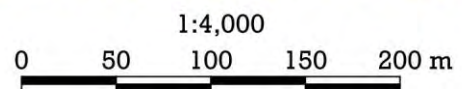


Site 69. Cogley, Sutton and Hill Lakes, Rowville

Three adjacent lakes in a parkland setting.

Summary of significant features:

- Locally significant: viable populations of locally-threatened plant species;
- Locally significant: a component of the Corhanwarrabul Creek habitat corridor.



Boundaries

The site is in two parts, each outlined with blue dashes above. The boundaries follow property boundaries. There has been no change since the previous (2010) edition of this report.

Land use & tenure: Lakes and fringing open space. The lakes were constructed for purposes of drainage, water quality and amenity. Some of the open space is public and some is fenced for access only by adjacent residents.

Site description

This 9.57-hectare site is on a minor tributary of Corhanwarrabul Ck at an elevation of 55 m. A 1976 aerial photograph shows the lakes newly constructed and surrounded by bare ground and pasture. The only remaining woody vegetation was on the island in Sutton Lake and on the headland of Hill Lake. The island still has a remnant Cherry Ballart (*Exocarpos cupressiformis*) and some Swamp Paperbarks (*Melaleuca ericifolia*) but nothing appears to have survived on the headland. Plants have since been planted around the lake, particularly non-indigenous ‘Australian native’ species that were commonly planted in the 1970s and 1980s.

A modest range of indigenous wetland plant species have established naturally in and around the lakes, having arrived as windblown seeds or on waterbirds.

The open water supports floating aquatic plants, submerged aquatic plants, tiny pondlife and fish. These organisms provide food for introduced tortoises and urban-adapted bird species of open water such as Eurasian Coots and Little Pied Cormorants. The lakes are periodically stocked with introduced fish for the benefit of anglers. Carp are also present, clouding the water and diminishing the amount of submerged vegetation that provides the base of the aquatic food chain.

The lakes’ vertical edges and constant water level minimise the range of native flora and fauna around the shores, which are normally the most biologically diverse zones of natural wetlands.

While the diversity of plant life is suppressed by the design of the lakes, there have been two plant species that are rarely seen in Victoria this century. One is the Tiny Duckweed (*Wolffia australiana*) – up to 1 mm in size with no roots – growing on the surface of Hill Lake in 2024. The other is the Fennel Pondweed (*Stuckenia pectinata*), which covered the bottom of Cogley Lake until c. 2019 when the lake was apparently dredged and the pondweed was completely destroyed.

Relationship to other land

This site is a component of the Corhanwarrabul Creek catchment’s habitat corridor, as evidenced by occasional visits by waterbirds such as Australasian Darters and Australian Pelicans. The nearest other component of the corridor is Stamford Park (Site 65), on the other side of Stud Rd.

Bioregion: Gippsland Plain

Habitat types

Artificial wetland: Estimated as 0.1 ha of vegetation in fair ecological condition (rating C) fringing the lake, plus 6.2 ha of open water with an unknown extent of bottom-dwelling plants.

Trees, shrubs, vines and ferns: Effectively absent, but there are some *Melaleuca ericifolia* and an *Exocarpos cupressiformis* on the island in Sutton Lake.

Aquatic and semi-aquatic flora: The fringing vegetation is dominated variously by *Typha domingensis* or *Juncus sarophorus*. The bottoms of Hill Lake and Sutton Lake have substantial cover of *Vallisneria australis*. The bottom of Cogley Lake had a substantial cover of *Potamogeton pectinatus* until c. 2018.

Plant species

The following wild, indigenous plant species were observed by the author on 10th September 2024 except for the *Stuckenia* (see above). The column headed ‘Risk’ indicates the indigenous species’ risk of dying out in Knox as follows: ‘C’=Critically Endangered; ‘E’=Endangered; and ‘V’=Vulnerable.

Risk	Wild indigenous species	Risk	Wild indigenous species
V	<i>Acacia mearnsii</i> , Black Wattle		<i>Juncus amabilis</i> , Hollow Rush
V	<i>Alternanthera denticulata</i> , Lesser Joyweed	C	<i>Juncus fockei/holoschoenus</i> , a joint-leaf Rush
C	<i>Chara ?australis</i> , a stonewort		<i>Juncus gregiflorus</i> , Green Rush
	<i>Crassula decumbens</i> , Spreading Crassula		<i>Juncus sarophorus</i> , Broom Rush
	<i>Dichondra repens</i> , Kidney-weed	E	<i>Juncus subsecundus</i> , Finger Rush
V	<i>Eleocharis acuta</i> , Common Spike-rush		<i>Lachnagrostis filiformis</i> , Common Blown-grass
	<i>Epilobium hirtigerum</i> , Hairy Willow-herb		<i>Lemna disperma</i> , Common Duckweed
V	<i>Exocarpos cupressiformis</i> , Cherry Ballart	E	<i>Melaleuca ericifolia</i> , Swamp Paperbark
	<i>Isolepis inundata</i> , Swamp Club-rush		

Risk Wild indigenous species*Rytidosperma racemosum*, Clustered Wallaby-grass*Senecio quadridentatus*, Cotton FireweedC *Stuckenia pectinata*, Fennel PondweedRisk Wild indigenous species*Typha domingensis*, Cumbungi*Vallisneria australis*, Eel GrassV *Wolffia australiana*, Tiny Duckweed**Fauna of special significance**

With the exception of Hardhead and Darter, the following information about numbers and frequencies of birds come from a knowledgeable local resident (Doreen Calder) whose birdwatching skills were verified by the author. However, this information came from 2002 and the only record of a significant species since then is a single record of the Eastern Great Egret in 2019.

Listed as Vulnerable under Victorian law

Eastern Great Egret. In 2002, one individual was said to be present most of each year.

Locally threatened

Hardhead. 2 birds were observed by the author in 2002; not otherwise recorded.

Pied Cormorant. In 2002, two or three Pied Cormorants were said to visit the lakes. One was seen by the author in 2024, flying over.

Australasian Darter. In 2002, one individual was seen by the author and said by the local resident to be an occasional visitor. Nine were seen by the author at nearby Caribbean Lake in March 2025.

Australian Pelican. In 2002, said to be regular visitors in autumn and occasional in other seasons.

Fauna habitat features

- The lakes are inhabited by fish (introduced and Flat-headed Gudgeon) and invertebrates. Frogs are scarce due to the vertical sides around most of the lake edges and perhaps the predatory fish that the Victorian Fishing Authority stocks the lakes with;
- Open water with a vegetated bottom provides habitat for birds such as coots, moorhens, grebes and cormorants;
- The fringing beds of Cumbungi (*Typha domingensis*) are used by waterbirds for nest sites;
- Some birds use the island in Sutton Lake as a safe refuge.

Significance ratings

The following is an assessment of the site's biological significance against the Department of Energy, Environment & Climate Action's standard criteria (Amos 2004).

Ecological Integrity and Viability

The site is a component of the Corhanwarrabul Creek habitat corridor, which is important at a Local scale. This gives the site **Local** significance under criterion 1.2.6 of Amos (2004).

Locally-threatened Plants

The locally-threatened plant species listed above have viable populations except for the *Stuckenia*, *Eleocharis acuta* and *Juncus fockei/holoschoenus*. The habitat for such species is of **Local** significance under criterion 3.1.5.

Locally-threatened Fauna

The paucity of data about the site's fauna since 2002 prevents a sound assessment of whether species such as the Eastern Great Egret make sufficient use of the site to be recognised as biologically significant.

Threats

- Periodic removal of silt from the lake bottoms, which mobilises toxins and removes the submerged vegetation that forms the base of the aquatic food chain. It could also disrupt waterbird breeding if fringing rushes are removed during breeding season. Desilting appears to have already caused the loss of the only known population of Fennel Pondweed (*Stuckenia pectinata*) in Knox's history. The problem of vegetation destruction can be minimised by salvaging and restoring some of the submerged plants as part of the desilting

process (as recommended in the previous edition of this report) but that recommendation has so far not been adopted;

- Carp, which disturb the lake bottoms, cloud the water and reduce the cover of submerged vegetation;
- Water pollution, particularly in Cogley Lake.

Strategic planning

- The previous (2010) edition of this report led to its version of this site being covered by Schedule 2 of the Environmental Significance Overlay (ESO2). There has been no material change since then in the basis for applying ESO2, so no recommendation is made for amending ESO2;
- The waterbodies are zoned Public Use Zone - Service & Utility (PUZ1) and they are covered by the Special Building Overlay. The remainder of the site is zoned Public Park and Recreation Zone (PPRZ).

Information sources used in this assessment

- An ecological survey by Dr Lorimer taking one hour on 4th June 2002, comprising compilation of separate lists of indigenous and introduced plant species in and around each of the lakes, fauna observations, and checks for fauna habitat, ecological threats, management issues and populations of scarce or threatened plant species;
- The same ecological survey included on-site discussions with local residents, one of whom was surveying Sutton Lake's fish and another (Doreen Calder) who provided a bird list for the lakes;
- A botanical survey of the site by Dr Lorimer on 10th September 2024, compiling a list of indigenous plant species and checking for changes in features relevant to this report compared with pre-existing information;
- Flora and fauna observations stored in the Atlas of Living Australia;
- Aerial and satellite imagery from between 1946 and 2025;
- The Victorian Government's 'NatureKit' website;
- Maps of geology, topography and strategic planning information produced by agencies of the Victorian Government.