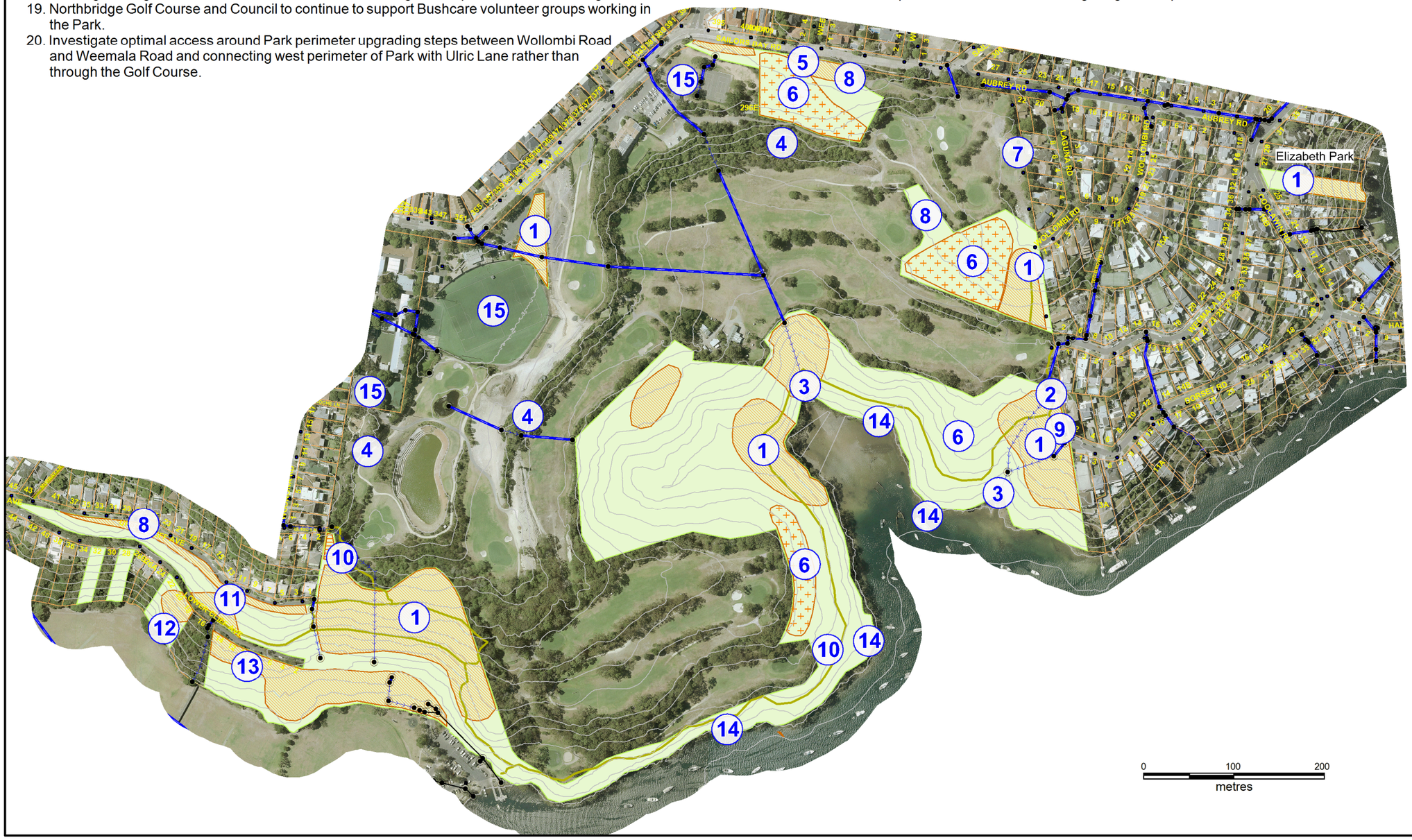
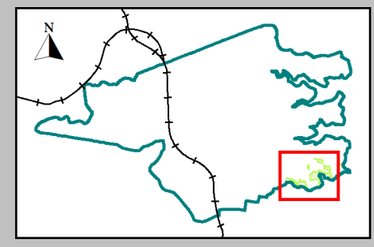
Northbridge and Elizabeth Park Actions

Priorities will be given to programs 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. This RAP refers only to those areas containing bushland. The Northbridge Park Masterplan 2010 refers to recreation assets within the Park.

1. Contractors to continue ongoing regeneration work.
2. Contractor to continue maintenance of public and access tracks.
3. Monitor drainage lines and flow paths to reduce erosion and weed infestations.
4. Investigate options for contractor to support Northbridge Golf Course management of resilient bushland below course club house, car parking areas, access road and vegetation between fairways.
5. Contractor to continue regeneration work and to manage native vegetation along road edge to Bonds Corner.
6. Council's Bushfire Management Team to prepare and conduct prescribed burns and carry out post fire maintenance.
7. Golf Course to manage and contain landscape material stockpile in locations as discussed with Council.
8. Bushcare groups to continue bush regeneration in accordance with Bushcare Action Plans.
9. Grape vine historical planting to incrementally be replaced with native vine species.
10. Contractors, in consultation with Council engineers, to monitor condition of historic stone walls.
11. Stone armouring of degraded wall and revegetation of Upper Cliff Avenue to be carried out after weed removal.
12. Gradual removal of Camphor Laurel Trees adjacent to A. costata vegetation community.
13. Monitor Lower Cliff Avenue for illegal dumping.
14. Reduce use of informal tracks to foreshore area.
15. Parks, playgrounds and sporting fields managed by WCC Open Space.
16. Continue to monitor encroachments at 1 Upper Cliff Avenue, 2 Ulric Lane and 2 Dorset Avenue. Refer priorities to Compliance Section.
17. Continue communication with the Golf Course to encourage a high standard of bushland management within the course including minimising access into bushland, minimising vegetation removal and reducing chemical and water usage.
18. Plantings throughout the Golf Course lease area to be indigenous species from Northbridge and Middle Harbor catchment area. Council to provide assistance in selecting indigenous species.
19. Northbridge Golf Course and Council to continue to support Bushcare volunteer groups working in the Park.
20. Investigate optimal access around Park perimeter upgrading steps between Wollombi Road and Weemala Road and connecting west perimeter of Park with Ulric Lane rather than through the Golf Course.



RESERVE ACTION PLAN NORTHBRIDGE AND ELIZABETH PARK



Plan details

Status: FINAL
Prepared by: Richard O'Brien

Drawn by: N. Prasad
Date printed: 21/05/2019
Approximate Scale: 1:4600

Legend

- 16 — Property number
- 12 — Action plan activity
- Stormwater node
- Power pole
- 35 — 5m contours
- Stormwater network - Underground *
- Stormwater network - Overground / Unknown *
- Bush track / Path
- Property boundary
- Reserve / bushland
- Council bush regeneration contractors
- Proposed prescribed burn area

* The accuracy of this data is not guaranteed and must be verified prior to use.
** Data as at 14-07-2007. Please check with Dial Before You Dig prior to any earth works.
*** No responsibility is taken for the accuracy of this data. Please check with Energy Australia, Dial Before You Dig or any other relevant authorities prior to undertaking any work.

References

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Northbridge and Elizabeth Park Reserve Action Plan

Reserve Profile

Northbridge Park is approximately 46 ha of remnant bushland and recreational areas located on the southern side of Northbridge. The northern boundary is Sailors Bay Rd, with Tunks Park and Middle Harbour to the south. The largest proportion of the Park is utilised by Northbridge Golf Club under lease from Willoughby City Council. Northbridge Park is Crown land zoned RE1.

This RAP also includes Elizabeth Park 0.2 ha of remnant bushland located between 25 and 27 Coolawin Rd, Northbridge. It is 300 metres east of Northbridge Park.

PLANT COMMUNITY: The main vegetation community is Coastal Sandstone Gully Forest (S_DSF09). Here Sydney peppermint (*Eucalyptus piperita*) and Smooth-barked apple (*Angophora costata*) form a moderately tall open forest. This community is typically situated on rocky environments with an understorey of heath and shrub species. Small pockets of Hornsby Enriched Exposed Woodland (S_DSF10) exist on the eastern and northern boundaries. This is low open eucalypt woodland with an open to dense shrub layer. Here Sydney peppermint (*E. piperita*) is prominent on exposed slopes. There are small significant pockets of Coastal Sandstone Foreshore Forest (S_DSF06) at the end of Lower Cliff Ave. This community is found on sheltered sandstone slopes along the foreshores of Sydney's major waterways. The canopy can be dominated by Smooth-barked apple (*A. costata*). Sydney peppermint (*E. piperita*) and Blackbutt (*Eucalyptus pilularis*) are also found in this vegetation community. Upland Coastal Wetland Heath Swamp (S_FrW02) is located on the golf course. This vegetation community is associated with periodically waterlogged soils on Hawkesbury sandstone plateaus with sedge, grass and heath plant species

HABITAT: The Park supports various habitats including south facing gully forest and woodlands, heathlands, rocky foreshores, a fresh water creek, man-made dams, and large open areas of the Golf Course.

Statement of Significance

Northbridge Park and Elizabeth Park have bushland as defined in State Environmental Planning Policy No 19, and is protected under State and Federal Legislation. Northbridge Park is zoned RE1 and Elizabeth Park E2 in the Willoughby Local Environment Plan (WLEP) 2012.

ABORIGINAL CULTURAL SIGNIFICANCE: The Camaraigal people of the Guringai nation originally occupied the area. The steep topography of the southern section of the park protects numerous Aboriginal archaeological sites, including engravings and middens, making it a reserve with high cultural significance.

NATURAL HERITAGE SIGNIFICANCE: Northbridge Park is significant due to its contrasting plant communities and species. The Park acts as a link to larger bushland areas to the west and then adjoining foreshore areas to the north and south. Steep foreshore sections of the Park provide fauna habitat connectivity. A range of arboreal, terrestrial and rocky outcrop habitat exists. Intertidal areas support various algal communities with marine invertebrates. Some locally significant wildlife found in Northbridge Park includes the listed threatened species Powerful Owl and vulnerable microbat species. Terrestrial species include Swamp Wallabies, Buff Banded Rail and Brown Quail.

HISTORIC CULTURAL SIGNIFICANCE: Prior to 1935 Northbridge Park was known as Long Bay Reserve, then Middle Harbour Park as a public recreation area. The Golf Course, designed by Council Engineer HD Robb had its first 9 holes completed in 1935, and the remaining 9 holes in 1947. Its stone retaining walls constructed by unemployed workers during the Great Depression are listed locally for their heritage importance. Northbridge Golf Club has managed and maintained the course under lease from Council since 1956.

European rock carvings and sections of a rock pool date from the 1930s. A former holiday shack and picnic area on Salt Pan Cove briefly became a residence with vegetable gardens. In the 1800s the Cove produced salt for the settlement and later became a boat building site. Unredeemable vessels were scuttled here including the still visible Itata, sunk in 1906 & Cobaki laid up in 1937.

HABITAT SIGNIFICANCE: Northbridge Park is an important ecological link for Middle Harbour foreshores. It is a part of north/south habitat connectivity and joins directly to Flat Rock Gully to the west. Despite the Park's bushland being heavily modified due to surrounding recreational use the area still contains valuable habitat for local species. Within the Golf Course dams are an important freshwater resource for wildlife particularly microbats and aquatic species. Isolated patches of remnant heath provide habitat for the Buff Banded Rail, Bandicoot and Echidna. The bushland foreshores and creek lines are important habitat for water rats and shore birds as well as the Powerful Owl. The rocky and steep sloped terrain to the west of the Park is important for wildlife including the Superb Lyrebird, various reptiles, mammals and small birds. Likewise, Elizabeth Park offers a foreshore refuge for wildlife.

Reserve Impacts

The Golf Course places significant pressure on the biodiversity of native bushland throughout the Park and beyond. High water usage by the Golf Course has led to drainage issues and encourages the growth of exotic plants. Chemicals used to maintain the Golf Course spread into drains and bushland areas affecting flora diversity. Clearing and thinning of vegetation for golf sight lines and golf ball access is an ongoing problem. Vegetation between golf course fairways contains weed infestations that impact surrounding bushland as sources of exotic plant species. Resilience of some bushland is poor due to soil disturbance from course construction, bike tracks, illegal dumping, increased water runoff and lack of fire.

Bushland above Tunks Park has been cleared in the past and regeneration of remnant bushland is restricted by multiple tracks, large dominant weeds like Camphor Laurels, illegal dumping and storm water drainage. Vegetation and rubbish dumping is an ongoing issue along Lower Cliff Ave.

Spray paint vandalism of the rock outcrops known as Monkey Rocks has significantly reduced visual appeal.

ENCROACHMENTS: 1 Upper Cliff Ave, 2 Ulric Lane, 2 Dorset Rd.

Wildlife Habitat Issues

Feral and domestic animals have significant effects on endemic fauna populations. Foxes, domestic dogs, black rats, cats, and feral bees apply pressure through competition and predation.

Council conducts an integrated pest management plan which includes fox baiting and feral cat trapping.

A mosaic of unofficial and official tracks, have been created by regular incursions into bushland for lost golf balls, by fisherman along the foreshore and visitors to Tunks Park who enter into the adjoining bushland. These incursions break up and undermine the integrity of an already diminished bushland habitat.

Achievements

Extensive bush regeneration has been completed along the foreshore track from Dorset St to Tunks Park. Over time weed infestations have been reduced. Weed control and maintenance on historic stone walls throughout the Park have conserved these heritage assets.

Improvements to walking tracks have enabled better access and visitor experience throughout the Park.

Council has and will continue to liaise with the Golf Club to improve the management of bushland in the Park.

An ecological burn was completed in spring 2016 in the area west of Dorset St.

Council has and will continue to support three Bushcare groups working in the Park.

Bushland Management Goals – Northbridge Park

This bushland Reserve Action Plan has identified the following management aims from the Urban Bushland Plan of Management 2014 as 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.
6.2g: Maintain natural habitat formations and supplement with manufactured structures where natural habitat has been depleted.
6.3b: To implement weed control programs which are based on regeneration and restoration principles and which increase bushland resilience to further weed infestation.
7.1g: To manage fire such that the fire regime and implementation of the burn is beneficial to flora and fauna diversity and habitat.

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.

Bushland Management – General Principles for all Reserves

a. Bushland regeneration is a long term process requiring staged weed removal to ensure establishment of native plant communities. Work will proceed from good bush to degraded areas with techniques that encourage regeneration.
b. If possible, weed refuse and natural debris composted on-site.
c. If 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/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. *Phytophthora cinnamomi* (a root rot pathogen) is listed as a key threatening process in NSW. Bushland workers are to use hygiene protocols to minimise risk.
g. Report and record all reserve encroachments. Monitor for tree vandalism and/or removal and report to Council Compliance for appropriate action.
h. Monitor wildlife habitat and supplement where necessary.
i. Monitor feral animal activity and implement appropriate management actions where necessary.
j. Encourage the community to report wildlife sightings via the Wildlife Watch Program.
k. Bushfire management will be achieved through implementation of a strategic hazard reduction program consistent with the Bushfire Risk Management Plan.
l. Species diversity will be maintained by an ecological burn program in a mosaic pattern.
m. Monitor and protect Aboriginal cultural heritage sites. Bushland staff to notify Aboriginal Heritage Office prior to a burn to identify sites and implement protection measures.
n. Preserve natural features for educational purposes and continue to inform the community of bushland issues through on-site activities and signage. Maintain appropriate signage.
o. Formal tracks to be maintained and unwanted tracks to be 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 work and review annually.

q. Protection of habitat is required for flora and fauna species found in reserves listed as threatened species under State and Commonwealth legislation.

r. The collection of rubbish from bushland is carried out by council contractors and bushland field staff as required.

Native Plant List for Northbridge Park

Northbridge Park Bushland Native Plant Species		
CONIFERS	EUPHORBIACEAE	*Hakea gibbosa*
PODOCARPACEAE	*Amperea xiphoclada*	*Hakea teretifolia*
Podocarpus spinulosus	*Breynia oblongifolia*	*Lomatia silaifolia*
FERNS	*Glochidion ferdinandi*	*Persoonia levis*
ADIANTACEAE	*Micrantheum ericoides*	*Persoonia pinifolia*
Adiantum aethiopicum	*Omalanthus populifolius*	RUBIACEAE
ASPLENIACEAE	*Phyllanthus hirtellus*	*Opercularia aspera*
Asplenium australasicum	FABACEAE FABOIDEAE	*Pomax umbellata*
BLECHNACEAE	*Glycine clandestine*	RUTACEAE
Blechnum cartilagineum	*Gompholobium grandiflorum*	*Crowea saligna*
Blechnum patersonii	*Hardenbergia violacea*	*Phebalium dentatum*
Doodia aspera	*Indigofera australis*	*Zieria laevigata*
CYATHEACEAE	*Kennedia rubicunda*	*Zieria pilosa*
Cyathea australis	*Platylobium formosum*	*Zieria smithii*
Cyathea cooperi	*Pultenaea daphnoides*	SAPINDACEAE
DENNSTAEDTIACEAE	*Pultenaea elliptica*	*Dodonaea triquetra*
Histiopteris incise	FABACEAE-MIMOSOIDEAE	SCROPHULARIACEAE
Hypolepis muelleri	*Acacia decurrens*	*Veronica plebeia*
Pteridium esculentum	*Acacia floribunda*	STERCULIACEAE
DICKSONIACEAE	*Acacia linifolia*	*Lasiopetalum ferrugineum*
Calochlaena dubia	*Acacia longifolia*	THYMELIACEAE
GLEICHENIACEAE	*Acacia mearnsii*	*Pimelea linifolia*
Gleichenia dicarpa	*Acacia myrtifolia*	*Wikstroemia indica*
LINDSAEACEAE	*Acacia suaveolens*	VERBENACEAE
Lindsaea linearis	*Acacia terminalis*	*Clerodendrum tomentosum*
POLYPODIACEAE	*Acacia ulicifolia*	VITACEAE
Platycerium bifurcatum	GOODENIACEAE	*Cayratia clematidea*
Pyrrosia rupestris	*Goodenia sp*	*Cissus antarctica*
PTERIDACEAE	HALORAGACEAE	*Cissus hypoglauca*
Cheilanthes sieberi	*Gonocarpus micranthus*	***MONOCOTS***
THELYPTERIDACEAE	*Gonocarpus teucrioides*	COMMELINACEAE
Christella dentate	LAMIACEAE	*Commelina cyanea*
SINOPTERIDACEAE	*Plectranthus parvifolius*	CYPERACEAE
Pellaea falcate	LOBELIACEAE	*Gahnia erythrocarpa*
DICOTS	*Lobelia gracilis*	*Isolepis inundatus*
ACANTHACEAE	*Pratia purpurascens*	*Isolepis nodosa*
Pseuderanthemum variabile	MENISPERMACEAE	*Lepidosperma laterale*
APIACEAE	*Stephania japonica*	*Lepidosperma longitudinale*
Actinotus helianthi	MORACEAE	*Schoenus melanostachys*
Actinotus minor	*Ficus rubiginosa*	IRIDACEAE
Centella asiatica	MYRTACEAE	*Patersonia sericea*
Hydrocotyle peduncularis	*Acmena smithii*	JUNCACEAE
Platysace linearifolia	*Angophora bakeri*	*Juncus usitatus*
Xanthosia pilosa	*Angophora costata*	PHORMIACEAE
Platysace stephensonii	*Angophora hispida*	*Dianella caerulea*
APOCYNACEAE	*Corymbia gummifera*	*Dianella revoluta*
Parsonsia straminea	*Darwinia fascicularis*	UVULARIACEAE
ARALIACEAE	*Eucalyptus botryoides*	*Schelhammera undulata*
Polyscias sambucifolia	*Eucalyptus camfieldii*	LOMANDRACEAE
ASCLEPIADACEAE	*Eucalyptus haemastoma*	*Lomandra cylindrica*
Marsdenia suaveolens	*Eucalyptus maculata*	*Lomandra filiformis*
Tylophora barbata	*Eucalyptus pilularis*	*Lomandra longifolia*
ASTERACEAE	*Eucalyptus piperita*	Lomandra multiflora
Cassinia denticulata	*Eucalyptus punctata*	*Lomandra obliqua*
BIGNONIACEAE	*Eucalyptus resinifera*	LUZURIAGACEAE
Pandorea pandorana	*Kunzea ambigua*	*Eustrephus latifolius*
CAMPANULACEAE	*Leptospermum laevigatum*	PHILESIACEAE
Wahlenbergia gracilis	*Leptospermum squarrosum*	*Geitonoplesium cymosum*
Wahlenbergia stricta	Melaleuca hypericifolia	POACEAE
CASSYTHACEAE	*Melaleuca styphelioides*	*Anisopogon avenaceus*
Cassytha paniculata	OLEACEAE	*Cymbopogon refractus*
CASUARINACEAE	*Notelaea longifolia*	*Dichelachne crinita*
Allocasuarina distyla	PITTOSPORACEAE	*Digitaria parviflora*
Allocasuarina littoralis	*Billardiera scandens*	*Echinopogon caespitosus*
Casuarina glauca	*Pittosporum revolutum*	*Entolasia marginata*
CONVOLVULACEAE	*Pittosporum undulatum*	*Entolasia stricta*
Dichondra repens	POLYGONACEAE	*Eragrostis brownii*
CUNONIACEAE	*Rumex brownii*	*Imperata cylindrica*
Bauera rubioides	PROTEACEAE	*Microlaena stipoides*
Callicoma serratifolia	*Banksia ericifolia*	*Oplismenus imbecillis*
DILLENIACEAE	*Banksia integrifolia*	*Paspalidium distans*
Hibbertia decurens	*Banksia marginata*	*Paspalidium aversum*
Hibbertia scandens	*Banksia oblongifolia*	*Themeda australis*
ELAEOCARPACEAE	*Banksia serrata*	RESTIONACEAE
Elaeocarpus reticulatus	*Grevillea buxifolia*	*Restio sp*
ERICACEAE STYPHELIOIDEAE	*Grevillea linearifolia*	SMILACACEAE
Epacris longiflora	*Grevillea sericea*	*Smilax glyciphylla*
Epacris pulchella	*Grevillea speciosa*	XANTHORRHOEACEAE
Woollsia pungens	*Hakea dactyloides*	*Xanthorrhoea media*