

## 'Biodiversity in Glen Eira': Implementation Plan

### As per report prepared by Dr Graeme Lorimer PhD, for Glen Eira City Council

In the *Environmental Sustainability Strategy (ESS) 2016-2021*, Council committed to protect and enhance biodiversity and public amenity. The 'Biodiversity in Glen Eira' report was commissioned by Council as part of the implementation of this strategy.

This document specifically looks at the recommendations made in the 'Biodiversity in Glen Eira' report, protecting and enhancing biodiversity is also complemented and supported by other Council plans and strategies including:

- ESS and annual *Environmental Sustainability Action Plans*
- Refresh of Open Space Strategy 2013-2016
- Urban Forest Strategy – due for completion in 2018
- Classified Tree Register – currently being considered by Council.
- Draft Nature Strip Planting Guidelines – due for completion in 2018.

Actions from this implementation plan will be incorporated into annual *Environmental Sustainability Action Plans* which is reported on annually. For more information, visit [www.gleneira.vic.gov.au](http://www.gleneira.vic.gov.au).

Report reference	Overview/Background	Recommendation/issues for consideration	GECC Actions/Opportunities	Type of Action
<b>BIODIVERSITY HOTSPOTS:</b> The report identified nine biodiversity hotspots. (Ref. 7.1 to 7.9)				
7.1 Sandringham Railway Line Verge, Elsternwick (Non-Council site)	<ul style="list-style-type: none"> <li>• One of the top three sites in Glen Eira for wild indigenous plants.</li> <li>• The rarest of the wild plant species are each represented by only one or two individuals, raising serious doubts about their medium-term survival if corrective action is not taken</li> </ul>	<ul style="list-style-type: none"> <li>• There are introduced species that appeared to threaten the survival of indigenous plants</li> </ul>	<ul style="list-style-type: none"> <li>• Recommend that VicTrack take appropriate corrective action to protect the wild plants at this site.</li> </ul>	Advocacy
7.2 Rippon Lea Lake and Surrounds (Non-council site)	<ul style="list-style-type: none"> <li>• The lake provides habitat for indigenous waterbirds, wetland plants, migratory eels and most likely frogs. The surrounding trees and shrubs provide habitat for resident and nomadic species of indigenous birds</li> </ul>	<ul style="list-style-type: none"> <li>• St Peter's Wort (<i>Hypericum tetrapterum</i>) – is notable as a potentially serious wetland weed</li> <li>• Nankeen Night Heron seen is significant - is on the state list of 'near threatened' species</li> <li>• The presence of the Shortfin Eel is significant – travel thousands of kilometres to the Coral Sea to breed and return.</li> </ul>	<ul style="list-style-type: none"> <li>• Work with the Rippon Lea Estate to enhance and protect biodiversity at this site.</li> <li>• The recent arrangement with the Estate provides a valuable opportunity to include Rippon Lea in our sustainability education program, and could be part of a community biodiversity monitoring project. These opportunities will be further explored in negotiation with the National Trust.</li> </ul>	Advocacy & Education

7.3 Caulfield Park (Council managed site)	<ul style="list-style-type: none"> <li>• Hosts a community of indigenous birds, particularly waterbirds attracted to the lake. Nankeen Night Heron regular sightings is significant - is on the state list of 'near threatened' species</li> <li>• Home to some domesticated birds and a diverse range of planted trees from around the world. Treed parts of the park other than next to the lake provide habitat mainly for common urban wildlife such as possums and magpies</li> <li>• Areas with eucalypt trees are occasionally used by a few less common birds.</li> </ul>	<ul style="list-style-type: none"> <li>• Some of the waterbirds are attracted by food provided by park visitors which poses a health risk to some of the birds and it contributes to the nutrient pollution of the lake. Excessive nutrients can cause toxic blue-green algal blooms.</li> <li>• The Aviary garden is small (approximately 800m<sup>2</sup>) and no part of it is further than 6m from a path, which puts off small understorey birds.</li> <li>• The large eucalypts provide habitat, these will improve as the trees age.</li> </ul>	<ul style="list-style-type: none"> <li>• Consider biodiversity implications and opportunities in Caulfield Park master plan design development.</li> <li>• Seek advice in re-development works on opportunities to enhance biodiversity in/around the lake.</li> <li>• Refresh signage asking people not to feed the birds and why.</li> </ul>	Operational
7.4 Caulfield Racecourse Reserve (Non-council site)	<ul style="list-style-type: none"> <li>• The southern lake vegetation is a close reproduction of a natural wetland. The northern lake is less so due to the species and cultivars planted and steep banks around much of the edge.</li> <li>• The diversity of birds around the lakes is high by suburban standards, particularly for waterbirds.</li> <li>• The diversity of indigenous plants and birds is high for Glen Eira.</li> <li>• The water-milfoil are rare and critical plants for pond life, diving birds and overall wetland ecology. The identity of these at the indicative location can be confirmed when it flowers in summer.</li> </ul>	<ul style="list-style-type: none"> <li>• Investigate ways to avoid unnecessary removal of the lakes submerged plant life when work is done to keep clear the pump inlets (used for watering the racetrack), especially in the southern lake which has lots of submerged plants, including the rare water-milfoil</li> <li>• Introduce additional indigenous frog species not already present to improve the lakes' food chain through a citizen science project in the warmer months to establish which frog species are present other than the Common Froglets.</li> </ul>	<ul style="list-style-type: none"> <li>• Advocate to DELWP to consider recommendations in the report, particularly in planning any major works and in lake maintenance works.</li> <li>• Consider a citizen science project to establish which frog species are present if access is possible.</li> <li>• Officers do not recommend relocation of frog species.. Other expert advice received recommends that says frog species should not be moved.</li> </ul>	Advocacy & Education
7.5 Red Gums at Carnegie & Murrumbeena Train Stations (VicTrack ownership)	<p>River Red gums are potential 'refuelling stations' or ecological stepping-stones on the Swift Parrots' migrations. There are stands of well-maintained Gums at the 'Rosstown Woodland' around Carnegie railway station and the southern car park of Murrumbeena railway station.</p>	<ul style="list-style-type: none"> <li>• Level Crossing Removal construction work may affect River Red Gums continued biodiversity and heritage values at the railway stations. Damage to eucalypt roots can take several years or more to kill a River Red Gum, often in times of stress such as prolonged dry weather.</li> </ul>	<ul style="list-style-type: none"> <li>• Council's Arborists will continue to monitor these trees and recommend treatment where necessary. (Note: 'Rosie' The Red Gum has received treatment to ensure its survival.)</li> <li>• The Red Gums at Carnegie Station are currently being retained though there are State Government plans to use the site for a future development opportunity. Council officers will continue advocating for it to be protected.</li> </ul>	Advocacy
7.6 Boyd Park Sanctuary Murrumbeena (Council managed site)	<ul style="list-style-type: none"> <li>• Indigenous species of shrub, tree and groundcover have been planted over many years to support the wild plants in providing wildlife habitat and a wildflower display in spring.</li> <li>• The Nodding Greenhood colony in Boyd Park 60 to 80 m north of the sanctuary appears to be Glen Eira's last wild orchids. These were identified in August 2017 but were not present when the author reinspected the site in October 2017.</li> </ul>	<ul style="list-style-type: none"> <li>• Investigate disappearance of three orchid species to prevent a similar incident if any orchids reappear in the future. Re-emergence of the orchids should be checked in June 2018. If the orchids are found, protective measures should be considered.</li> <li>• If the orchids re-emerge consider use of iron-based snail baits (with low toxicity) in bait stations that prevent access by dogs or children.</li> <li>• Carry out checks on sanctuary's southern edge and implement ways to minimise harm to the vegetation from weeds, soil and construction waste incursion, during and post skyrail construction works.</li> </ul>	<ul style="list-style-type: none"> <li>• Check for orchids at locations provided in June 2018.</li> <li>• If they re-emerge implement protective measures including weed removal and signage to deter people and dogs from the site.</li> <li>• Investigate options to protect orchids from snails that will not adversely affect native fauna, dogs or people.</li> <li>• Propagate the orchids if they re-emerge.</li> <li>• Continue to monitor the sanctuary's</li> </ul>	Operational

		<ul style="list-style-type: none"> <li>Discourage dogs off-lead in the area</li> </ul>	<p>southern edge and implement harm minimisation measures if required.</p> <ul style="list-style-type: none"> <li>Consider making the sanctuary part of Boyd Park a dog on-leash area.</li> </ul>	
7.7 Boyd Park excluding the Sanctuary (Council managed site)	<p>A mostly typical urban park with lawns and gardens, but considered a biodiversity hotspot because it includes:</p> <ul style="list-style-type: none"> <li>a few old River Red Gums (100+ years old)</li> <li>a colony of Trim Greenhoods (last known indigenous orchids in Glen Eira see above)</li> <li>small numbers of other indigenous plants that have survived or recolonised</li> <li>extensive plantings of indigenous plant species in mulched garden beds</li> <li>a tree canopy formed by indigenous and Australian native species that provides habitat for native birds that are uncommon in most of Glen Eira</li> </ul> <ul style="list-style-type: none"> <li>Dog prevalence particularly in bushy area near Dandenong Road is compromising the habitat value for bird life, such as the Pink Robin.</li> </ul>	<ul style="list-style-type: none"> <li>Breed up some of the Trim Greenhoods in a nursery for re-planting to improve the species' security at both locations identified in the report.</li> <li>Controlled removal of the White Arum Lilies around the orchids would assist the survival of the orchids.</li> <li>Parks staff to note the undesirability of applying mulch over the orchids, particularly during April to October each year.</li> <li>Place snail bait around the orchids periodically during April to September. To avoid risks consider use of iron-based snail baits (with low toxicity) in bait stations that prevent access by dogs or children.</li> <li>Dogs should be excluded from the bushy area near Dandenong Road except on the footpath and discouraged from being off-lead to protect bird life</li> </ul>	<ul style="list-style-type: none"> <li>Parks staff to implement recommendations in regard to Trim Greenhoods.</li> <li>Consider making the bushy area near Dandenong Road a dog on-leash area.</li> </ul>	Operational
7.8 Moorabbin Reservoir, Bentleigh East (Non-Council site)	<ul style="list-style-type: none"> <li>The grounds (particularly the embankments and raised ground) support a substantially greater diversity of wild, indigenous flora, and in a more resilient state, than anywhere else in Glen Eira.</li> <li>The site is not open to the public but some of the indigenous flora can be seen from the footpath along Warrigal Rd.</li> <li>The trees and shrubs, generally, would provide nest sites for a range of native and introduced birds.</li> </ul>	<ul style="list-style-type: none"> <li>Check past planting records to determine if Running Postman, Tasman Flax-lily and Tree Everlasting are remnant wild species or were planted at the site.</li> <li>Gorse (a very invasive weed) is threatening the rare Running Postman plants on the south-eastern corner. The Gorse should be urgently killed by cut-and-paint method, taking great care not to affect the Running Postman.</li> </ul>	<ul style="list-style-type: none"> <li>Advocate to South East Water to implement these recommendations.</li> <li>Explore planning controls to protect the biodiverse areas, as part of any potential change to the site in future.</li> </ul>	Advocacy
7.9 Yarra Yarra Golf Course (Non-Council site)	<ul style="list-style-type: none"> <li>Based on all available bird observation data, Yarra Yarra Golf Course has the most diverse birdlife of anywhere in Glen Eira, including some species not found elsewhere in the municipality.</li> <li>The significance of the course's flora is uncertain because there are no prior plant records and this study did not have permission to enter the property.</li> </ul>	<ul style="list-style-type: none"> <li>The Golf Course may benefit by promoting birdlife that can be seen at the course.</li> </ul>	<ul style="list-style-type: none"> <li>Advocate to Yarra Yarra Golf Course to promote local birdlife at the course.</li> <li>Explore planning controls to protect the biodiverse areas, as part of any potential change to the site in future.</li> <li>Explore opportunities to work with Yarra Yarra Golf Course to undertake further flora and fauna research.</li> </ul>	Advocacy
<b>Other relevant sections</b>				
<b>9. Community contributions to biodiversity</b>	<ul style="list-style-type: none"> <li>Providing Habitat – the right kind of nature strips and private gardens play a significant role in the welfare and survival of quite a few indigenous plant and animal species.</li> <li>Citizen Science – The best opportunity to correct the deficiency for information about frogs and lizards and insects is through a coordinated campaign of</li> </ul>	<ul style="list-style-type: none"> <li>Glen Eira City Council is in an ideal location to coordinate such a campaign. Ideally run during the warmer months when frogs and lizards are active.</li> </ul>	<ul style="list-style-type: none"> <li>Promote advice to residents on how to improve habitat and create habitat corridors as part of sustainability education program.</li> <li>Promote online resources and smartphone applications for the general public to learn how to find and identify fauna, and submit observations and photographs to online</li> </ul>	Education

	community searching and recording, or citizen science. Butterflies, bees and beetles could also be surveyed by citizen science.		databases. <ul style="list-style-type: none"> <li>Implement a citizen science project as part of the sustainability education program.</li> </ul>	
<b>5.2 Significant trees</b>	<p>A number of significant trees were identified including:</p> <ul style="list-style-type: none"> <li>Studley Park Gum (<i>Eucalyptus x studleyensis</i>) at Brighton Cemetery</li> <li>Yellow Box (<i>Eucalyptus melliodora</i>) in the vicinity of the Labassa mansion in Caulfield North</li> <li>Black Sheoak (<i>Allocasuarina littoralis</i>) on the nature strip of Lockerbie Ct, Caulfield North.</li> <li>A Coastal Manna Gum (<i>Eucalyptus viminalis</i> subspecies <i>pryoriana</i>) in the playground at Packer Park, Carnegie.</li> <li>River Red Gums (<i>Eucalyptus camaldulensis</i>) on the western verge of the Sandringham Railway Line, immediately north of the Nepean Hwy railway bridge.</li> <li>A River Red Gum at the northern edge of Booran Reserve, Glen Huntly.</li> <li>Coastal Manna Gums (<i>Eucalyptus viminalis</i> subspecies <i>pryoriana</i>) – one at Springthorpe Gardens and several at the southeastern corner of Caulfield Racecourse Reserve</li> </ul>	<ul style="list-style-type: none"> <li>These significant trees are worthy of consideration for Heritage Overlay protection for their size, age and connection with the pre-colonisation landscape.</li> <li>The fieldwork for this study was inadequate to be confident of detecting all trees whose biodiversity significance warrants planning protection.</li> </ul>	<ul style="list-style-type: none"> <li>Council recently consulted with the community in regard to implementing a Classified Tree Register. This will report and community feedback will be considered in the next steps of that process.</li> <li>The protection of significant trees will also be explored in the Urban Forest Strategy.</li> </ul>	Operational
<b>8. Additional Sites</b>	<p>Places included in the report that don't meet the criteria of biodiversity hotspots but retain a small amount of native vegetation or provide substantial habitat (or potential habitat) for urban wildlife. These include:</p> <ul style="list-style-type: none"> <li>Bentleigh Primary School and Moorleigh Community Village</li> <li>Packer Park and Mallanbool Reserve</li> <li>Glenhuntly Railway Reserve</li> <li>Booran Reserve.</li> </ul>	<p>The report lists a number of issues and opportunities for improving the potential for habitat at some of these sites, including:</p> <ul style="list-style-type: none"> <li>The areas of denser understorey in Packer Park could provide habit for small insect-eating birds if the garden beds were wider. The best potential is in the eastern corner of the park.</li> <li>The swale in Packer Park near the playground is occupied by three frog species and has further habitat potential. However as this is a dog off lead area, dogs are displacing birds and frogs.</li> <li>Herbicide spraying at Glenhuntly Railway Reserve has killed wildflowers and favoured weeds. In 1994 a botanical survey found this as best site for remnant wildflowers in Glen Eira. Only a small strip of indigenous plants remain.</li> <li>There are opportunities to improve habitat in the urban forest at Booran Reserve, including planting indigenous understorey species.</li> </ul>	<ul style="list-style-type: none"> <li>Understorey planting at Booran Reserve is planned for the 2018 planting season. Officers will include the plants recommended in the report where possible. (Note: the soil in this location is very sandy and plant species will need to be selected that are likely to survive.)The placing of logs and rocks will be included to provide habitat for small birds, lizards, bees and other fauna.</li> <li>Options for enhancing habitat at Packer Park are to be investigated further and implemented where practical as part of the update of the Open Space Strategy Refresh, due to take place in late-2018.</li> </ul>	Operational