

KOOLEWONG FLORA RESERVE N^o. 202

SITE SPECIFIC WORKING PLAN



Smooth-barked Apple/Turpentine/Sydney Peppermint heathy woodland on sandstone ranges of the Central Coast, nearby Dharug National Park. Photo: Sarah Brookes, NPWS.

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The NSW Department of Planning and Environment (DPE) Secretary has been appointed as land manager of Koolewong Flora Reserve (FR) No. 202 (Appendix 1) by the Minister responsible for the *Forestry Act 2012* under section 57(3) of the Act. Under section 146(3) of the *National Parks and Wildlife Act 1974*, nearby or adjoining land to existing reserves can be managed by NPWS.

This site-specific working plan describes the important values of an individual Flora Reserve and identifies site-specific priorities for management. The plan is to be read in conjunction with the General Working Plan for Flora Reserves Managed by NPWS document which identifies NSW National Parks and Wildlife Service's broad objectives and strategies for managing flora reserves (Appendix 2). These two documents together form the flora reserve working plan in line with the requirements of section 25 of the *Forestry Act 2012*.

1. DETAILS OF THE RESERVE

1.1 LOCATION

Koolewong FR occupies the western block of McPherson State Forest (SF) and is located on the western edge of the Central Coast region of New South Wales approximately 15 kilometres north-east of Wisemans Ferry and 12 kilometres south of Bucketty.

The Mangrove Creek corridor forms the eastern boundary of the reserve and separates it from the eastern block of McPherson SF. Despite its name, Mangrove Creek is designated as a river, and its impounded headwaters form the primary reservoir for water supply to the Central Coast. Mangrove Creek Dam wall is located on the north-east boundary of Koolewong FR.

The historic Old Great North Road runs along the reserve's western boundary, however it is not part of the flora reserve. The section of the Old Great North Road adjacent to Koolewong FR is managed by Central Coast Council.

There is no public vehicle access to Koolewong FR. Bushwalkers and mountain bike riders can access the FR via the Sullivans Arm Trail in Yengo NP and the Old Great North Road.

Mangrove Creek and Mangrove Creek Dam limit access from the east and Yengo NP lies to the west. There is one management trail (Blue Door Point Trail) within the reserve which connects with the eastern block of McPherson SF after crossing private land and Mangrove Creek. It enters the reserve on the western boundary approximately three kilometres from the north-west corner. This is a powerline service road through the Central Coast Council Catchment Area. There was a management trail providing access to Finis Trig in the past which is now overgrown.

See Locality Map in Appendix 1.

1.2 KEY ATTRIBUTES OF THE RESERVE

Koolewong FR forms part of an extensive area of protected sandstone landscape on the Hornsby Plateau, some of which exhibits high biodiversity and wilderness values. Together with the adjoining national parks, the reserve contributes to north-south and east-west wildlife corridors.

Specific values that are to be protected in the reserve include:

- » Regionally significant vegetation
- » Threatened fauna and flora species
- » Part of traditional Country for the Darkinjung People.
- » Connections to the Old Great North Road experience.

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These values are described in more detail in the following sections.

1.3 GENERAL DESCRIPTION

Area

The reserve is 1874 hectares and is adjoined by Yengo NP to the west and Dharug NP to the south. Water catchment adjoins to the north. Private land adjoins to the east along Mangrove Creek and to the south-east along Greens Run, a tributary of Mangrove Creek.

Yengo NP, to the west of Koolewong FR, is part of the Greater Blue Mountains Area. Much of Yengo NP is also declared wilderness under the *Wilderness Act 1987* but the area immediately adjoining the reserve is not part of the declared wilderness area.

Topography

The terrain of Koolewong FR is typical of the elevated sandstone plateaus on the edges of the Sydney Basin. The central portion of the reserve forms an undulating plateau of fairly consistent elevation apart from a central north-south aligned ridge and steep gorges falling to incised creek lines to the east and south-west. Judge Dowling Range forms the western boundary, averaging 220 metres ASL elevation, and reaching a maximum height of 260 metres ASL near the south-western corner. Finis Trig Station also sits at 260 metres ASL, in the southern third and roughly in the centre of the reserve. Along the reserve's eastern boundary the land drops steeply to 30 metres ASL along the banks of Mangrove Creek.

The reserve lies within a regional habitat corridor that connects the NPWS parks of the coastal plain and the escarpment. State forest and water catchment are also part of the naturally vegetated east-west link between the coastal and sub-coastal reserves in the Hawkesbury Valley and Broken Bay areas and those of the Central Tablelands.

The reserve is in the Sydney Basin Bioregion (Australian Government Department of the Environment and Energy (DotEE) 2016).

Geology and soils

Koolewong FR is underlain by Mesozoic era sedimentary rocks of Hawkesbury Sandstone and the geologically older Narrabeen Group. Hawkesbury Sandstone dominates the higher ground of the reserve with the Narrabeen group revealed on the lower eastern parts of the reserve.

Both Hawkesbury Sandstone and rocks of the Narrabeen Group weather to form acid, highly erodible soils of generally low fertility with loose sandy topsoil.

Climate

Koolewong Flora Reserve lies on the western boundary of the Central Coast climatic region (OEH 2014a, OEH 2014b).

This area is in a rain shadow and receives lower rainfall than the higher tablelands to the west and coastal ranges to the east (DECC 2009). The nearest station rainfall records are available from Kulnura (Mangrove Creek Dam), located above the dam, approximately 1 kilometre east of the reserve, where average annual rainfall is 956 mm and St Albans (Espie St), some 11 kilometres west-south-west of the reserve, where average annual rainfall is 945 mm.

Annual rainfall distribution is seasonal. Rainfall at these sites predominantly occurs over summer with peaks January to March. Winter periods are drier.

Annual rainfall distribution is also influenced by topography. Annual rainfall is approximately 1040 mm at the highest points along the western boundary of the reserve (260 metres ASL), declining to 936 mm on the lower parts of the reserve on its eastern boundary (BioClim 2009).

Average annual temperatures are also expected to vary with elevation, slope and aspect, which impact on the amount of solar radiation received.

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Under climate change, minimum and maximum temperatures in the Central Coast climatic region are expected to increase by 0.3 – 1.0°C and the number of hot days (over 35°C) will increase. Average annual rainfall is projected to decrease in spring and winter and average fire weather is expected to increase in summer and spring (OEH 2014a, OEH 2014b).

Vegetation / flora and fauna

Vegetation types

Vegetation in Corrabare FR was mapped as part of the NSW State Vegetation Type Map (DPE 2022) which relied heavily on GIS capabilities to predict the distribution of vegetation communities. The Plant Community Types (PCTs) identified in this mapping are presented in Table 1.

Existing vegetation mapping will be ground-truthed to provide a more accurate description of vegetation communities in the FR.

Table 1: Plant Community Types (PCTs) mapped in Corrabare Flora Reserves (DPE 2022)

PCT ID	PCT Name	Class	Formation
3037	Sydney Basin Warm Temperate Rainforest	Northern Warm Temperate Rainforests	Rainforests
3041	Sydney Sandstone Coachwood-Grey Myrtle Rainforest	Northern Warm Temperate Rainforests	Rainforests
3176	Sydney Enriched Sandstone Moist Forest	North Coast Wet Sclerophyll Forests	Wet Sclerophyll Forests (Shrubby sub-formation)
3183	Far South Hinterland Stringybark Sheltered Forest	South Coast Wet Sclerophyll Forests	Wet Sclerophyll Forests (Shrubby sub-formation)
3237	Hunter Range Blue Gum Gully Forest	Northern Hinterland Wet Sclerophyll Forests	Wet Sclerophyll Forests (Grassy sub-formation)
3238	Hunter Range Colluvial Apple-Gum Forest	Northern Hinterland Wet Sclerophyll Forests	Wet Sclerophyll Forests (Grassy sub-formation)
3239	Hunter Range Sheltered Grey Gum Forest	Northern Hinterland Wet Sclerophyll Forests	Wet Sclerophyll Forests (Grassy sub-formation)
3242	Lower North Ranges Turpentine Moist Forest	Northern Hinterland Wet Sclerophyll Forests	Wet Sclerophyll Forests (Grassy sub-formation)
3263	Watagan Range Turpentine-Mahogany Grassy Forest	Northern Hinterland Wet Sclerophyll Forests	Wet Sclerophyll Forests (Grassy sub-formation)
3593	Sydney Coastal Sandstone Bloodwood Shrub Forest	Sydney Coastal Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrubby sub-formation)
3617	Sydney Hinterland Peppermint-Apple Forest	Sydney Hinterland Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrubby sub-formation)
3620	Sydney Hinterland Turpentine Sheltered Forest	Sydney Hinterland Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrubby sub-formation)
3621	Sydney Hinterland Turpentine-Apple Gully Forest	Sydney Hinterland Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrubby sub-formation)
3622	Sydney Hinterland Yellow Bloodwood Woodland	Sydney Hinterland Dry Sclerophyll Forests	Dry Sclerophyll Forests (Shrubby sub-formation)

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PCT ID	PCT Name	Class	Formation
3813	Sydney Hinterland Dwarf Apple Low Woodland	Sydney Coastal Heaths	Heathlands
4042	Lower North Riverflat Eucalypt-Paperbark Forest	Coastal Floodplain Wetlands	Forested Wetlands
4127	Colo Plateau Dwarf Apple Heath-Woodland	Sydney Coastal Heaths	Heathlands

Flora

Yengo NP is located at the convergence of three botanical provinces (the Central Western Slopes, the Central Tablelands and Central Coast) and its flora exhibits a high degree of biodiversity (DECC 2009). Flora surveys in Dharug NP have also confirmed a very high diversity of native plants (NPWS 1997).

A detailed flora survey has not yet been completed in Koolewong FR and the reserve is considered to share high biodiversity with these adjoining parks. To date, five threatened plant species have been recorded within one kilometre of the reserve and Scrub Turpentine (*Rhodamnia rubescens*) has been recorded in the reserve (DPIE 2018). The species are listed in Appendix 4

Another threatened plant, Camfield's Stringybark (*Eucalyptus camfieldii*), has been recorded at Mangrove Creek Dam immediately adjoining the reserve's northern boundary. Mangrove Creek Dam is a priority management site for the species under the Saving our Species (SoS) program. NPWS has been undertaking recovery actions for this species under the Saving Our Species program, including monitoring of myrtle rust and tracking the abundance and condition of the species over time.

Vertebrate Fauna

The reserve has a variety of faunal habitats including bare rock, moist gullies, and dry sclerophyll forest with a species-rich understorey. Combined with its rugged terrain and remoteness, these habitats could potentially support a diverse suite of native animals, particularly in those parts which are least disturbed.

A total of 25 threatened animal species have been recorded in the FR and/or MacPherson SF (Appendix 5). A koala was sighted within the FR on a trail camera in July 2022. However, the Reserve was not identified as important habitat under the Koala Strategy (NSW Government 2018).

Threatened fauna that have been recorded nearby in Dharug and Yengo National Parks include dusky woodswallow, gang-gang cockatoo, giant burrowing frog, glossy black-cockatoo, koala, little lorikeet, powerful owl, red-crowned toadlet, speckled warbler, varied sitella, white-bellied sea eagle, yellow-bellied glider.

1.4 HISTORY

Aboriginal history and heritage

Koolewong FR is in the traditional Country of the Darkinjung People and within the area covered by the Metropolitan Local Aboriginal Land Council (LALC). While previous Aboriginal use of the area is not well understood, it is highly likely that, like other parts of the Sydney Basin, the well-watered and fertile environments would have been extensively used, with the remote and rugged environments providing sites of spiritual and cultural significance and temporal resources (DECC 2008).

The Hawkesbury Sandstone areas of the Sydney Basin are particularly rich in Aboriginal heritage and a prolific number of sites are present. Those recorded in the FR and surrounding forest include grinding grooves, enclosed shelters and art sites.

Shared heritage

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Due to the proximity of this area to Sydney, settlement progressed quickly in the early 1800s along the alluvial valleys for orchards and grazing, including Webb Creek, Macdonald and Wollombi Rivers. Land away from these areas was less attractive to European settlers but a route through to the fertile Hunter region became a priority.

In 1825 the NSW government began work on an inland road using abundant convict labour. The Old Great North Road was completed in 1836 and passes along the western boundary of Koolewong FR. The road was 264 kilometres long and is now one of the best surviving examples of convict-built heritage, including buttresses, culverts, bridges and 6-metre-high retaining walls. The 43-kilometre section that passes through Dharug NP and Yengo NP and adjacent to Yengo NP extends from Wisemans Ferry to Mount Manning near Bucketty.

Part of the Old Great North Road, in Dharug NP, is one of 11 sites that are collectively known as the Australian Convict Sites World Heritage Property, listed in 2010. The entire section of the Old Great North Road located within Dharug NP is managed in accordance with a conservation management plan.

Timber-getting in this region did not become established until after the 1950s (NPWS 2001 cited in DECC 2008). Until then, selective harvesting had supplied landowners with timber for housing, fencing and firewood. Mechanised harvesting techniques in state forests targeted Ironbarks, Blue Gums, Turpentine, Stringybarks, Blackbutt and Cabbage Gum and supplied sawmills located in Colo Heights, Putty and Muswellbrook.

McPherson SF was gazetted on 15 May 1964. The western block of McPherson SF has not been harvested.

With a decline in farming, and population growth on the Central Coast, the rugged land in the dry sandstone plateau country was recognised as important for catchment protection. The first conservation area gazetted in this area was Dharug NP, in 1967.

Mangrove Creek Dam was constructed between 1978 and 1982 and is operated by Central Coast Water Corporation.

Fire history

Koolewong FR was entirely burnt by wildfire in 1993-94 (cause undetermined), in 2002-03 (caused by lightning) and by wildfire in 2019/20 (caused by lightning).

NPWS manages wildfire, fuel loads and response capabilities in accordance with bush fire risk management plans and plans of operations prepared by bush fire management committees in collaboration with Forestry Corporation, NPWS wildlife ecologists and neighbours. When preparing burn plans NPWS considers the biodiversity thresholds for the target vegetation types and the fuel loading of the area (NPWS 2004).

1.5 CURRENT USAGE

One bee range has been recorded in the reserve, at the north-east point where the FR joins the east block of McPherson SF. This bee range is for a licensed bee site which sits outside the reserve.

A Transgrid 500kV line traverses the FR east-west and continues across the eastern block of McPherson SF, entering the FR approximately one kilometre south of the Mangrove Creek Dam picnic area.

Visitors to Dharug NP can walk or mountain bike the Old Great North Road along the western boundary of Koolewong FR. This walk is reasonably popular and attracts up to about 18,000 visitors per year. An annual mountain bike event known as the Convict 100 also attracts 500+ participants.

There are no visitor facilities in the reserve. Koolewong FR is very remote and visitor use within the reserve is expected to be low.

Koolewong Flora Reserve forms part of public land (formerly McPhersons State Forest) that has been declared for the purposes of recreational hunting under the *Game and Feral Animal Control Act 2002*. The area contained within Koolewong Flora Reserve is currently listed as a total public exclusion zone

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meaning that public access including hunting is not permitted. This may be revised should the circumstances around the exclusion change

Unauthorised uses which are known to occur in the reserve include illegal access by four-wheel drive vehicles and trail bikes.

2. SYSTEM OF MANAGEMENT

2.1 OBJECTIVES OF MANAGEMENT

General objectives for the management of all flora reserves managed by NPWS are set out in Section 1.1 of the General Working Plan for NPWS Managed Flora Reserves (Appendix 2). This includes objectives from applying local NPWS operational plans and strategies including those for fire, pests and weeds.

In addition to that general guidance, the objective for Koolewong FR will be to:

- » Conserve biodiversity values
- » Protect Aboriginal cultural heritage values
- » Integrate management of the flora reserve with management of Yengo NP in accordance with the *Yengo National Park, Parr State Conservation Area and Finchley Aboriginal Area Plan of Management* and Dharug NP in accordance with the *Dharug National Park Plan of Management*.

Yengo NP has an area of 154,271 hectares and was gazetted in 1988. It is part of the Greater Blue Mountains Area and is managed with adjoining parks under the *Yengo National Park, Parr State Conservation Area and Finchley Aboriginal Area Plan of Management* (Department of Environment and Climate Change NSW (DECC) 2009). Dharug NP conserves almost 15,000 hectares and was gazetted in 1967. It contains the section of the Old Great North Road which is part of the Australian Convict Sites World Heritage Property and sections that are listed on the Register of the National Estate. The Old Great North Road is managed under a conservation management plan (University of Canberra 2019) and the *Dharug National Park Plan of Management* (NPWS 1997). However, this working plan will stand alone in terms of its role in ensuring the original purpose of the flora reserve dedication is upheld.

2.2 MANAGEMENT STRATEGIES

Stewardship activities within the reserve are enabled by this working plan as informed by the *Yengo National Park, Parr State Conservation Area and Finchley Aboriginal Area Plan of Management* and the *Dharug National Park Plan of Management* and the general requirements of the NPWS Parks Management Framework.

General management strategies (policies) for the management of all flora reserves managed by NPWS are set out in Section 1.2 of the General Working Plan for NPWS Managed Flora Reserves (Appendix 2). This includes policies applying from local NPWS operational plans and strategies including those for fire, pests and weeds.

In addition to that general guidance, the management objectives in Section 4.1 will be met through the management strategies (policies) identified below and the adaptable works program at Appendix 3.

Biodiversity management and ecological knowledge

- » Monitoring of Camfield's stringybark and other relevant recovery actions identified in the *Saving our Species* program will be supported.

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Pest and weed management

- » As per the General Working Plan (Appendix 2) and any actions in the adaptable works program (Appendix 3).

Fire

- » Fire planning and operations will be managed and conducted in collaboration with Forestry Corporation, the Central Coast Bushfire Management Committee, Central Coast Council and other adjoining landowners.
- » Blue Door Point Trail within Koolewong FR will be upgraded as per the Central Coast Bush Fire Management Committee *Fire Access Fire Trail Plan 2021* following the determination of a Review of Environmental Factors (REF) (Appendix 6).

Roads and infrastructure

- » There is no public vehicle access to the reserve.
- » Old Great North Road is not part of the flora reserve nor the adjoining national parks and is not open to public vehicle access. However, it is used by NPWS and Central Coast Council vehicles as a management trail for essential management purposes. The section of Old Great North Road adjoining Koolewong FR will continue to be maintained by Central Coast Council.
- » NPWS will manage the land adjoining and use the Old Great North Road in accordance with the conservation management plan.
- » If Department of Industry (Crown Lands) were to re-establish the dormant management trail to Finis Trig this would be available to NPWS for management purposes.

Visitor opportunity and management

- » There is no public vehicle access to the reserve.
- » Consistent with visitor uses allowed in adjoining NPWS parks, visitor use in this parcel will be limited to bushwalking, mountain biking and other self-reliant nature-based activities such as photography and bird watching.

Community engagement

- » As per the General Working Plan (Appendix 2) and any actions in the adaptable works program (Appendix 3).
- » Opportunities for Aboriginal community involvement in the Flora Reserve will be promoted.

Licences and other third-party agreements

- » As per the General Working Plan (Appendix 2) and any actions in the adaptable works program (Appendix 3).

2.3 ACTIVITY PERMISSIBILITY

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Activities permitted without approval or conditions

- » All actions consistent with the management strategies identified in the general working plan for NPWS managed flora reserves (at the time of writing this included weeds, pest, fire, infrastructure and visitation management)
- » nature-based activities such as bushwalking, bird watching and photography
- » recreational cycling on park roads and management trails as allowed under the *Yengo National Park, Parr State Conservation Area and Finchley Aboriginal Area Plan of Management and the Dharug National Park Plan of Management*
- » Aboriginal cultural activities not requiring a permit
- » activities allowed by a continuing valid permit, e.g., scientific licence.

Activities permitted with conditions

No activities specific to Koolewong FR are listed as requiring permission. Activities general to all flora reserves that require permitting are listed in the general working plan of NPWS managed flora reserves (Appendix 2).

Activities requiring permission will generally be subject to assessment and, if permitted, have conditions applied by the land manager (NPWS) consistent with the Forestry Act and applying policies and guidelines. Permits can only be issued for activities within flora reserves following approval by the DPE Secretary under section 61(1) of the Forestry Act.

Activities not permitted

The following activities will not be permitted in Koolewong Flora Reserve:

- » timber harvesting
- » removal of forest products and materials, with the exception of Aboriginal use of forest products (Appendix 2)
- » grazing by domestic stock
- » gravel or hard rock quarrying
- » mineral and petroleum exploration and mining
- » lighting of campfires and any other unauthorized fires
- » camping
- » entering with domestic dogs
- » new permits for bee keeping
- » mineral fossicking
- » hunting
- » horse riding.

Mining

There are no gazetted exemptions from provisions of the *Mining Act 1992* for this flora reserve.

2.4 MANAGEMENT RESPONSIBILITY

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The Secretary of the Department of Planning and Environment (DPE) has been appointed as land manager of Koolewong FR by the Minister for Regional NSW under section 57(3) of the *Forestry Act*. This will enable NPWS to manage the land in accordance with this working plan. Under section 146(3) of the *National Parks and Wildlife Act 1974* nearby or adjoining land to existing reserves can be managed by NPWS.

Koolewong FR is gazetted over state forest land. Timber harvesting has been excluded from this area since its dedication. The reserve will be managed by NPWS for conservation purposes as guided by the principles, objectives and legislative framework of the *Forestry Act 2012* and the *Agreement for the Management of Flora Reserves between the Minister for Lands and Forestry and the Minister for the Environment* (OEI 2018). NPWS will draw on its own management frameworks to achieve this.

The management of Koolewong FR will be integrated into the management of other NPWS managed land. However, this working plan will stand alone in terms of its role in ensuring the original purpose of the Flora Reserve dedication is upheld.

The plan seeks to apply an adaptive management approach, to ensure that the application of flexible and sound land management practices can be applied to protect the specific values of Koolewong FR. This adaptive management approach ensures the integration of natural variability and environmental changes across the broader landscape into decisions and actions delivered.

2.5 MONITORING, REPORTING AND REVIEW

Observation, reporting and review will be undertaken in accordance with section 3 of the *General Working Plan for Flora Reserves Managed by NPWS* in Appendix 2.

Reviews of this Working Plan will be linked with reviews of *Yengo National Park, Parr State Conservation Area and Finchley Aboriginal Area Plan of Management*. Further or refined review may be undertaken via the adaptable actions in Appendix 3.

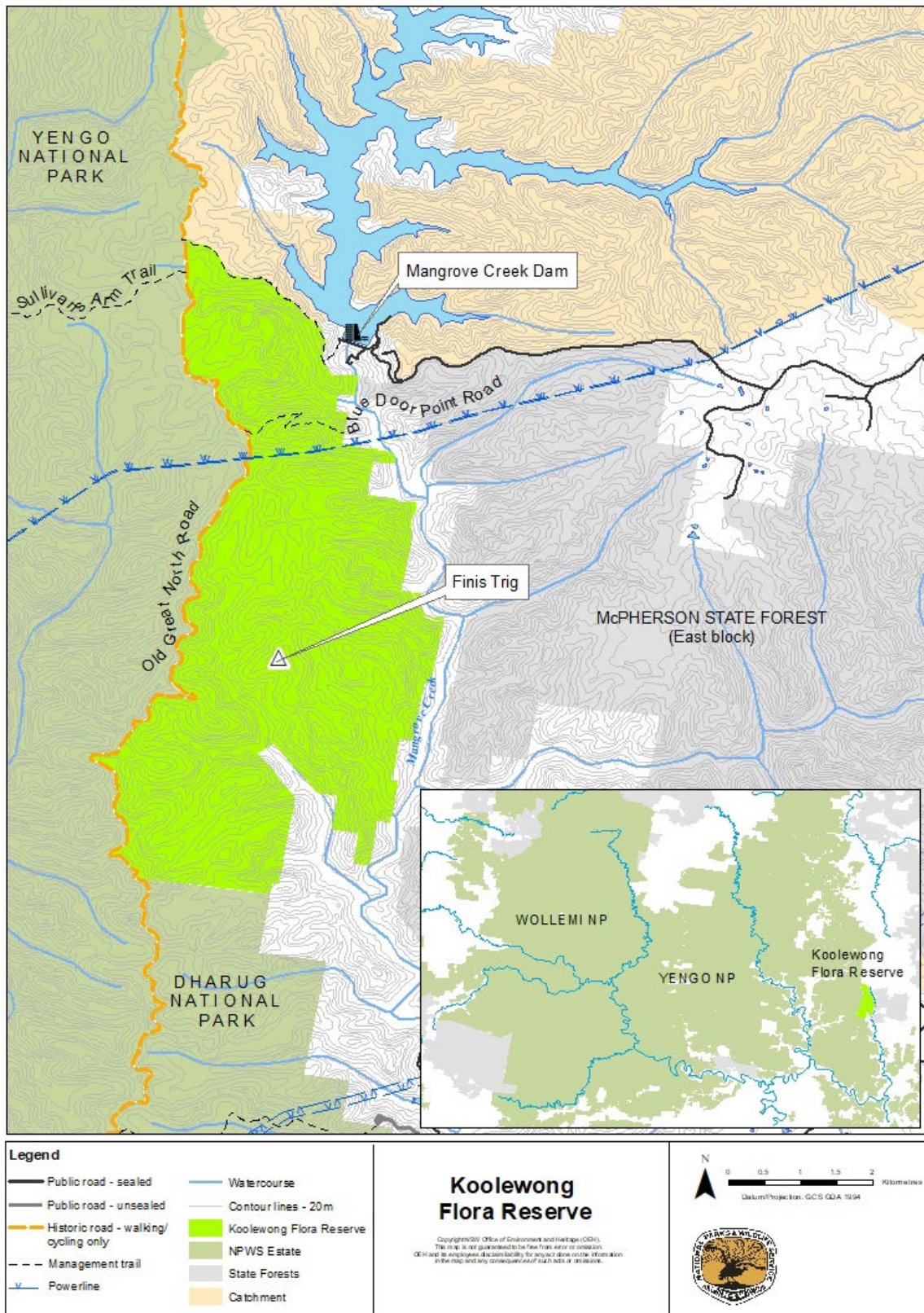
3. LIST OF APPENDICES

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APPENDIX 1 – LOCALITY MAP



APPENDIX 2 – GENERAL WORKING PLAN FOR FLORA RESERVES MANAGED BY NPWS

[Forestry Corporation link to general working plan.](#)

APPENDIX 3 – ADAPTABLE WORKS PROGRAM

This list of actions has been developed from discussions with local staff referencing the objectives in Section 2.1 and the strategies/policies in Section 2.2.

In keeping with an adaptive management approach, the actions below may be revised or deleted and new actions may be added by the local NPWS Branch in order to better meet the objectives of the working plan. This may occur after they have been undertaken or attempted, when new information arises or to suit changing circumstances. The priorities applied to these actions may also be revised.

The priority rating in the table below have been agreed with local operational staff and reflect the importance of the list of actions relative to the situation in the reserve.

No.	Adaptable management actions	Priority
1	<p>Biodiversity management and ecological knowledge</p> <p>Support monitoring of Camfield's stringybark at Mangrove Creek Dam and recovery actions identified in the <i>Saving Our Species</i> action statement.</p> <p>Specific biodiversity management activities will be developed to address habitat recovery and threatened species conservation for the species listed in Appendix 4 and 5, when funding allows.</p> <p>Undertake flora and fauna surveys when resources allow.</p>	1
2	<p>Aboriginal heritage</p> <p>Consult with the Aboriginal community about the management of Aboriginal heritage within the reserve.</p>	1
3	<p>Pest and weed management</p> <p>Until the flora reserve is established in the Branch Pest Management Strategy, priority pest/weed control works will include:</p> <ul style="list-style-type: none"> » removal of straying stock » opportunistic control of fallow deer and rusa deer » opportunistic control of wild dogs » opportunistic control of other pests such as pigs, foxes and feral cats » monitor weed incursions and treat priority weeds 	1
4	<p>Fire management</p> <p>Manage the reserve as a Land Management Zone (LMZ), consistent with adjoining park land to the west and south. The objective of the LMZ is to conserve biodiversity and protect cultural heritage.</p> <p>Review the <i>Yengo National Park, Parr State Recreation Area and Dharug National Park Fire Management Plan and Dharug Fire Management Plan</i> to include Koolewong FR.</p> <p>Upgrade Blue Door Point Trail as per the Central Coast Bush Fire Committee Fire Access Fire Trail Plan (2021) as funding becomes available.</p>	1
5	<p>Roads and infrastructure</p> <p>Ex-forestry trails in the reserve may be maintained for visitor use on foot, fire management purposes, or closed and rehabilitated following a local assessment.</p> <p>Maintain Blue Door Point Trail for management purposes including fire, pests,</p>	2

	weeds and access.	
6	Unauthorised uses Implement an initial campaign of observation and compliance in response to unauthorised uses.	3
7	Neighbour relations Develop a database of neighbouring landowners for use in pest management, wildfire response and other management activities. Check the bee range and associated bee site once a year.	3

APPENDIX 4 – THREATENED FLORA SPECIES LIST

The table below lists the threatened native plants found in Koolewong Flora Reserve and McPherson State Forest (DPIE 2018).

Common Name	Scientific Name	NSW Status*	Cwlth status#	Koolewong Flora Reserve@	McPherson State Forest!
Bynoe's Wattle	<i>Acacia bynoeana</i>	E	V	Known	
Grevillea shiressii	<i>Grevillea shiressii</i>	V	V	Known	
Grove's Paperbark	<i>Melaleuca groveana</i>	V			Present
Scrub Turpentine	<i>Rhodamnia rubescens</i>	E4A			Present
Tetratheca glandulosa	<i>Tetratheca glandulosa</i>	V	-	Known	

* Listing NSW Biodiversity Conservation Act 2016

Listing Commonwealth Environment Protection and Biodiversity Conservation Act 1999

V= Vulnerable, E = Endangered

@ Known is defined as all records occurring within 1000 metres of the boundary of the reserve

! Present is within the adjoining State Forest

APPENDIX 5 – THREATENED FAUNA SPECIES LIST

The table below lists the threatened native animals found in Koolewong Flora Reserve and adjoining McPherson State Forest (DPIE 2018).

Common Name	Scientific Name	NSW Status*	Cwlth status#	Koolewong Flora Reserve@	McPherson State Forest!
Mammals					
Corben's Long-eared Bat	<i>Nyctophilus corbeni</i>	V	V	Known	
Large Bent-winged Bat	<i>Miniopterus orianae oceanensis</i>	V			Present
Eastern Chestnut Mouse	<i>Pseudomys gracilicaudatus</i>	V			Present
Eastern Pygmy-possum	<i>Cercartetus nanus</i>	V		Known	Present
Golden-tipped Bat	<i>Kerivoula papuensis</i>	V			Present
Greater Glider	<i>Petauroides volans</i>		V		Present
Koala	<i>Phascolarctos cinereus</i>	V	V	Known	Present
Southern Myotis	<i>Myotis macropus</i>	V			Present
Spotted-tailed Quoll	<i>Dasyurus maculatus</i>	V	E		Present
Yellow-bellied Glider	<i>Petaurus australis</i>	V		Known	Present
Birds					
Brown Treecreeper (eastern subspecies)	<i>Climacteris picumnus victoriae</i>	V			Present
Dusky Woodswallow	<i>Artamus cyanopterus cyanopterus</i>	V		Known	
Gang-gang Cockatoo	<i>Callocephalon fimbriatum</i>	V		Known	Present
Glossy Black-Cockatoo	<i>Calyptrorhynchus lathamii</i>	V		Known	Present
Little Lorikeet	<i>Glossopsitta pusilla</i>	V		Known	Present
Masked Owl	<i>Tyto novaehollandiae</i>	V		Known	
Powerful Owl	<i>Ninox strenua</i>	V			Present
Rainbow Bee-eater	<i>Merops ornatus</i>		J		Present
Sooty Owl	<i>Tyto tenebricosa</i>	V			Present
Varied Sittella	<i>Daphoenositta chrysoptera</i>	V			Present
White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>	V	C		Present
Amphibians					
Giant Barred Frog	<i>Mixophyes iteratus</i>	E	E		Present
Giant Burrowing Frog	<i>Heleioporus australiacus</i>	V	V	Known	Present

Red-crowned Toadlet	<i>Pseudophryne australis</i>	V	-	Known	Present
Reptiles					
Rosenberg's Goanna	<i>Varanus rosenbergi</i>	V	-		Present

* Listing NSW *Biodiversity Conservation Act 2016*

Listing Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*

V= Vulnerable, E = Endangered, C=CAMBA, J=JAMBA, K=ROKAMBA

@ Known is defined as all records occurring within 1000 metres of the boundary of the reserve

! Present is within the adjoining State Forest

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APPENDIX 6 – NAMED ROADS AND TRAILS

Trail/road name	Designation under FAFT Plan
Blue Door Point Fire Trail	Strategic Cat 9

APPENDIX 7 – REFERENCES

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APPENDIX 8 – APPROVAL AND AMENDMENTS FROM PREVIOUS VERSION

In line with section 25 of the *Forestry Act 2012*, flora reserve working plans and any amendments must be approved by the Minister.

This plan was approved by The Hon. Tara Moriarty MLC, Minister for Agriculture, Minister for Regional New South Wales and Minister for Western New South Wales

Date of approval: 14/9/23

Version	Changes	Approval details
3.0	» Addressed comments by Forestry Corporation.	» The Hon. Tara Moriarty MLC, Minister for Agriculture, Minister for Regional New South Wales and Minister for Western New South Wales, 14/9/23