtain food and water and although there has been significant modification the area is of cultural sensitivity as defined in the *Aboriginal Heritage Regulations 2018*.

- 18 Engage and involve the *Wadawurrung Traditional Owners Aboriginal Corporation* in building appreciation and understanding of the cultural values of the site through development of a Cultural Values Plan. (H)