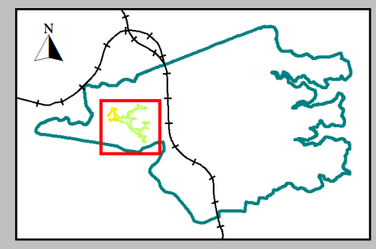
Ferndale Park Actions

Priorities will be given to programs for the 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.

1. Bushland Contractor to conduct weed removal in former Bushcare work site.
2. Bushland Contractor to target herbaceous weeds in Fullers Road Reserve and replace with indigenous plantings to improve local biodiversity. Also monitor the channel in this section and stabilise if required.
3. Bushland Contractor to remove woody and herbaceous weeds targeting Ochna, Trad, Fishbone Fern, Asparagus Fern and Peruvian Lily.
4. Bushland Contractor to complete maintenance work in previously worked area targeting the removal of herbaceous and woody weeds working in a westerly direction.
5. Bushland Contractor to remove woody weeds in and around creek line targeting Trad and Fishbone fern. Track upgrade work is also required here in some sections.
6. Bushland Contractor to complete annual maintenance sweep in previously worked and now stable area, ensuring no woody weeds establish. This area is impacted by water flows.
7. Continue to liaise with Chatswood Golf Course to improve the link to O.H Reid Reserve and manage weeds.
8. Bushland Contractor to complete primary weed removal targeting woody weeds around stormwater line.
9. Bushland Contractor to remove woody weeds targeting Ochna, Lantana and Fishbone Fern north of track.
10. Ferndale Street Bushcare group to continue to work in accordance with Bushcare Action Plan.
11. Bushland Contractor and nearby Bushcare groups to monitor stormwater lines for weed outbreaks. Also monitor for erosion, siltation and litter and remove where possible.
12. Bushland Contractor to complete follow-up weed treatment of woody weeds and ground layer in area north of the creek.
13. Investigate options to install additional seating along track for interpretive activities.
14. Bushland Contractor to target the removal of mid-storey woody weeds and canopy weeds in area south of the creek. Aim to reduce mid-storey weeds by 50-75% and canopy by 30-50%. Continue working in a mosaic pattern where native plant resilience is high.
15. Bushland Contractor to complete maintenance weed removal sweeps in area previously burnt.
16. Bushland Contractor to control weeds in easement behind houses targeting Madeira Vine and Trad.
17. Continue to liaise with Chatswood High School regarding the management of critically endangered Blue Gum High Forest vegetation in school grounds. Council to continue coordinating bush regeneration contractors while reminding the School of its responsibilities for managing native vegetation in school grounds.
18. Ferndale Park Bushcare group to continue to work in accordance with Bushcare Action Plan.
19. Bushland Contractor to complete weed removal works in fern area next to grassed area to reduce Trad.
20. Investigate options to use logs to create new bush furniture or sculptures.
21. Investigate options to install informal children's bush play elements in grassed areas.
22. Bushland Team to routinely monitor and maintain all tracks and remove rubbish from creek.
23. Bushland Contractor to target the removal of Creeping Ruellia and Mist Weed along the entire creekline.
24. Council to continue to complete regular chemical and biological testing of Swaines Creek through its Water Quality Monitoring program.
25. Natural Assets Officer to complete Ferndale Park guided walk information for Willoughby Walks App.
26. Council Rangers patrolling tracks to enforce regulations.
27. Liaise with local residents about keeping wildlife friendly backyards including weed removal, planting native plants and habitat creation. Also to inform residents of responsible pet ownership.
28. Bushand Team controlling Trad and assist Bushcare group with controlling Cats Claw Creeper.
29. Natural Assets Officer to liaise with DPIE in conducting annual monitoring surveys for threatened fungi, as part of the State Government's Save Our Species Program.
30. Council's Safety City Unit to patrol the reserve and impose fines as required.

RESERVE ACTION PLAN FERNDALE PARK



Plan details

Status: Final
Prepared by: N. Yu
Drawn by: N. Prasad
Date printed: 30/11/2022
Approximate Scale: 1:3600

Legend

- Property number
- Action plan activity
- Stormwater node
- Approximate fire hydrant location
- Power pole
- 5m contours
- Stormwater network - Underground *
- Stormwater network - Overground / Unknown *
- Bush track / Path *
- Property boundary
- Reserve / bushland
- Private open space (Chatswood Golf Course)
- Council bush regeneration contractors
- BushCare group
- Council staff regeneration site

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

The information contained herein has been provided in good faith. Effort has been made to ensure it's accuracy and completeness.

Willoughby City Council does not take any responsibility for errors or omissions nor any loss or damage that may result from the use of this information.

References

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WILLOUGHBY CITY COUNCIL
City of Diversity

Ferndale Park Reserve Action Plan

Reserve Profile

Ferndale Park is a long and narrow 9.8 hectare remnant bushland reserve that is surrounded by residential properties, located within the Lane Cove River catchment, Chatswood.

It plays an important role linking a number of small bushland spaces to larger significant bushland reserves like Mowbray Park, Blue Gum Park and the Lane Cove National Park.

Swaines Creek runs through the centre of the park with many stormwater drains from nearby roads and properties feeding into it. A major sewer line runs parallel with the creek with a series of sewer overflow points found along the creek line. Water from the creek flows into the adjacent Chatswood Golf Course before draining into the Lane Cove River.

There are sign-posted walking tracks in the reserve and the Ferndale Walking Track is part of the larger Rail to River walk.

PLANT COMMUNITY: The Park is predominately comprised of Coastal Enriched Sandstone Moist Forest [S_WSF02]. A small area to the south of the park is listed as Blue Gum High Forest, a Critically Endangered Ecological Community. The vegetation along most of Swaines creek is listed as Coastal Sandstone Gallery Rainforest [S_RF02].

HABITAT: There are a range of hollow bearing and stag trees providing habitat for micro bats, parrots, and owls. Riparian areas contain rocky ledges and sandstone boulders providing refuge for frogs, reptiles and invertebrates. While rock outcrops and bush rock structures are habitat for reptiles, invertebrates and micro bats.

The park is designated as a Wildlife Protection Area under the *Companion Animals Act 1998* with no cats permitted and dogs required on a leash at all times.

Statement of Significance

Ferndale Park 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 E2 Environmental Conservation in the Willoughby Local Environment Plan (WLEP) 2012.

ABORIGINAL CULTURAL SIGNIFICANCE: The Gamaragal people were the original inhabitants of Willoughby and had a deep cultural and spiritual connection to the Land, Sky and Waters. The creeks, wetlands, estuaries and rivers were important for food, tools, spiritual connection and for transport by nowe (canoe), from Swaine's Creek to the Lane Cove River. The shorelines were carefully maintained by the Aboriginal people ensuring support to all life. There is evidence of an Aboriginal heritage site within the reserve and its location will be kept confidential to ensure its protection.

NATURAL HERITAGE SIGNIFICANCE: The value of Ferndale Park as avian habitat is reflected in the high diversity of forest and woodland birds that are found there. Commonly heard and/or seen species include the Australian King-parrot, Crimson Rosella, Rainbow Lorikeet, Sulphur-crested Cockatoo and Australian Brush-turkey. In lesser numbers the Australian Owlet-nightjar has been recorded and the vulnerably listed Powerful Owl has also been known to roost within the park. Four species of microbats inhabit the park and also Antechinus have been observed. There is low diversity of native mammal species in the park and this could be mainly due to its narrowness and proximity to urban impacts. Further surveying of mammal species is required.

HISTORIC CULTURAL SIGNIFICANCE: During early settlement, timber-getting was an important industry in the region. Hardwood timbers such as Blue Gum, needed for the building of houses in Sydney, were felled and carried down the Lane Cove River by boat and raft. As trees were felled, the patches of cleared land were used as small farms and orchards. Later these farms and orchards gave way to urban development when the increase in population required that more residential properties were built in the Chatswood area, particularly after 1890 when the North Shore Railway Line was opened. Today, only the narrow gullies like Ferndale Park which were too rugged to be logged or farmed remain as bushland.

Reserve Impacts

A significant sewer line and stormwater network runs through the park, following the creek for its entire length. The associated outlets, sewer chambers and drains greatly impact water quality in the park. During heavy rain sewer overflows can pollute creek water and banks. High velocity flows also cause erosion along creek banks. Excess moisture and nutrients facilitate weed spread particularly in stormwater lines.

Gas pipe and overhead power lines dissect the park, particularly between Greville St North and Greville St South.

Most of the park is bordered by private property. This magnifies the impact of urbanisation, including invasion by garden escapes, dumping of refuse and fill, light pollution, stormwater run-off and roaming domestic pets in the bush. The western end of the park adjoins Chatswood Golf Course. There are no buffers between the bush and the turfed area so this boundary is a source of nutrients and weeds.

ENCROACHMENTS: There are no recorded encroachments.

Wildlife Habitat Issues

Ferndale Park is a vital wildlife corridor linking small suburban pockets of bushland to larger reserves within the Lane Cove River catchment. It links smaller reserves Campbell Park, Lowanna Park, Fullers Road Reserve, Coolaroo Reserve and OH Reid Reserve to the larger bushland reserves of Blue Gum Park, Mowbray Park and the Lane Cove National Park all of which support diverse and large numbers of native wildlife. Without Ferndale as a link these smaller reserves would be isolated. Connectivity should continue to be strengthened to O.H. Reid Reserve and further to Mowbray Park. It is also close to the Pacific Highway and is integral in connecting bushland in Willoughby's west to bushland in the east via habitat corridors.

There are hollow bearing trees in the park but not in great abundance. Habitat creation and improvement projects should be considered for local populations of gliders and parrots by installing nest boxes.

Water quality in Swaines Creek is poor. Surveying for amphibian species is recommended to understand the impact on populations. Habitat creation work is required along the creek.

There is evidence of fox activity in the park but due to regulations the park is too narrow to be included in the fox baiting program. Other options to control feral animals will be investigated.

Controlled burning in Ferndale Park has reduced fuel loads, increased plant diversity and improved habitat quality.

Achievements

Great work has been completed to improve the connection of Ferndale Park to the adjacent OH Reid Reserve through improvements to the walking track and vegetation management.

Track work has also been completed in other areas with stonework, replacement of steps and the installation of a bridge to improve visitor access.

Old interpretive signs have been replaced throughout the park.

A successful controlled burn was completed between Greville Street and Ferndale Street with good regeneration of native plants occurring. Another controlled burn was completed behind properties at Beaconsfield Road.

Weed distribution has been incrementally reduced through weed management programs conducted by Council staff, contractors and two active and dedicated Bushcare volunteer groups.

Bushland Management Goals – Ferndale Park

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

4.2c: Provide a high level of planning, support, training and supervision of existing and future community volunteers;

5.3b: Create and/or maintain conditions in which creek and drainage lines are protected from increased erosion and/or sedimentation due to urban impacts;
6.2f: 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 is depleted.
6.3b: Implement weed control programs which are based on regeneration and restoration principles and which increase the bushland resilience to further weed infestation.

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 areas of 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.
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's Safe City Unit 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. 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 cultural heritage sites within the reserve. Bushland staff to notify Aboriginal Heritage Office prior to each burn to identify sites and implement protection measures and post-fire survey.
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 to be closed to prevent damage to habitat and 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.

Native Animal List for Explosives Reserve and H.C Press Park
Ferndale Park 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 Ferndale Park

FORK FERNS	*Phragmites australis*	*Acacia elata*
PSILOTACEAE	*Poa affinis*	*Acacia floribunda*
Psilotum nudum	*Sporobolus creber*	*Acacia linifolia*
CONIFERS	*Sporobolus elongatus*	*Acacia longifolia subsp. longifolia*
PODOCARPACEAE	*Themeda triandra*	*Acacia longissima*
Podocarpus spinulosus	SMILACACEAE	*Acacia suaveolens*
FERNS	*Smilax australis*	*Acacia ulicifolia*
ASPLENIACEAE	*Smilax glyciphylla*	GERANIACEAE
Asplenium australasicum	TYPHACEAE	*Geranium homeanum*
Asplenium flabellifolium	*Typha sp.*	*Geranium solanderi var. solanderi*
BLECHNACEAE	**DICOTS**	GOODENIACEAE
Blechnum ambiguum	ACANTHACEAE	*Goodenia heterophylla subsp. heterophylla*
Blechnum cartilagineum	*Pseuderanthemum variabile*	HALORAGACEAE
Doodia caudata	AMARANTHACEAE	Gonocarpus teucrioides
Doodia australis	*Alternanthera denticulata*	LAMIACEAE
CYATHEACEAE	APIACEAE	*Plectranthus parviflorus*
Cyathea australis	*Actinotus helianthi*	LAURACEAE
Cyathea cooperi	*Actinotus minor*	*Cassytha glabella*
DENNSTAEDTIACEAE	*Centella asiatica*	*Cassytha paniculata*
Histiopteris incisa	*Platysace lanceolata*	*Cassytha pubescens*
Pteridium esculentum	*Platysace linearifolia*	*Cryptocarya glaucescens*
DICKSONIACEAE	*Platysace stephensonii*	LINACEAE
Calochlaena dubia	*Xanthosia pilosa*	*Linum marginale*
GLEICHENIACEAE	*Xanthosia tridentata*	MALVACEAE
Gleichenia dicarpa		*Lasiopetalum ferrugineum var. ferrugineum*
HYMENOPHYLLACEAE	APOCYNACEAE	*Seringia arborescens*
Hymenophyllum cupressiform	*Marsdenia suaveolens*	MORACEAE
LINDSAEACEAE	*Parsonsia straminea*	*Ficus rubiginosa*
Lindsaea linearis	*Tylophora barbata*	MYRTACEAE
Lindsaea microphylla	ARALIACEAE	*Acmena smithii*
POLYPODIACEAE	*Astrotricha floccosa*	*Angophora costata subsp. costata*
Platycerium bifurcatum	*Astrotricha latifolia*	*Backhousia myrtifolia*
Pyrrosia rupestris	*Astrotricha longifolia*	*Callistemon linearis*
SCHIZAEACEAE	*Hydrocotyle sibthorpioides*	*Corymbia gummifera*
Schizaea bifida	*Polyscias sambucifolia subsp. Long leaflet*	*Eucalypus haemastoma*
PTERIDACEAE	ASTERACEAE	*Eucalyptus pilularis*
Adiantum aethiopicum	*Cassinia aculeata subsp. aculeata*	*Eucalyptus piperita*
Adiantum hispidulum var. hispidulum	*Cassinia denticulata*	*Eucalyptus racemosa*
THELYPTERIDACEAE	*Cotula australis*	*Eucalyptus resinifera subsp. resinifera*
Christella dentata	*Helichrysum elatum*	*Eucalyptus saligna*
MONOCOTS	*Lagenophora stipitata*	*Kunzea ambigua*
ARACEAE	*Oleria microphylla*	*Leptospermum trinervium*
Gymnostachys anceps	*Ozothamnus diosmifolius*	*Rhodamnia rubescens - CE*
Spirodela polyrhiza	*Senecio hispidulus*	*Syncarpia glomulifera subsp. glomulifera*
COMMELINACEAE	*Sigesbeckia orientalis*	*Tristaniopsis laurina*
Commelina cyanea	BIGNONIACEAE	PLANTAGINACEAE
CYPERACEAE	*Pandorea pandorana*	*Veronica plebeia*
Gahnia clarkei	CALASTRACEAE	PHYLLANTHACEAE
Gahnia radula	Stackhousia monogyna	*Breynia oblongifolia*
Ficinia nodosa	Stackhousia viminea	*Glochidion ferdinandi var. ferdinandi*
Lepidosperma gunnii	CAMPANULACEAE	*Phyllanthus hirtellus*
Lepidosperma laterale	*Lobelia dentata*	PICRODENDRACEAE
Schoenus apogon	CASUARINACEAE	*Micrantheum ericoides*
Schoenus melanostachys	*Allocasuarina distyla*	PRIMULACEAE
Netrostylis capillaris	*Allocasuarina littoralis*	*Myrsine variabilis*
IRIDACEAE	*Allocasuarina torulosa*	OLEACEAE
Patersonia sericea var. sericea	*Casuarina glauca*	*Notelaea longifolia f. longifolia*
JUNCACEAE	CELASTRACEAE	*Notelaea ovata*
Juncus continuus	*Denhamia silvestris*	PITTOSPORACEAE
Juncus planifolius	CHENOPODIACEAE	*Billardiera scandens*
Juncus usitatus	*Atriplex australasica*	*Pittosporum revolutum*
ASPARAGACEAE	*Sarcocornia quinqueflora subsp. quinqueflora*	*Pittosporum undulatum*
Eustrephus latifolius	CONVOLVULACEAE	POLYGONACEAE
Lomandra brevis	*Calystegia marginata*	*Persicaria decipiens*
Lomandra filiformis subsp. filiformis	*Dichondra repens*	PROTEACEAE
Lomandra fluviatilis	Polymeria calycina	*Banksia ericifolia subsp. ericifolia*
Lomandra glauca	CRASSULACEAE	*Banksia integrifolia subsp. integrifolia*
Lomandra gracilis	*Crassula sieberiana*	*Banksia serrata*
Lomandra longifolia	CUNONIACEAE	*Banksia spinulosa*
Lomandra multiflora subsp. multiflora	*Bauera rubioides*	*Grevillea buxifolia subsp. buxifolia*
Lomandra obliqua	*Callicoma serratifolia*	*Grevillea linearifolia*
ASPHODELACEAE	*Ceratopetalum apetalum*	*Grevillea sericea subsp. sericea*
Xanthorrhoea arborea	*Ceratopetalum gummiferum*	*Hakea sericea*
Xanthorrhoea media	*Schizomeria ovata*	*Lambertia formosa*
Caesia parviflora var. parviflora	DILLENIACEAE	*Lomatia silaifolia*
Dianella caerulea var. caerulea	*Hibbertia dentata*	*Persoonia laurina subsp. laurina*
Dianella longifolia var. longifolia	*Hibbertia empetrifolia subsp. empetrifolia*	*Persoonia levis*
Dianella revoluta var. revoluta	*Hibbertia linearis*	*Persoonia linearis*
Tricoryne simplex	*Hibbertia obtusifolia*	*Persoonia pinifolia*
COLCHIACEAE	*Hibbertia scandens*	*Xylomelum pyriforme*
Schelhammera undulata	DROSERACEAE	RANUNCULACEAE
ORCHIDACEAE	*Drosera auriculata*	*Clematis aristata*
Acianthus fornicatus	ELAEOCARPACEAE	RHAMNACEAE
Caladenia catenata	*Elaeocarpus reticulatus*	*Pomaderris intermedia*
Caladenia carnea	*Tetratheca ericifolia*	*Pomerderris sp.*
Calochilus campestris	ERICACEAE-EPACRIOIDEAE	RUBIACEAE
Corybas aconitiflorus	*Astroloma humifusum*	*Morinda jasminoides*
Cryptostylis erecta	*Epacris pulchella*	*Opercularia aspera*
Cyrtostylis reniformis	*Leucopogon ericoides*	*Pomax umbellata*
Dendrobium sp.	*Leucopogon juniperinus*	RUTACEAE
Dipodium punctatum	*Leucopogon lanceolatus var. lanceolatus*	*Correa reflexa var. reflexa*
Pterostylis longifolia	*Leucopogon setiger*	*Zieria pilosa*
Pterostylis nutans	*Monotoca scoparia*	*Zieria smithii*
POACEAE	*Trochocarpa laurina*	SANTALACEAE
Anisopogon avenaceus	EUPHORBIACEAE	*Omphacomeria acerba*
Aristida vagans	*Homalanthus populifolius*	SAPINDACEAE
Rytidosperma tenuius	EUPOMATIACEAE	*Dodonaea multijuga*
Austrostipa sp.	*Eupomatia laurina*	*Dodonaea triquetra*
Cymbopogon refractus	FABACEAE- FABOIDEAE	SOLANACEAE
Dichelachne sp.	*Bossiaea heterophylla*	*Solanum aviculare*
Echinopogon caespitosus var. caespitosus	*Bossiaea obcordata*	*Solanum prinophyllum*
Entolasia marginata	*Dillwynia retorta*	STYLIDIACEAE
Entolasia stricta	*Glycine clandestina*	*Stylidium graminifolium*
Imperata cylindrica	*Gompholobium latifolium*	*Stylidium productum*
Lachnagrostis filiformis	*Hardenbergia violacea*	THYMELAECEAE
Microlaena stipoides var. stipoides	*Hovea linearis*	*Pimelea linifolia subsp. linifolia*
Oplismenus aemulus	*Kennedia rubicunda*	VIOLACEAE
Oplismenus imbecillis	*Platylobium formosum*	*Viola hederacea*
Panicum simile	*Pultenaea flexilis*	VITACEAE
Paspalidium criniforme	FABACEAE- MIMOSOIDEAE	*Cayratia clematidea*
Paspalidium distans	*Acacia binervia*	*Cissus hypoglauca*