



MUNDAROO FLORA RESERVE No.181
WORKING PLAN
Mundaroo State Forest
Hume Region



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1. INTRODUCTION

This plan has been prepared in accordance with the terms of section 25A (5) of the Forestry Act 1916 with the objective of providing for the future management of that part of the Mundaroo State Forest No. 646, set aside as Mundaroo Flora Reserve No. 181. This plan aims to identify the important values of the Reserve and provides guidelines that will protect those values.

Mundaroo Flora Reserve forms part of the dedicated reserve system for the Southern Region Forest Agreement.

2. KEY VALUES OF THE RESERVE

Mundaroo Flora Reserve has the following identified values requiring protection:

- **Remnant vegetation.** Much of the surrounding Tumbarumba – South West Slopes Region has been cleared for agricultural purposes and pine plantation. This Reserve provides a regional benchmark for local flora, and
- **Important habitat for native flora, fauna and ecological communities.** Mundaroo Flora Reserve is of a size adequate to sustain populations of many plant and animal species. Several bird species identified as Vulnerable in the NSW Threatened Species Conservation Act 1995 have been recorded in nearby Carabost Flora Reserve.

3. DESCRIPTION OF THE RESERVE

Refer to Appendices 1 and 2 for locality and topographic maps.

3.1 Location

Mundaroo Flora Reserve is within Mundaroo State Forest No. 646, managed by Hume Region, Forests NSW. It is located 16km directly west of the township of Tumbarumba. Primary access is via the Wagga-Tumbarumba Road and Maginnitys Road, Cararoo Road and Munderoo Trig Road.

3.2 Exclusions

There are no exclusions within the Flora Reserve boundaries. Along Mundaroo Trig Road (on the southern boundary) the Flora Reserve boundary is 20m from the centreline of the road on the Reserve side.

3.3 Geography

Mundaroo Flora Reserve includes an area of approximately 1945 ha, with elevation ranging from 500 - 888m ASL (at Mundaroo Trig Station).



Photo by Pual Kelly, FNSW

Figure 2: View over Mundaroo Flora Reserve (facing north - west) from Mundaroo Fire Tower on Mundaroo Trig.

Topography within the Flora Reserve is steep and dissected, with the majority of the area having a northerly or westerly aspect.

All water flowing within the Reserve enters the upper tributaries of Back Creek and Horse Creek. Both of these creeks flow into Coppabella Creek, which joins the Jingellic Creek, part of the Murray River catchment.

Pinus radiata plantations managed by Forests NSW occur on the northern and southern boundaries of the Flora Reserve. The east and western boundaries of the Reserve are primarily private property, much of which is also pine plantation.

3.4 Geology and Soils

The geology of the area is predominantly Ordovician quartzite metasediments, deposited in the warm shallow sea of the Wagga Marginal Basin (Wagga Wagga 1:250 000 Geological Series Sheet S1 55 – 15, 1977). Metamorphism has

occurred due to heat, folding and intrusion of igneous material during the middle to late Silurian period.

The shale parent material produces primarily shallow lithosols. There are small areas of a relatively stable Red Earth, and an extremely erodible Yellow Solod. Red earths are usually found on the lower hill slopes but not right into the gullies, which is where the Yellow Solods are found (FCNSW 1984).

There may be a very small section of Corryong Granite in the extreme southern section of the Flora Reserve. Erosion gullies, slips and soil flows are common in the Corryong Granite landscape.

A soils profile (No. 29060) taken on the northern boundary of the Reserve on a north-western facing hillslope with a Red Stringybark and Red Box overstorey gave the following results:

Surface condition	hard set, well drained profile, moderate erosion hazard
Layer 1	A2 horizon: brown silty clay loam with massive structure (earthy), pH 6.0
Layer 2	B2 horizon: red clay with strong pedality, pH 5.5
Soil Type	Brown Chromosol (ASC), Brown Podzolic Soil (GSG)

(NSW Dept. of Land & Water Conservation 1999 – 2002)

The combination of landscape significance, rocky outcrops and erodible soils contributed to the area not being developed as plantation forest in the past.

3.5 Climate

The climate of the area has predominantly cool, wet winters with warm and drier summers. Figures provided are averages for Tumbarumba from readings taken over the period 1885 – 2003. Data is from the Commonwealth Bureau of Meteorology website www.bom.gov.au/climate/averages/tables/cw_072043.shtml.

Mean annual rainfall	982.2mm
Mean daily minimum temperature (July)	-0.2° Celcius
Mean daily maximum temperature (January)	28.3° Celcius

The highest monthly rainfall occurs during winter and spring (May - October), although reasonable rainfall is experienced in the other months.

3.6 Vegetation

See Appendix 4 for the Mundaroo Flora Reserve flora species list.

The flora and ecosystems within this Reserve provide an excellent reference point in a region that has experienced significant disturbance and removal of native vegetation.

The dominant tree species within the Reserve are *Eucalyptus bridgesiana* (Apple Box), *E. macrorhyncha* (Red Stringybark), *E. polyanthemos* (Red Box), and *E.goniocalyx* (Long-leaved Box).

3.7 Fauna

Appendix 5 lists recorded fauna species for the Reserve. It is expected the list of known fauna species will increase with further survey work.

A transect for monitoring the populations of feral animals has been located within Mundaroo Flora Reserve, with trapping and baiting programs conducted within Mundaroo State Forest. Results from the track surveys in 2002 recorded a high number of fox tracks, some rabbit tracks and 1 pig and 1 cat. A high number of kangaroo and wombat tracks were also recorded. In 2002 and 2003 a number of dogs were baited or trapped.

4. HISTORY

4.1 Indigenous Cultural Heritage

Mundaroo Flora Reserve is part of an area that was traditionally used and occupied by Aboriginal people and clan groups of the Wiradjuri and Wolgalu Nations. These groups had cultural, spiritual and clan obligations with the high country which they maintained, respected and cared for over thousands of years.

Physical evidence of prior use and occupation of the area by Aboriginal clans, before the advent of European settlement, is found in the recording of Aboriginal sites within Mundaroo Flora Reserve.

Ceremonies of a spiritual nature linked to traditional practices would have occurred in this landscape, encompassing both mens and womens traditional cultural obligations and responsibilities.

Aboriginal cultural values of the area are still maintained today through cultural heritage surveys and future employment programs and opportunities being developed in partnership with Forests NSW and the local Aboriginal people.

This section of Mundaroo Flora Reserve Working Plan was written by Alice Williams, Forests NSW Aboriginal Co-ordinator, Tumut, in consultation with the Snowy Mountains Elders Aboriginal Corporation.

4.2 Non-Indigenous Cultural Heritage

Adjacent to the north - eastern boundary of the Flora Reserve is a memorial to Sergeant Maginnity, a police officer murdered by bushranger Dan Morgan in 1864. The Tumbarumba Historical Society have recently identified (circa 2004) that the actual location of the shooting was at a creek crossing on the old Copabella to Tumbarumba Road on the northern boundary of the Flora Reserve.

The old road is still visible although it is mostly outside of the Flora Reserve on the northern side of the creek. Sergeant Maginnity's body was discovered near where the old road intersects with Maginnity's Gap Road, upslope to the east by a mailman the following day.

The Copabella Pastoral Run Map drawn in the 1880's shows that the now Flora Reserve area was included in Part B of the Copabella Run No. 379. Part B encompassed an area of 20, 900 acres – the total Copabella Run was 39, 600 acres. Horse Creek (which is on the western boundary of the Flora Reserve) is marked and named, and the road to Tumbarumba is marked (which is now part of McGinnity's Gap Road).

4.3 Forest Management

The 1916 Coppabella Parish, County Goulburn Map shows the majority of what is now Flora Reserve was the first section dedicated as Mundaroo State Forest in 1918. Maginnity's Gap Road is marked as "Rosewood – Tumbarumba road" (<http://www.lpi.nsw.gov.au/maps/pmap>). Extensions occurred in 1922, 1971, 1975 and 1992.

Foliage from the eastern side of the Flora Reserve was periodically cut for eucalyptus oil production from 1910's to the 1970's. Logging was conducted by Langheims Sawmill, Holbrook during the late 1970's and early 1980's.

Prior to dedication as a Flora Reserve, the area did have sporadic grazing by domestic stock under authorised permits.

Mundaroo Flora Reserve was established on 1st January 2001 through enactment of the National Park Estate (Southern Region Reservations) Act of 2000, Schedule 3.

4.4 Fire History

Since clearing for agriculture and the establishment of pine plantation on adjacent land, the natural fire regime at Mundaroo has been considerably modified. In a landscape that experiences seasons of numerous dry storms and lightning strikes, the wildfire occurrence in the past 30 – 40 years has been reduced to virtually nil. This is a deliberate consequence of rapid detection and response to any fire outbreak by government and community agencies. The last

wildfire reaching a significant size and entering the area that is now Flora Reserve was the 1952 fire, which was an extensive and severe wildfire in the region.

A firebreak has been constructed on the eastern side of the reserve separating State forest from private property.

Many areas within the Flora Reserve have been burnt regularly (that is, every 4 to 5 years) to reduce fuel loads. It is likely that these burns were predominantly 'edge burns' along controlled access lines. The total area burnt as well as fire intensity would have been highly variable. Records indicate that whilst fuel loads were successfully reduced along ridgelines and slopes, often gullies were too wet to burn.

A firebreak has been constructed on the eastern side of the Reserve separating State forest from private property.

5. CURRENT USAGE

Public usage of this area is minimal, however the recently established walking trail from the Maginnity's Gap Memorial to the actual site of the Sergeant Maginnity's shooting along the old Coppabella to Tumberumba Road should result in a small increase in visitor numbers. The Reserve contains two research sites used for monitoring bird species.

6. MANAGEMENT

6.1 Objectives of Management

- To preserve native flora and fauna species in the Reserve.
- To protect examples of forest ecosystems in the area.
- To protect aboriginal cultural and archaeological values of the Reserve.
- To meet the expectations of the local community with respect to the management of the Reserve, consistent with Forests NSW legal and policy requirements.
- To protect the Reserve and neighbouring areas from wildfire.
- To maintain reference stands within the natural forest to provide for scientific study, and for assessing the effects of alternative land use in surrounding areas, consistent with the protection of the Reserve.

6.2 Management Issues

The following issues will influence future management priorities. Over time these issues will change and require review. Many of the works program priorities identified in Appendix 6 are in response to these issues.

6.2.1 Available archaeological and scientific data

There is a limited amount of data available on flora and fauna species occurring within the Reserve. Further survey work will assist in assessment of values and development of appropriate management practices.

6.2.2 Human impact on the site

Most of the Reserve is in reasonably intact native forest. There is a limited amount of illegal firewood collection, and occasional illegal hunting (mainly for pigs). Forests NSW needs to maintain a presence in the Flora Reserve to minimise unauthorised activities, particularly in regards to rubbish dumping and off-track vehicle use.

6.2.3 Road Access and adjacent land management

The roads and tracks bounding and within the Reserve are of varying condition. Roads adjacent to State forest plantations are generally satisfactory, requiring only routine maintenance. On the western boundary, the terrain is steep and track access is limited. At present access to this area of the Flora Reserve (and State forest) requires utilising tracks on private property, which are variable in condition. Improved access is required in this area for fire management activities and will reduce the potential for erosion.

Management of the adjacent pine plantation by Hume Region must recognise the Forest Management Zone 1 values of the Flora Reserve. Operations in adjacent areas will be performed in a manner not to cause damage or disturbance to the Reserve. Logs must not be stockpiled or loading sites constructed within Flora Reserve boundaries, and if possible placed on the opposite side of the boundary roads.

6.2.4 Weeds

Weeds such as Blackberry and St Johns wort occur within the Reserve. The distribution and rate of spread of noxious weeds and other environmental weeds requires ongoing monitoring and if necessary, control.

There is also some limited infestation by pine wildlings (*Pinus radiata*).

6.2.5 Feral animals

Predation by the European red fox (*Vulpes vulpes*) and feral cats (*Felis catus*) are Key Threatening Processes under the Threatened Species Conservation Act. Fox and cat populations should be monitored and baiting or trapping programs conducted if necessary. To be effective, any fox or cat baiting program will need to be done in association with neighbouring landholders.

A sand pad transect is monitored in Mundaroo S.F. which enters into the Flora Reserve (Huckers transect). This was established in response to neighbouring landholders having significant problems with wild dogs attacking sheep. Results from 2002 showed tracks from the following feral species ; dogs, foxes, cats, pigs and rabbits. Fox track numbers were high, with over 40 tracks recorded over a 3 day program each time.

Trapping, baiting and monitoring programs will continue in this area of Mundaroo S.F. to reduce populations of wild dogs and foxes.

6.2.6 Fire

The impact of uncontrolled wildfire on the wildlife in the Flora Reserve is likely to be severe, with alternative habitat sources either low in availability or non-existent. Exposure to invasion by weeds and feral animals would be high. There is also responsibility for preventing wildlife from escaping from the Flora Reserve and spreading to assets, including private property and pine plantation. Consequently suppression of any wildfire will be a priority.

Properly managed prescribed burning may play an important role in meeting biodiversity management objectives. For example, Van der Ree (unpublished) identified the need to maintain a diversity of flowering plants and ensure recruitment of new individuals as being critical for the survival of the Squirrel Glider population, and the use of fire may have a role here.

Prescribed burning is an activity permitted under standard conditions. Work is required on existing firebreaks to make them effective.

6.2.7 Historical Walking Trail

The recently established historical walking trail that follows the old Coppabella-Tumbarumba Road from the Maginnity monument to the site of the shooting of Sergeant Maginnity by the bushranger Dan Morgan will provide access to the Flora Reserve for a small number of visitors. The trail forms a loop through the northern part of the Flora Reserve and is approximately 5km in length. It was originally proposed by the Tumbarumba Historical Society and has been supported by both the Tumbarumba Shire Council and the Department of Corrective Services. Corrective Services Industries (CSI) inmates from the Mannus Prison assisted in the construction of the trail and will be responsible for its ongoing maintenance as a community service.

6.3 Future Management

Mundaroo Flora Reserve will be managed by Hume Region, Forests NSW.

The following management priorities will be adopted:

- Maintenance of healthy forest condition in the Flora Reserve to protect key values, consistent with the dynamic nature of forest ecosystems.
- Maintenance of existing roads and trails as required, consistent with the objectives of the Reserve. Boundary roads to be graded and gravelled as required to maintain access for firefighting and other management purposes and visitor use.
- The Historical Walking Trail will be maintained as required by Corrective Service Industries inmates from the Mannus Prison in consultation with Hume Region.
- Fuel management within the Reserve will be undertaken as part of the District Bush Fire Committee considerations and consistent with the Rural Fires Act 1997.
- Occupation and Special Purposes permits will only be issued for activities consistent with the objectives for the reserve. Hunting is permitted within the Reserve by holders of a Game Licence issued under the *Game and Feral Control Act 2002*.
- The boundary of the reserve must be checked and if necessary its location confirmed prior to commencement of any forestry operations in the vicinity of the Reserve. Operations in adjacent areas will be performed in a manner not to cause damage or disturbance to the Reserve.

Under the Forest Management Zoning (FMZ) system Mundaroo Flora Reserve is zoned FMZ 1 and therefore contributes to the dedicated (formal) Comprehensive Adequate and Representative reserve system in the Southern Region (Tumut Subregion). Management is to meet the requirements of JANIS dedicated (formal) reserves. Refer to the Southern Region Forest Agreement 2002 for further details and definitions.

Minister for Forestry approval by notice in the Gazette is required for new declarations, revocations or boundary amendment.

6.3.1 Activities Not Permitted

The following activities are not permitted:

- Timber harvesting
- Removal of forest products and materials
- Grazing by domestic stock
- Gravel or hard rock quarrying
- Mineral and petroleum exploration and mining

6.3.2 Activities Permitted with Standard Conditions

The following activities will be permitted subject to standard conditions approved by the Regional Manager and consistent with the Codes of Practice, Operational Circulars, protocols, licenses and Management/Recovery Plans:

- Scientific studies (eg, fauna surveys including trapping)
- Maintenance of existing roads and fire trails
- Limited tree removal for safety reasons or weed control only.
- Feral animal and noxious weed control
- General access for activities such as bush walking and photography
- Suppression of wildfire
- Prescribed burning

6.3.3 Activities Permitted with Special Conditions

The following activities will be permitted subject to special conditions approved by the Regional Manager and consistent with the Codes of Practice, Operational Circulars, protocols, licenses and Management/Recovery Plans:

Construction of New Roads and Trails

The construction of new roads and fire trails will be permitted with special conditions. Construction will only be permitted in exceptional instances and consistent with the following principles:

- No practical alternative is available;
- The values of the Reserve will not be significantly affected by the road or fire trail;
- Opportunity is provided for public comment on the proposal; and

- Ministerial approval is given for the proposal.

7. MONITORING, REPORTING AND REVIEW

Forests NSW will monitor:

- The output of scientific research and incorporate the results, where relevant into future management of the Reserve.
- The condition of the roads and fire trails and fuel accumulation in the Reserve.

The provisions of this Working Plan will be amended if necessary in light of the results of the monitoring program.

8. ACKNOWLEDGEMENTS

This plan was prepared by Gabriel Wilks, Forester, Forests NSW.
The following people have contributed data, knowledge and expertise in the development of this document.

David Leslie, Ecologist, Riverina Region Forests NSW (fauna)
Doug Binns, Ecologist, Forests NSW (flora)
Duncan Watt, Planning Manager Hume Region, Forests NSW
Alice Williams, Forests NSW Aboriginal Co-ordinator, Tumut (Indigenous culture)
Janet Wild, Regional Soil Surveyor Murrumbidgee Region, Dept. of Infrastructure, Planning and Natural Resources (geology and soils).

9. REFERENCES

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10. APPENDICES

Appendix 1: Locality Map

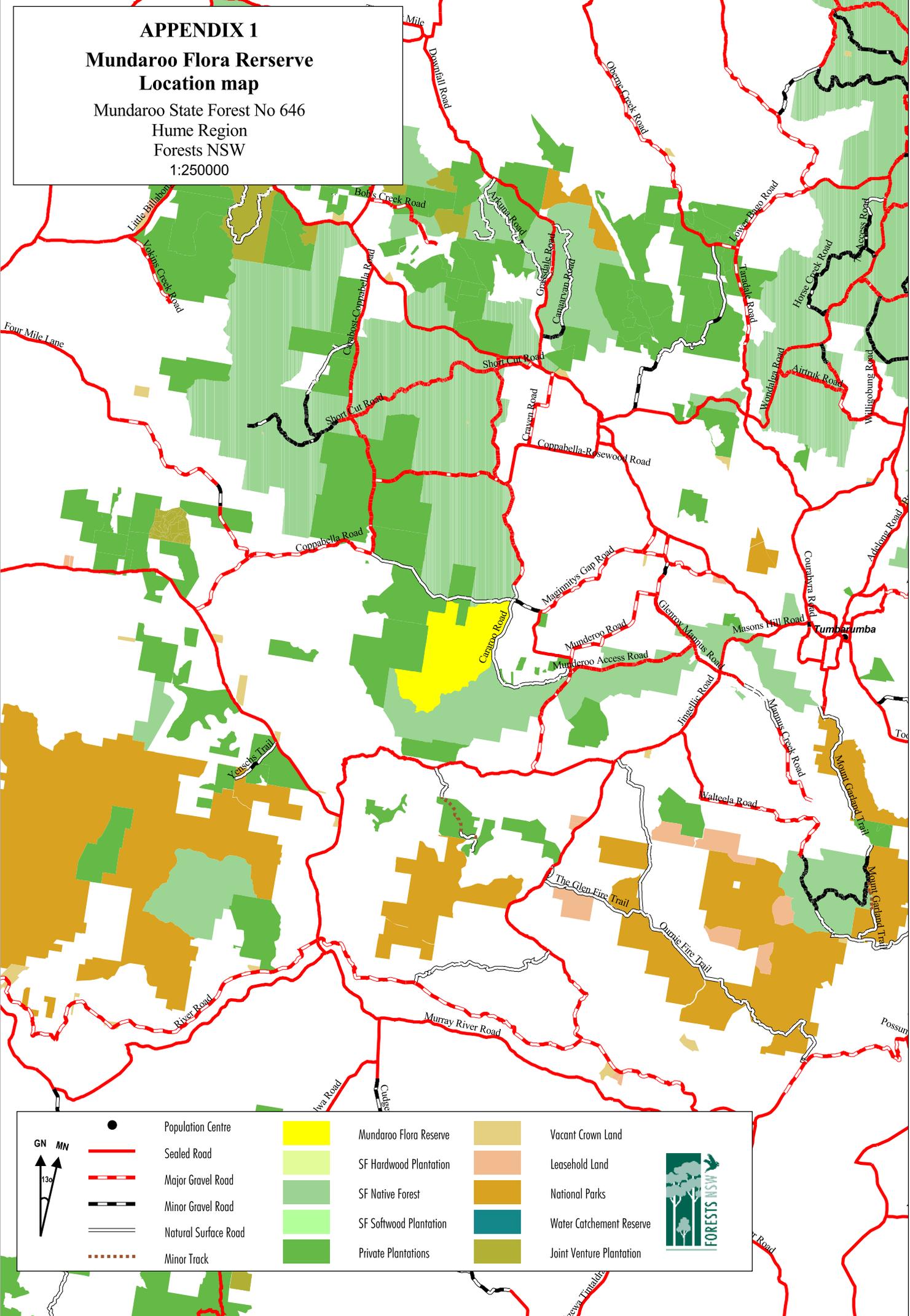
Appendix 2: Flora Reserve Topographic Map

Appendix 3: Flora Species List

Appendix 4: Fauna Species List

APPENDIX 1 Mundaroo Flora Reserve Location map

Mundaroo State Forest No 646
Hume Region
Forests NSW
1:250000



		Population Centre		Mundaroo Flora Reserve		Vacant Crown Land
		Sealed Road		SF Hardwood Plantation		Leasehold Land
		Major Gravel Road		SF Native Forest		National Parks
		Minor Gravel Road		SF Softwood Plantation		Water Catchment Reserve
		Natural Surface Road		Private Plantations		Joint Venture Plantation
		Minor Track				

7. APPENDIX 3: MUNDAROO FLORA RESERVE FLORA SPECIES LIST

Data from State Forests of NSW Flora Survey, conducted by Doug Binns & David Leslie, October 2003

* indicates introduced species

FAMILY	SPECIES NAME
Anthericaceae	<i>Thysanotus patersonii</i>
Apiaceae	<i>Daucus glochidiatus</i>
Apiaceae	<i>Hydrocotyle laxiflora</i>
Asphodelaceae	<i>Bulbine bulbosa</i>
Aspleniaceae	<i>Pleurosorus rutifolius</i>
Asteraceae	* <i>Cirsium vulgare</i>
Asteraceae	* <i>Hypochaeris glabra</i>
Asteraceae	* <i>Hypochaeris radicata</i>
Asteraceae	* <i>Taraxacum officinale</i>
Asteraceae	<i>Brachyscome spathulata</i>
Asteraceae	<i>Cymbonotus lawsonianus</i>
Asteraceae	<i>Euchiton sphaericus</i>
Asteraceae	<i>Helichrysum scorpioides</i>
Asteraceae	<i>Lagenifera stipitata</i>
Asteraceae	<i>Microseris lanceolata</i>
Asteraceae	<i>Senecio quadridentatus</i>
Asteraceae	<i>Senecio species E</i>
Asteraceae	<i>Senecio tenuiflorus</i>
Boraginaceae	* <i>Myosotis discolor</i>
Campanulaceae	<i>Wahlenbergia graniticola</i>
Campanulaceae	<i>Wahlenbergia stricta subsp. stricta</i>
Caryophyllaceae	* <i>Cerastium glomeratum</i>
Caryophyllaceae	* <i>Stellaria media</i>
Caryophyllaceae	<i>Stellaria pungens</i>
Clusiaceae	<i>Hypericum gramineum</i>
Colchicaceae	<i>Wurmbea dioica subsp. dioica</i>
Convolvulaceae	<i>Dichondra repens</i>
Crassulaceae	<i>Crassula sieberiana</i>
Cyperaceae	<i>Carex appressa</i>
Cyperaceae	<i>Carex breviculmis</i>
Cyperaceae	<i>Lepidosperma laterale</i>
Dennstaedtiaceae	<i>Pteridium esculentum</i>
Dilleniaceae	<i>Hibbertia obtusifolia</i>
Dilleniaceae	<i>Hibbertia riparia</i>
Droseraceae	<i>Drosera auriculata</i>
Epacridaceae	<i>Acrotriche serrulata</i>

Epacridaceae	<i>Melichrus urceolatus</i>
Epacridaceae	<i>Monotoca scoparia</i>
Euphorbiaceae	<i>Poranthera microphylla</i>
Fabaceae (Faboideae)	* <i>Trifolium campestre</i>
Fabaceae (Faboideae)	* <i>Trifolium repens</i>
Fabaceae (Faboideae)	<i>Dillwynia phyllicoides</i>
Fabaceae (Faboideae)	<i>Glycine clandestina</i>
Fabaceae (Faboideae)	<i>Gompholobium huegelii</i>
Fabaceae (Faboideae)	<i>Hardenbergia violacea</i>
Fabaceae (Faboideae)	<i>Platylobium formosum subsp. formosum</i>
Fabaceae (Mimosoideae)	<i>Acacia dealbata</i>
Fabaceae (Mimosoideae)	<i>Acacia melanoxylon</i>
Gentianaceae	* <i>Centaurium erythraea</i>
Geraniaceae	<i>Geranium solanderi var. solanderi</i>
Haloragaceae	<i>Gonocarpus tetragynus</i>
Iridaceae	<i>Patersonia sericea</i>
Juncaceae	<i>Juncus sp.</i>
Juncaceae	<i>Luzula flaccida</i>
Lamiaceae	<i>Ajuga australis</i>
Lamiaceae	<i>Mentha diemenica</i>
Lamiaceae	<i>Scutellaria humilis</i>
Lomandraceae	<i>Lomandra filiformis subsp. coriacea</i>
Lomandraceae	<i>Lomandra filiformis subsp. filiformis</i>
Lomandraceae	<i>Lomandra longifolia</i>
Myrtaceae	<i>Eucalyptus bicostata</i>
Myrtaceae	<i>Eucalyptus bridgesiana</i>
Myrtaceae	<i>Eucalyptus dives</i>
Myrtaceae	<i>Eucalyptus goniocalyx</i>
Myrtaceae	<i>Eucalyptus macrorhyncha</i>
Myrtaceae	<i>Eucalyptus mannifera</i>
Myrtaceae	<i>Eucalyptus polyanthemus subsp. polyanthemus</i>
Myrtaceae	<i>Eucalyptus robertsonii subsp. robertsonii</i>
Myrtaceae	<i>Leptospermum continentale</i>
Onagraceae	<i>Epilobium hirtigerum</i>
Orchidaceae	<i>Caladenia carnea</i>
Orchidaceae	<i>Caladenia gracilis</i>
Orchidaceae	<i>Chiloglottis trapeziformis</i>
Orchidaceae	<i>Corybas sp.</i>
Orchidaceae	<i>Cyrtostylus reniformis</i>
Orchidaceae	<i>Diuris maculata</i>
Orchidaceae	<i>Diuris sulphurea</i>
Orchidaceae	<i>Gastrodia sesamoides</i>
Orchidaceae	<i>Glossodia major</i>
Orchidaceae	<i>Microtis unifolia</i>
Orchidaceae	<i>Pterostylis nutans</i>

Orchidaceae	<i>Pterostylis pedunculata</i>
Orchidaceae	<i>Thelymitra pauciflora</i>
Oxalidaceae	* <i>Oxalis incarnata</i>
Oxalidaceae	<i>Oxalis</i> sp.
Phormiaceae	<i>Dianella revoluta</i> var. <i>revoluta</i>
Pittosporaceae	<i>Billardiera scandens</i> var. <i>scandens</i>
Poaceae	* <i>Aira caryophyllea</i>
Poaceae	* <i>Aira elegantissima</i>
Poaceae	* <i>Anthoxanthum odoratum</i>
Poaceae	* <i>Briza minor</i>
Poaceae	* <i>Cynodon dactylon</i>
Poaceae	* <i>Vulpia bromoides</i>
Poaceae	<i>Dichelachne hirtella</i>
Poaceae	<i>Echinopogon ovatus</i>
Poaceae	<i>Elymus scaber</i> var. <i>scaber</i>
Poaceae	<i>Joycea pallida</i>
Poaceae	<i>Microlaena stipoides</i> var. <i>stipoides</i>
Poaceae	<i>Notodanthonia longifolia</i>
Poaceae	<i>Poa helmsii</i>
Poaceae	<i>Poa sieberiana</i> var. <i>hirtella</i>
Poaceae	<i>Poa sieberiana</i> var. <i>sieberiana</i>
Polygonaceae	* <i>Acetosella vulgaris</i>
Polygonaceae	<i>Rumex brownii</i>
Primulaceae	* <i>Anagallis arvensis</i>
Proteaceae	<i>Grevillea lanigera</i>
Ranunculaceae	<i>Ranunculus pumilio</i> var. <i>pumilio</i>
Ranunculaceae	<i>Ranunculus sessiliflorus</i> subsp. <i>sessiliflorus</i>
Rosaceae	* <i>Rubus 'fruticosus'</i>
Rosaceae	<i>Acaena novae-zelandiae</i>
Rosaceae	<i>Acaena ovina</i>
Rosaceae	<i>Aphanes australiana</i>
Rosaceae	<i>Rubus parvifolius</i>
Rubiaceae	* <i>Sherardia arvensis</i>
Rubiaceae	<i>Galium gaudichaudii</i>
Rubiaceae	<i>Opercularia varia</i>
Rutaceae	<i>Boronia nana</i> var. <i>hyssopifolia</i>
Scrophulariaceae	* <i>Veronica serpyllifolia</i>
Stackhousiaceae	<i>Stackhousia monogyna</i>
Thymelaeaceae	<i>Pimelea linifolia</i> subsp. <i>linifolia</i>
Violaceae	<i>Viola betonicifolia</i>
Violaceae	<i>Viola hederacea</i>
Xanthorrhoeaceae	<i>Xanthorrhoea glauca</i> subsp. <i>angustifolia</i>

8. APPENDIX 4: MUNDAROO FLORA RESERVE FAUNA SPECIES LIST

Status Key:

P protected

V vulnerable (as per Schedule 2, NSW Threatened Species Conservation Act 1995)

E endangered (as per Schedule 2, NSW Threatened Species Conservation Act 1995)

I introduced

Sources:

1. Sand Pad Monitoring Program 2002
2. Bird Site Records, State Forests of NSW 2003

FAMILY	SPECIES	COMMON NAME	STATUS	SOURCE
Accipitridae	<i>Aquila audex</i>	Wedge-tailed Eagle	P	2
Acanthizidae	<i>Acanthiza chrysorrhoa</i>	Yellow-rumped Thornbill	P	2
Acanthizidae	<i>Acanthiza lineata</i>	Striated Thornbill	P	2
Cacuatuidae	<i>Callocephalon fimbriatum</i>	Gang-gang cockatoo	P	2
Columbidae	<i>Phaps chalcoptera</i>	Common Bronzewing	P	2
Corvidae	<i>Corvus coronoides</i>	Australian Raven	P	2
Cracticidae	<i>Strepera graculina</i>	Pied Currawong	P	2
Cracticidae	<i>Cracticus torquatus</i>	Grey Butcherbird	P	2
Maluridae	<i>Malurus cyaneus</i>	Superb Fairy-wren	P	2
Meliphagidae	<i>Acanthorhynchus tenuirostris</i>	Eastern Spinebill	P	2
Muscicapidae	<i>Rhipidura fuliginosa</i>	Grey Fantail	P	2
Muscicapidae	<i>Colluricincla harmonica</i>	Grey Shrike-thrush	P	2
Platycercidae	<i>Platycercus elegans</i>	Crimson Rosella	P	2

MAMMALS

FAMILY	SPECIES	COMMON NAME	STATUS	SOURCE
MARSUPIALIA				
MACROPODIDAE	Wallabia bicolor	Swamp Wallaby	P	
	Macropus giganteus	Eastern Grey Kangaroo	P	1

VOMBATIDAE	Vombatus ursinus	Common Wombat	P	1
LAGOMORPHA				
	Oryctolagus cuniculus	Rabbit	I	1
CARNIVORA				
CANIDAE	Vulpes vulpes	Fox	I	1
CANIDAE	Canis familiaris	Dog	I	1
FELIDAE	Felis catus	Cat	I	1
ARTIODACTYLA				
SUIDAE	Sus scrofa	Pig	I	1