Reserve Action Plan
O.H Reid Reserve

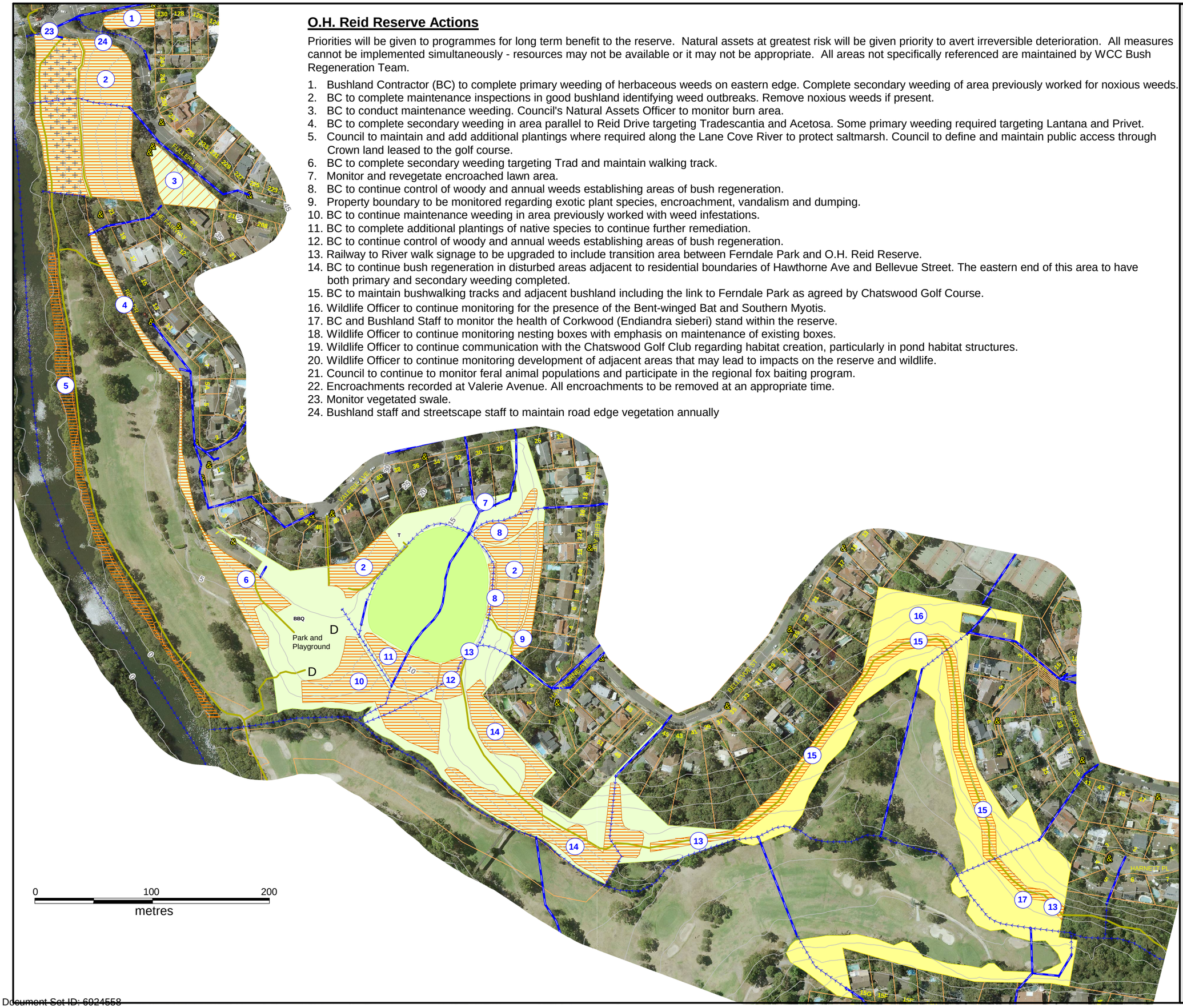
2023

WILLOUGHBY CITY COUNCIL
City of Diversity

O.H. Reid Reserve Actions

Priorities will be given to programmes for long term benefit to the reserve. Natural assets at greatest risk will be given priority to avert irreversible deterioration. All measures cannot be implemented simultaneously - resources may not be available or it may not be appropriate. All areas not specifically referenced are maintained by WCC Bush Regeneration Team.

1. Bushland Contractor (BC) to complete primary weeding of herbaceous weeds on eastern edge. Complete secondary weeding of area previously worked for noxious weeds.
2. BC to complete maintenance inspections in good bushland identifying weed outbreaks. Remove noxious weeds if present.
3. BC to conduct maintenance weeding. Council's Natural Assets Officer to monitor burn area.
4. BC to complete secondary weeding in area parallel to Reid Drive targeting Tradescantia and Acetosa. Some primary weeding required targeting Lantana and Privet.
5. Council to maintain and add additional plantings where required along the Lane Cove River to protect saltmarsh. Council to define and maintain public access through Crown land leased to the golf course.
6. BC to complete secondary weeding targeting Trad and maintain walking track.
7. Monitor and revegetate encroached lawn area.
8. BC to continue control of woody and annual weeds establishing areas of bush regeneration.
9. Property boundary to be monitored regarding exotic plant species, encroachment, vandalism and dumping.
10. BC to continue maintenance weeding in area previously worked with weed infestations.
11. BC to complete additional plantings of native species to continue further remediation.
12. BC to continue control of woody and annual weeds establishing areas of bush regeneration.
13. Railway to River walk signage to be upgraded to include transition area between Ferndale Park and O.H. Reid Reserve.
14. BC to continue bush regeneration in disturbed areas adjacent to residential boundaries of Hawthorne Ave and Bellevue Street. The eastern end of this area to have both primary and secondary weeding completed.
15. BC to maintain bushwalking tracks and adjacent bushland including the link to Ferndale Park as agreed by Chatswood Golf Course.
16. Wildlife Officer to continue monitoring for the presence of the Bent-winged Bat and Southern Myotis.
17. BC and Bushland Staff to monitor the health of Corkwood (Endiandra sieberi) stand within the reserve.
18. Wildlife Officer to continue monitoring nesting boxes with emphasis on maintenance of existing boxes.
19. Wildlife Officer to continue communication with the Chatswood Golf Club regarding habitat creation, particularly in pond habitat structures.
20. Wildlife Officer to continue monitoring development of adjacent areas that may lead to impacts on the reserve and wildlife.
21. Council to continue to monitor feral animal populations and participate in the regional fox baiting program.
22. Encroachments recorded at Valerie Avenue. All encroachments to be removed at an appropriate time.
23. Monitor vegetated swale.
24. Bushland staff and streetscape staff to maintain road edge vegetation annually



RESERVE ACTION PLAN
O.H. REID RESERVE

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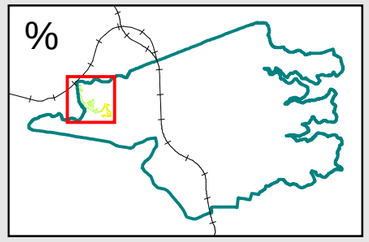

Plan details

Status:	Final
Prepared by:	N. Yu
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Approximate Scale:	1:3000

Legend

- 16 — Property number
- 12 — Action plan activity
- . — Stormwater node
- & — Approximate fire hydrant location
- D — Picnic table
- BBQ — Barbecue
- T — Toilet facilities
- 35 — 5m contours
- Stormwater network - Underground *
- Stormwater network - Overground / Unknown *
- Bush track / Path *
- Property boundary
- Reserve / bushland
- Private open space (Chatswood Golf Course)
- Oval
- Council bush regeneration contractors
- Council bush regeneration staff
- Proposed broad burn area

* The accuracy of this data is not guaranteed and must be verified prior to use.

O.H. Reid Reserve Action Plan

Reserve Profile

O.H. Reid Reserve is a narrow 9.3 ha, irregularly shaped and fragmented area of bushland within the Lane Cove River catchment in Chatswood West. It is a combination of recreational open space with an oval, children's playground, picnic tables, barbeques, walking tracks and bushland. Much of the northern boundary is residential properties, south is Chatswood Golf Course, east is Ferndale Park and west the Lane Cove River. The north-west edge of the Reserve links to the Lane Cove National Park at the Fullers Road Bridge.

Swaines Creek runs through the southern section of the Reserve adjacent to the golf course. It travels from Ferndale Park and there is an estuary at the mouth of the creek flowing into the Lane Cove River. Council and Crown land located along the river is part of a lease to the golf course. Land adjacent east of the Reserve is owned by the golf course and allows walkers to connect to Ferndale Park.

PLANT COMMUNITY: Coastal Sandstone Foreshores Forest (S_DSF06) is the predominant community found through most of the Reserve and consists of open forest with a moist shrub layer and a ground cover of ferns, rushes and grasses. The canopy is mostly smooth-barked apple (*Angophora costata*), Sydney peppermint (*Eucalyptus piperita*) and blackbutt (*Eucalyptus pilularis*) with some coast banksia (*Banksia integrifolia*). A prominent layer of hardy mesic small trees and shrubs is present, including sweet pittosporum (*Pittosporum undulatum*), cheese tree (*Glochidion ferdinandi*) and blueberry ash (*Elaeocarpus reticulatus*). Along the Lane Cove River there is Estuarine Swamp Oak Forest (S_FoW08) and Estuarine Mangrove Forest (S_SW01). Estuarine Swamp Oak Forest is the area between woodland and mangroves and consists mainly of Swamp oak (*Casuarina glauca*) which form dense stands above a thick ground cover of salt tolerant herbs, rushes and sedges. The shrub layer is low-growing and sparse with relatively low species diversity. Estuarine Mangrove Forest is in the estuary zone of the creek connecting with the mangroves on the Lane Cove River.

Statement of Significance

O.H. Reid Reserve is classified as bushland as defined in State Environmental Planning Policy No 19 (*Vol 1, 1.4), and is protected under State and Commonwealth Legislation (*Vol 1, 1.5.2). It is zoned RE1 Public recreation and E2 Environmental Conservation

ABORIGINAL CULTURAL SIGNIFICANCE: The Cammeraygal people originally occupied areas of the Lane Cove River as it was an important resource and spiritual place. There are no recorded Aboriginal cultural sites in the Reserve however there are many nearby in Mowbray Park and the Lane Cove National Park.

NATURAL HERITAGE SIGNIFICANCE: O.H. Reid Reserve is significant due to its contrasting plant communities and species. There are large canopy trees in woodland in higher areas through to saltmarsh species and mangroves along Swaines Creek and the Lane Cove River. The Reserve acts as a link to larger bushland areas. Significant recorded wildlife species are Sugar Gliders, four species of Micro Bats including the vulnerably listed *Myotis* and the Satin Bowerbird.The narrow and stretched out shape of the Reserve means that wildlife habitat that is available is important. However it is more significant as a link to other large bushland areas including Ferndale Park, Mowbray Park and the Lane Cove National Park. There are some large trees with hollows and some dense stands of weed infestations particularly of Lantana, Privet and Morning glory that provide wildlife habitat. The Reserve and the golf course should be viewed as one area that facilitates the movement of wildlife from other larger bushland in both north-south and east-west directions. The lawn and dams of the golf course also offer a moderate level of habitat for local water birds and frog species.

HISTORIC CULTURAL SIGNIFICANCE: The Reserve was part of the privately owned Peacock Estate. When the Estate was subdivided, Council acquired the land which included an area on the river frontage for recreational use. It was named after Oswald Hector Reid (1899-1947), foundation member of the Willoughby/Ku-Ring-Gai Cricket Association. Early land use was timber getting, orchards and market gardens. These were mainly along the banks of the river and up to what is now Fullers Road.

Reserve Impacts

The oval, playground and walking tracks are important recreational features for the local community to enjoy. The oval is also a designated dog off-leash area. However these recreational activities can impact on native plant and wildlife populations. Dogs and people sometimes wander into bushland off designated tracks and can impact on vegetation and wildlife.

The upper reaches of Swaines Creek are now piped drainage systems while substantial parts of the lower reaches have been piped through the golf course. As a result of the high level of disturbance and poor water quality, the creek lacks the presence of estuarine and freshwater fish and invertebrates. The oval, golf course and park are turfed impacting on the surrounding bushland by drainage, eutrophication, and weed invasion.

Sydney Water sewer lines that run through the Reserve have on occasions released material into Swaines Creek, polluting the creek and river.

Many private properties are adjacent to the Reserve and impacts are encroachment by clearing vegetation, stormwater and drainage issues, weed invasion, roaming of domestic pets, excess nutrients and sediment.

Since 2021, Chatswood Golf Course has undergone a redesign of its course. Progress of the DA can found by searching for DA-2021/372 on Council's Eportal page at: https://eplanning.willoughby.nsw.gov.au/pages/xc.track/searchapplication.aspx.

ENCROACHMENTS: Encroachments are recorded at Valerie Avenue and are extensions of gardens. All encroachments to be removed at an appropriate time. New encroachments will be forwarded to Council Compliance for swift action.

Wildlife Habitat Issues

The Reserve is important as a wildlife corridor and bush regeneration work should continue on improving connectivity to other bushland reserves.

There are hollow bearing trees including those of smaller dimensions in both live and dead trees. Nest boxes and other habitat enhancement efforts will be of benefit particularly in areas lacking in habitat richness. The Reserve contains few rocky outcrops and overhangs but is abundant in leaf litter, logs and branches on the ground.

Along the river and creeks there are valuable mangrove and saltmarsh ecosystems.

Feral bee, rabbit, black rat and fox activity is present. For the health and longevity of native wildlife populations, monitoring and control of feral animal species should continue.

Achievements

In 2019, Willoughby City Council's former Bushfire Management Team completed works involving the control of noxious weeds through secondary weeding and the use of flame weeding in small area of bushland at the corner of Fullers Road and The Fairway.

A vegetated swale and rock armoring was also installed in 2019 near Fullers Road to absorb water after rain to reduce erosion.

Bushland Management Goals – O.H. Reid Reserve

The following aims from the Urban Bushland Plan of Management 2014 are priority objectives:

5.3b: To create and or maintain conditions in which creek and drainage lines are protected from increased erosion and / or sedimentation due to urban impacts.
5.4b: To maintain the integrity of bushland reserves through the reduction of encroachments and other boundary impacts.
6.2f: To preserve and increase ecological links across the LGA and regionally to assist the movement of fauna.

Bushland Management – General Principles and Actions

a. Bush regeneration is a long term process that requires staged weed removal to ensure establishment of native plant communities. Work should proceed from good bush to degraded areas with techniques that encourage regeneration, including flame weeding, rather than spraying with herbicide.
b. If possible, all weed refuse and natural debris to be composted or retained on-site.
c. When natural regeneration is deemed inadequate, supplementary plantings to mimic local plant communities and landscapes will be used with local provenance species.
d. Standing dead trees and forest litter (including logs and branches) to be kept for wildlife habitat unless deemed a risk to safety.
e. Monitor, maintain and enhance vegetation connectivity for wildlife habitat within the reserve and reserve networks.
f. *Phytophthera cinnamomi* (a root rot pathogen) is listed as a key threatening process in NSW and has been identified as a threat to a number of species. Bushland workers are to use hygiene protocols to minimise risk.
g. Report and record all reserve encroachments. Also monitor for tree vandalism and/or removal within the reserve and report to Council Compliance for appropriate action.
h. Continue to monitor wildlife habitat requirements and supplement where necessary.
i. Monitor feral animal activity and implement appropriate management actions where necessary.
j. Encourage the community to report wildlife sightings to Council via the Wildlife Watch program to increase the understanding of native wildlife populations.
k. Monitor and protect cultural heritage sites within the reserve with Aboriginal heritage to be protected at all times. Bushland staff to notify Aboriginal Heritage Office prior to each burn to identify sites and implement protection measures and post-fire survey.
l. Bushfire management will be achieved through implementation of a strategic hazard reduction program consistent with the Bushfire Risk Management Plan.
m. Species diversity will be maintained by an ecological burn program in a mosaic pattern.
n. This reserve has a valuable role as an educational resource. Preserve natural features used for educational purposes and continue to inform the community of bushland issues through on-site educational activities and signage. Maintain appropriate signage.
o. Formal tracks to be regularly maintained and informal tracks closed to prevent damage to habitat and to impede access of feral animals, unless used for access by bushland workers.
p. Establish photo points to monitor the progress of reserve management actions.
q. Reserve Action Plan progress to be reviewed annually and updated after five years.
r. 6.3b: To implement weed control programs which are based on regeneration and restoration principles and which increase the bushland resilience to further weed infestation.
s. 7.1g: To manage fire such that the fire regime and implementation of the burn is beneficial to flora and fauna diversity and habitat.
t. 6.2g: Maintain natural habitat formations and supplement with manufactured structures where natural habitat has been depleted.
u. 10.1b: To ensure that leases and licences for activities undertaken in, or adjoining, or impacting on, bushland areas are compatible with the sustainable management of bushland.

Animal List for O.H Reid Reserve

O.H Reid Reserve provides habitat for a number native animals. A list of these species can be found at: https://www.willoughby.nsw.gov.au/files/sharedassets/public/ecm/willoughby-council-website/publications-reports-master-plans-strategies-action-plans/publications-reports-master-plans-strategies-action-plans/1-native_fauna_of_swains_creek.pdf

Native Plant List for O.H. Reid Reserve

CONIFERS	CONVOLVULACEAE	*Syncarpia glomulifera subsp. glomulifera*	*Avicennia marina subsp. australasica*
CUPRESSACEAE	*Dichondra repens*	*Tristaniopsis laurina*	VIOLACEAE
Callitris rhomboidea	CUNONIACEAE	OLEACEAE	*Viola hederacea*
PODOCARPACEAE	*Callicoma serratifolia*	*Notelaea longifolia f. longifolia*	VITACEAE
Podocarpus elatus	*Ceratopetalum gummiferum*	PHYLLANTHACEAE	*Cayratia clematidea*
Podocarpus spinulosus	DILLENIACEAE	*Breynia oblongifolia*	*Cissus antarctica*
FORK FERNS	*Hibbertia dentata*	*Glochidion ferdinandi var. ferdinandi*	*Cissus hypoglauca*
PSILOTACEAE	*Hibbertia scandens*	PICRODENDRACEAE	***MONOCOTS***
Psilotum nudum	DROSERACEA	*Micrantheum ericoides*	ASPARAGACEAE
FERNS	*Drosera peltata*	*Phyllanthus sp.*	*Lomandra glauca*
ASPLENIACEAE	ELAEOCARPACEAE	*Poranthera microphylla*	*Lomandra filiformis subsp. filiformis*
Asplenium australasicum	*Elaeocarpus reticulatus*	PITTOSPORACEAE	*Lomandra filiformis subsp. coriacea*
BLECHNACEAE	ERICACEAE-EPACRIDOIDEAE	*Billardiera scandens*	*Lomandra longifolia*
Blechnum ambiguum	*Epacris microphylla*	*Bursaria spinosa subsp. spinosa*	*Lomandra obliqua*
Doodia caudata	*Leucopogon ericoides*	*Pittosporum revolutum*	ASPHODELACEAE
CYATHEACEAE	*Monotoca scoparia*	*Pittosporum undulatum*	*Dianella caerulea var. caerulea*
Cyathea australis	*Woollsia pungens*	PLANTAGINACEAE	*Tricoryne simplex*
Cyathea cooperi	EUPHORBIACEAE	*Veronica plebeia*	*Xanthorrhoea arborea*
DENNSTAEDTIACEAE	*Amperea xiphoclada var. xiphoclada*	PODACARPACEAE	*Xanthorrhoea media*
Histiopteris incisa	*Homalanthus populifolius*	*Podocarpus spinulosus*	COMMELINACEAE
Hypolepis muelleri	FABACEAE FABOIDEAE	PRIMULACEAE	*Commelina cyanea*
Pteridium esculentum	*Bossiaea obcordata*	*Aegiceras corniculatum*	CYPERACEAE
DICKSONIACEAE	*Glycine clandestina*	*Samolus repens*	*Caustis flexuosa*
Calochlaena dubia	*Gompholobium grandiflorum*	*Myrsine variabilis*	*Cyperus gracilis*
LINDSAEACEAE	*Kennedia rubicunda*	PROTEACEAE	*Gahnia sieberiana*
Lindsaea linearis	*Pultenaea flexilis*	*Banksia integrifolia subsp. integrifolia*	*Isolepis cernua*
PTERIDACEAE	FABACEAE-MIMOSOIDEAE	*Banksia oblongifolia*	*Lepidosperma laterale*
Adiantum aethiopicum	*Acacia binervia*	*Banksia serrata*	*Schoenus melanostachys*
DICOTS	*Acacia decurrens*	*Banksia spinulosa*	JUNCACEAE
ACANTHACEAE	*Acacia ulicifolia*	*Grevillea buxifolia subsp. buxifolia*	*Juncus usitatus*
Pseuderanthemum variabile	*Acacia linifolia*	*Grevillea linearifolia*	ORCHIDACEAE
APIACEAE	*Acacia longifolia subsp. longifolia*	*Lambertia formosa*	*Calochilus campestris*
Actinotus minor	*Acacia parramattensis*	*Lomatia silaifolia*	*Calochilus sp.*
Centella asiatica	*Acacia suaveolens*	*Persoonia levis*	*Cryptostylis erecta*
Platysace lanceolata	*Acacia terminalis subsp. Long inflorescences*	*Persoonia pinifolia*	*Microtis parviflora*
Xanthosia pilosa	GERANIACEAE	RANUNCULACEAE	POACEAE
ARALIACEAE	*Geranium homeanum*	*Clematis aristata*	*Anisopogon avenaceus*
Astrotricha floccosa	HALORAGACEAE	RHAMNACEAE	*Aristida vagans*
Hydrocotyle sibthorpioides	*Gonocarpus micranthus subsp. micranthu*	*Pomaderris elliptica*	*Austrostipa pubescens*
Polyscias sambucifolia subsp. Long leaflets	LAURACEAE	RUBIACEAE	*Deyuxia quadriseta*
ASPHODELACEAE	*Cassytha pubescens*	*Morinda jasminoides*	*Echinopogon caespitosus var. caespitosus*
Geitonoplesium cymosum	*Endiandra sieberi*	*Opercularia aspera*	*Entolasia marginata*
ASTERACEAE	MENISPERMACEAE	*Pomax umbellata*	*Entolasia stricta*
Cassinia aculeata subsp. aculeata	*Stephania japonica var. discolor*	RUTACEAE	*Hemarthria uncinata var. uncinata*
Cotula australis	MORACEAE	*Phebalium dentatum*	*Imperata cylindrica*
Senecio hispidulus	*Ficus rubiginosa*	*Zieria pilosa*	*Lachnagrostis filiformis*
Ozothamnus diosmifolius	MYRTACEAE	*Zieria smithii*	*Microlaena stipoides var. stipoides*
BIGNONIACEAE	*Angophora costata subsp. costata*	SAPINDACEAE	*Oplismenus imbecillis*
Pandorea pandorana	*Corymbia gummifera*	*Dodonaea triquetra*	*Panicum simile*
CAMPANULACEAE	*Eucalyptus haemastoma*	SOLANACEAE	*Themeda triandra*
Lobelia purpurascens	*Eucalyptus pilularis*	*Solanum aviculare*	RESTIONACEAE
CASUARINACEAE	*Eucalyptus piperita*	STERCULIACEAE	*Lepyrodia scariosa*
Allocasuarina littoralis	*Eucalyptus punctata*	*Lasiopetalum ferrugineum var. ferrugineum*	SMILACACEAE
Casuarina glauca	*Eucalyptus resinifera subsp. resinifera*	STYLIDIACEAE	*Smilax glyciphylla*
HYPERICACEAE	*Kunzea ambigua*	*Stylidium productum*	
Hypericum gramineum	*Leptospermum trinervium*	ACANTHACEAE	