



CROWN LANDS DIVISION

DEPARTMENT OF PRIMARY INDUSTRIES

YARRABAR RESERVE

PLAN OF MANAGEMENT

ADOPTED JUNE 2011





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1.0 INTRODUCTION

1.1 Land to which the Plan of Management Applies

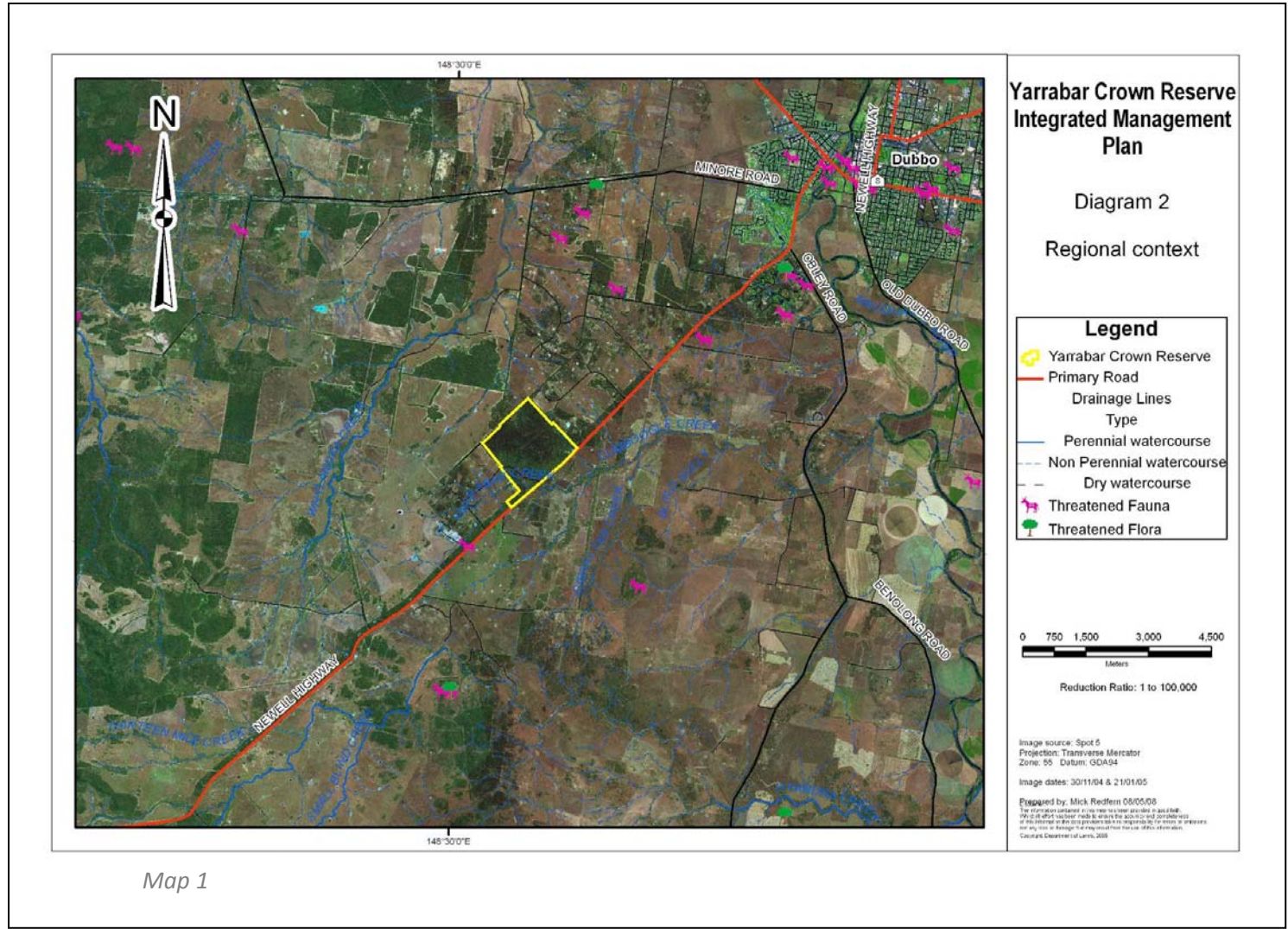
Yarrabar Reserve is comprised of 276 hectares located approximately 14 kilometres south west of the regional city of Dubbo in the Central West Region of NSW. The Reserve fronts onto the Newell Highway.

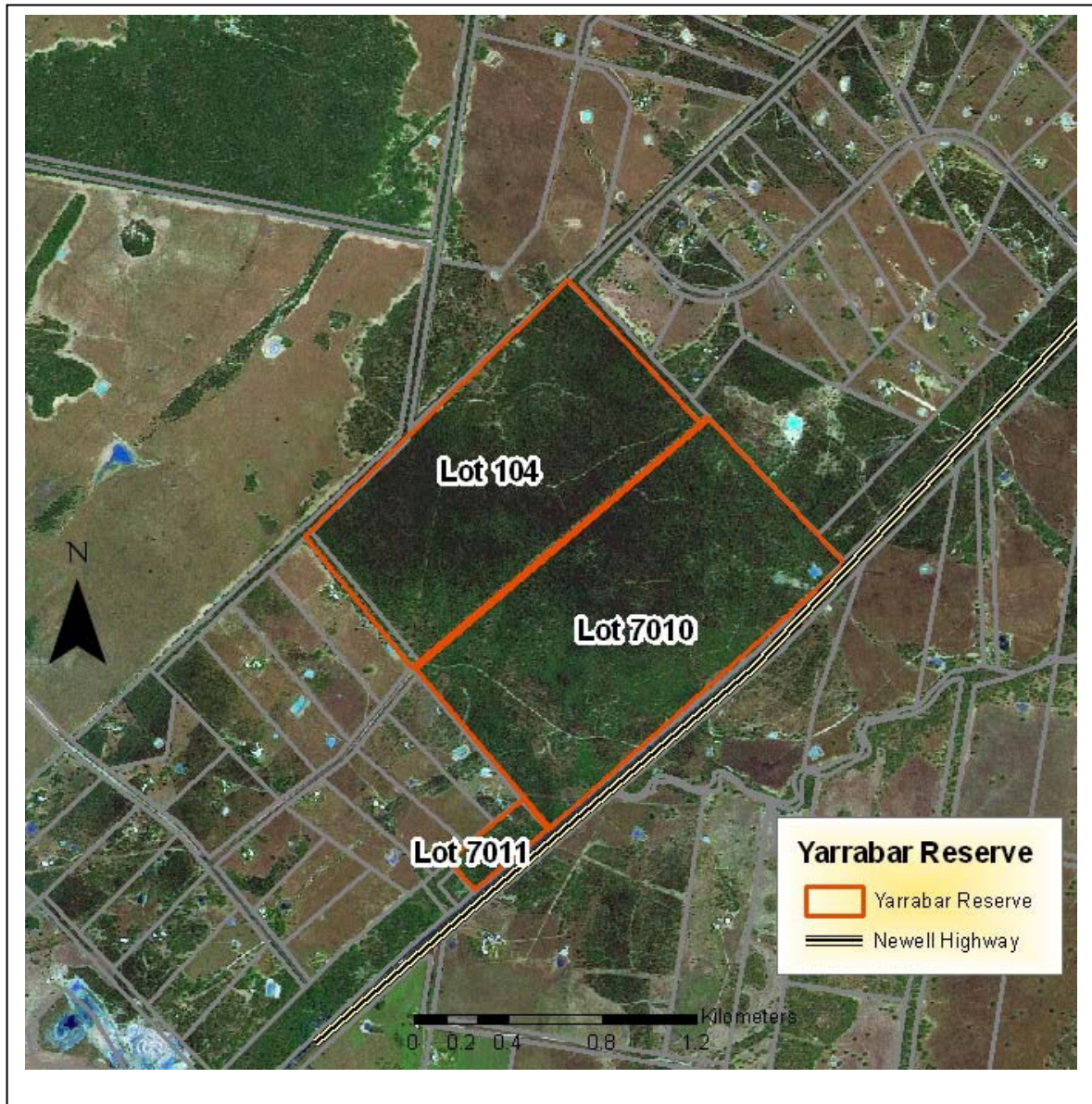
The reserve lies within the traditional lands of the Wiradjuri language group and is located within the Brigalow Belt South Biogeographic Bioregion.

Yarrabar Reserve is comprised of 3 separate land titles within one reserved area. These are listed below and shown in Map 2.

Table 1: Land area within the Reserve

Lot	104	7010	7011
Deposited Plan	753233	1120882	1065056
Parish	Dubbo	Dubbo	Whylandra
County	Gordon	Gordon	Gordon
Land District	Dubbo	Dubbo	Dubbo
Local Government Area	Dubbo CC	Dubbo CC	Dubbo CC
Topographic Map Sheet	Eulomogo 8633-N 1:50 000	Eulomogo 8633-N 1:50 000	Eulomogo 8633-N 1:50 000
Reserve Number	81726	39986	Part reserve 1986
Reserve Purpose	Future Public Requirements; Preservation of Fauna; Preservation of Native Flora	Camping, Travelling Stock	Travelling Stock
Management	Department of Lands	Livestock Pest and Health Authority	Livestock Pest and Health Authority
Approximate Area	120 ha.	149 ha.	7 ha





Map 2 Lots comprising Yarrabar Reserve

1.2 Objectives

This plan of management provides policy recommendations for:

- short and long term management of Yarrabar Reserve;
- procedures for compliance with statutory instruments.

The management objectives for the reserve are:

- to conserve and manage the reserve’s natural and conservation values;
- to identify potential additional uses which are consistent with sustainable management of the reserve;

- to pursue further opportunities for more sustainable management of the reserve.

1.3 Managing Crown Land

1.3.1 Crown Lands Act 1989

Yarrabar Reserve is classified as Crown land reserve and the Crown Lands Act 1989 (CL Act) is the primary act applying to its management. The CL Act governs the planning, management and use of Crown land, including reservation or dedication for a range of public purposes, and leasing and licensing.

All reserved Crown land is subject to the general land management objectives and provisions of the CL Act. The objectives and principles of Crown land management are listed in section 11 of the CL Act, these principles are:

- that environmental protection principles be observed in relation to the management and administration of Crown land,
- that the natural resources of Crown land (including water, soil, flora, fauna and scenic quality) be conserved wherever possible,
- that public use and enjoyment of appropriate Crown land be encouraged,
- that, where appropriate, multiple use of Crown land be encouraged,
- that, where appropriate, Crown land should be used and managed in such a way that both the land and its resources are sustained in perpetuity, and
- that Crown land be occupied, used, sold, leased, licensed or otherwise dealt with in the best interests of the State consistent with the above principles.

In July 2005, the Crown Land Legislation Amendment Act 2005 was passed, introducing a comprehensive body of amendments to the CL Act. These amendments allow flexibility in the granting of leases, permits, easements or right of way provisions over a Crown reserve. Section 112 allows that a Crown reserve may be used for a purpose that is additional to the purpose for which the land has been reserved or dedicated if the additional purpose is authorised by a plan of management for the reserve.

1.3.2 Requirements of a Plan of Management for a Crown Reserve

This Plan of Management has been prepared according to the requirements of the Crown Lands Act 1989.

Specific objectives of a Plan of Management for Crown Land are to:

- Identify the values of the reserve to the community.

- Identify potential opportunities for future development of the reserve based on community priorities.
- Identify threats to the ecological quality of the bushland.
- Address issues, including leases and licences, the preferred mix of recreational facilities, conflict between users, weed invasion in bushland and the recreational needs of residents.
- Prepare a concept plan showing practical future developments.
- Recommend performance measures by which the objectives of the plan shall be achieved, and the manner in which those measures will be assessed.
- Prepare guidelines for the future management and maintenance of the reserve. (Trust Handbook)

2.0 Reserve Assessment

Site investigations were carried out in September 2008 and included discussions with Department of Lands staff, a review of existing literature and aerial imagery. Orthophoto maps and topographic maps were also used to determine the physical character and context of the site.

2.1 Reserve Location and Description

Yarrabar Reserve represents an island of remnant bushland set within a primarily cleared rural landscape located approximately 14 kilometres south west of the large rural centre of Dubbo (Map 1).

The reserve lies on the Sappa Bulga Range, however the topography is relatively flat with altitude ranging from 300 to 339 masl. The area is comprised largely of remnant bushland with many areas carrying regrowth woodland after previous clearing. Very few old growth trees are located on the reserve, and these are a precious resource in a region that has been extensively cleared for agricultural purposes. The reserve shows evidence of past and recent clearing, with firewood collection apparently still occurring.

The ephemeral Yarrabar Creek and a few of its tributaries are located on the reserve, Yarrabar Creek flows into Cumboogle Creek and then into the Macquarie River. The area is located within the Central West Catchment Area.

The front (south-eastern) portion of the land (Lot 7010 DP 1120882 and Lot 7011 DP 1065056) is Crown land managed by the Livestock Health and Pest Authority (previously Rural Lands Protection Board) as a Travelling Stock Route (TSR). This part of the reserve adjoins the roadside TSR's along the Newell Highway. This section of TSR within Yarrabar Reserve is not currently regularly used for travelling stock. The rear (north-western) part of the reserve Lot 104 DP 753233 is Crown Reserve managed by the Department of Lands (Map 2).

Yarrabar Reserve is a well-vegetated bushland reserve, with no formal infrastructure or facilities. The reserve is fenced along its entire boundary, with a few breaches on the east and western boundaries. Old homestead ruins are still extant on the rear of the property and evidence of old mining/prospecting diggings are located on the front portion of the reserve.

2.2 Background and History

2.2.1 Purpose of Reservation

The notified purposes of the reserve lots are as follows:

Lot 104 (120ha) is reserved for the following:

- Future Public Requirements;
- Preservation of Fauna ;
- Preservation of Native Flora.

Lot 7010 (149ha) is reserved for the following:

- Camping;
- Travelling Stock.

Lot 7011 (7ha) is reserved for:

- Travelling Stock.

Lots 7010 and Lot 7011 at the front of the reserve are managed as a Travelling Stock Route (TSR) by The Livestock Health and Pest Authority (formerly RLPB), Dubbo, however due to the density of vegetation on the reserve and its location on a major transport corridor the land is no longer regularly used for the purposes of stock movement. The Department of Lands manages Lot 104.

2.2.2 Past Land Use History and Tenures

A brief summary of the historical usage of the land is shown below:

- Special Lease 1931/10 Dubbo, granted 8 October 1931;
- Special Lease 1959/1 Dubbo, granted 19 January 1959;
- Reserved from Sale for Future Public Requirements for the Preservation of Native Flora and Fauna, 19 January 1959;
- Permissive Occupancy 1987/10, commenced 1 September 1987;
- Permissive Occupancy 1987/10, terminated 8 November 1999.

These leases were granted for rural use, and the reserve shows evidence, through dense vegetation regrowth, of past clearing. Remains of foundations of buildings are still present in the cleared portion of Lot 104, and several dams are present.

There is some evidence, in the form of diggings, of past fossicking or mining activity on the reserve. It is unknown what minerals were sought, but both gold and copper were found in the district. The Brisbane Courier dated 7 July 1888 wrote "*The Dubbo Express states that a copper discovery has been made, which, if equal to the specimens shown from other localities, will equal the Cobar in quantity and surpass it in quality. The discovery is within twenty miles of Dubbo, and six and a half miles from the railway line.*"

2.3 Surrounding Land Use and Regional Context

Yarrabar Reserve is bordered by the Newell Highway to the south-east, and by private rural land on all other borders. Adjoining properties are comprised of both small rural subdivision blocks and larger landholdings. The roadside travelling stock route links this large remnant to other remnant vegetation along the highway and provides a natural corridor for many fauna species.

Dubbo is a major service centre which is located at the heart of NSW and is situated at the junction of three major highways: the Newell; The Mitchell and the Golden Highway. Dubbo's population is in excess of 39,500 people, and the city services a geographic area the size of a third of NSW.

Past and current land uses in the rural areas are predominantly grazing and cropping. Many of the larger rural land parcels in the area are now being subdivided into smaller rural parcels, this has occurred on the land to the south-west of the reserve. The increase in neighbour numbers naturally also increases the pressures on the reserve lands, through increased recreational use and firewood collection.

2.4 Cultural Values

2.4.1 Aboriginal Heritage

A data search of the Aboriginal Heritage Information Management System (AHIMS) and Historic Heritage Information Management System (HHIMS) databases from the Department of Environment and Climate Change revealed no recorded sites for the reserve. This is probably a direct result of the fact that no targeted surveys for Aboriginal sites or historic sites have been carried out in the area.

The area would undoubtedly have been used traditionally by Aboriginal people and would have value for contemporary Aboriginal people. The reserve is within the territory of the Wiradjuri language group. Some items that were possibly flakes and stone tools were observed on site, however these have not been verified.

Investigations made by the Department of Lands indicate that Native Title has been found to have been validly extinguished.

2.4.2 European Heritage

Little is known about the former European Heritage of the site. Maps show that the property on Lot 104 was called ‘Currawong’, this lease was terminated in 1999. The 1909 to 1958 Parish of Whylandra map shows that on or adjacent to Lot 7011, was a school called Yerrabah Public School (Figure 1). No information on this school was able to be obtained.

Current knowledge indicates that none of the building ruins on Lot 104 have any heritage significance.

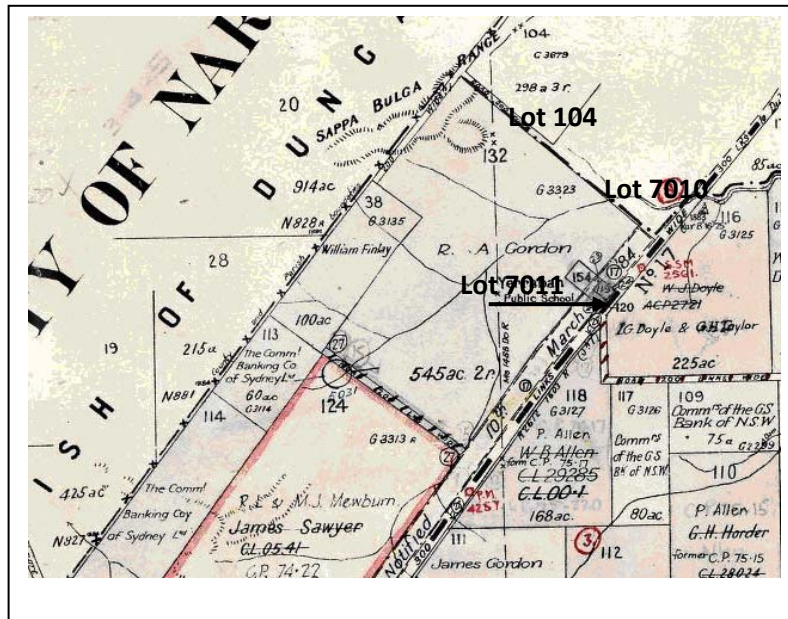


Figure 1. Old ‘Parish of Whylandra’ map showing location of Yerrabah Public School.

2.5 Climate

The Dubbo area experiences a temperate climate. Summers are warm to hot, generally ranging from 17 deg C (62.6F) to 33 deg C (91.4F), with some extreme events exceeding 38 deg C (100.4F).

During the winter months, the average daily temperature varies from 3 deg C (37.4F) to 17 deg C (62.6F), with some early morning frosts.

Dubbo's location in the transition area between the Central Tablelands and the Western Plains has the effect of providing even distribution of rainfall throughout the year. Average annual rainfall recorded at Dubbo is 584.8mm (23 inches). Dubbo's wettest month is January with an average rainfall of 60.1mm (2.36 inches) occurring on average over six days. Evaporation in the Dubbo area exceeds the average rainfall and averages approximately 1,880mm (74 inches) per year.

Wind patterns are consistent over the whole year. The prevailing winds at Dubbo are from the southeast, south, southwest and west, which account for a combined 64.4 per cent of the annual recorded wind direction.

2.6 Landform, Geology and Soils

The oldest rocks in the Dubbo region were formed during the initial stages of development of the Lachlan Fold Belt in the Ordovician Period about 450 million years ago.

The bioregion's bedrock comprises horizontally bedded Jurassic and Triassic quartz sandstone and shale of the Gunnedah Basin and Hyandra Creek groups. The dominant geology is Napperby Formation (Rp), which comprises siltstone, thinly interbedded with fine to medium grained lithio-quartz sandstone and minor conglomerate. There may also be a small area of Peachvale Formation (Drp) comprised of rhyolite breccia and rhyolite, as well as a very small area of Cainozoic units (ttx) comprising trachyte, syenite and minor phonolite (Meakin et al, 1999).

The presence of rhyolite and syenite indicate a contact zone between the igneous and sedimentary rock layers. This can be a sign of mineralisation and is likely to be the reason for the past evidence of fossicking on parts of the reserve. Soils are comprised predominantly of coarsely cracking grey and brown clays.

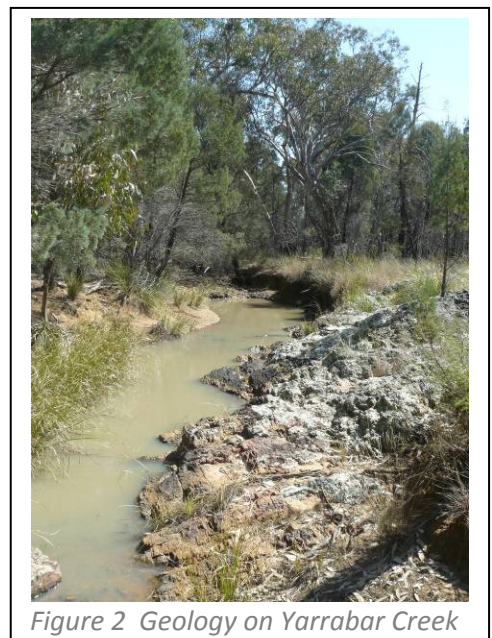
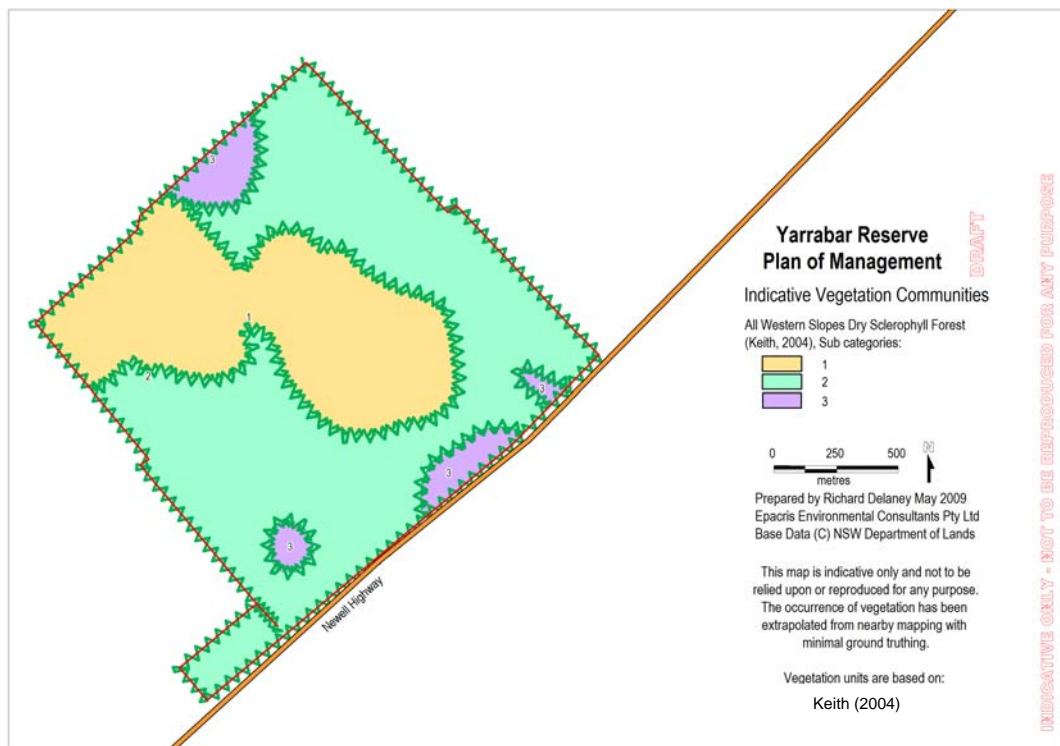


Figure 2 Geology on Yarrabar Creek

2.7 Vegetation

Keith (2004) describes the vegetation community present in this area as Western Slopes Dry Sclerophyll Forest. However, no detailed vegetation mapping has been carried out for this reserve. Dominant canopy species include White Cypress Pine (*Callitris glaucophylla*), Black Cypress Pine (*Callitris endlicheri*), Tumbledown Redgum (*Eucalyptus dealbata*), Mugga Ironbark (*E. sideroxylon*), Narrow-leaved Ironbark (*E. crebra*) and Yellow box (*E. melliodora*). Understorey species include *Dillwynia sieberi*, *Calotis cuneifolia*, *Acacia buxifolia*, *Acacia lineata* and *Leptospermum* sp. The indicative distribution of the major vegetation communities is shown on Map 3.

Map 3. Indicative vegetation communities



Vegetation communities indicated on map:

1. Dry sclerophyll forest, *Callitris* dominated
2. Dry sclerophyll forest, Mugga Ironbark dominated
3. Cleared land

Several threatened plant species have been recorded within 10 km of the reserve, these are listed below. There is potential for some of these species to be found on the reserve.

Silk Swainson-pea	<i>Swainsonia sericea</i>
Pine Donkey Orchid	<i>Diuris tricolour</i>
Thick-lipped Spider Orchid	<i>Caladenia tessellata</i>
	<i>Philothea ericifolia</i>
	<i>Rulingia procumbens</i>
Ingram's Zieria	<i>Zieria ingramii</i>

Some areas within the reserve are covered with extremely dense regrowth of *Callitris*, this is likely to have been triggered by past clearing (Figure 3). Cypress Pine from this area was in high demand for use as flooring and weatherboards for construction in the 1950's and 1960's, due to its durability and attractive patterns (Keith 2004). These thick stands of Cypress will thin with age, but in the meantime will tend to suppress regeneration of understorey



Figure 3 *Callitris* regrowth in Yarrabar Reserve.

species.

Yarrabar Reserve is considered to be of high conservation value as the reserve adjoins a roadside TSR, and is therefore an integral component of the vegetated roadside corridor. The native bushland is in excellent condition with minimal weed invasion.

2.8 Fauna

The reserve provides important habitat values within a largely cleared rural landscape. Evidence of several macropod species was observed throughout the reserve.

The reserve performs an extremely important role as a timbered island within an otherwise cleared and fragmented landscape. The role of these 'islands' is integral in the survival and movement



Figure 4 Old hollow habitat tree. Galahs were observed nesting in this tree.

across the landscape for many fauna species, in particular for bird species. Many bird species utilise the area, and it is considered likely that threatened bird species such as Regent Honeyeaters, Glossy Black Cockatoos and Swift Parrots could all utilise the reserve for foraging and nesting. Several nesting bird species were observed during the site visit (White-winged choughs and Galahs).

Presently the reserve provides a few large old habitat trees which are in demand as nest trees for several species, in particular parrots and microbats. Galahs were observed nesting in one of these old growth trees. These old trees are under threat from firewood collectors.

Birds observed during the site visit are listed below.

Common Bronzewing	<i>Phaps chalcoptera</i>
Galah	<i>Eolophus roseicapillus</i>
Cockatiel	<i>Nymphicus hollandicus</i>
Eastern Rosella	<i>Platycercus eximius</i>
Kookaburra	<i>Dacelo novaeguineae</i>
Buff-rumped Thornbill	<i>Acanthiza reguloides</i>
Spotted Pardalote	<i>Pardolatus punctatus</i>
Noisy Friarbird	<i>Philemon corniculatus</i>
Yellow Robin	<i>Eopsaltria australis</i>
Rufous Whistler	<i>Pachycephala rufiventris</i>
Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>
Olive-backed Oriole	<i>Oriolus sagittatus</i>
Magpie	<i>Gymnorhina tibicen</i>
Currawong	<i>Strepera graculina</i>
Australian Raven	<i>Corvus coronoides</i>
White-winged Chough	<i>Corcorax melanorhamphos</i>
Magpie Lark	<i>Grallina cyanoleuca</i>
Apostle Bird	<i>Struthidea cinerea</i>

An Anabat bat call detector was set up and aimed over the front dam during the site visit. The following species were detected:

Gould's Wattled Bat	<i>Chalinolobus gouldii</i>
Small Pied Bat	<i>Chalinolobus picatus</i>
Little Broad-nosed Bat	<i>Scotorepens greyii</i>
Little Forest Bat	<i>Vespadelus vulturnus</i>
White-striped Freetailed Bat	<i>Tadarida australis</i>

Of these species, the Small Pied Bat (*Chalinolobus picatus*) is classified as Vulnerable (Threatened Species Conservation Act 1995). The dams on the reserve provide a reliable water source for many species. Frogs were heard calling at both dams, but were unable to be identified.

Numerous threatened bird and bat species have been recorded within 10 km of the reserve. These are listed below.

The connectivity value of the reserve is high, as it adjoins the travelling stock route along the Newell Highway which represents a long ribbon of habitat for many kilometres, as well as providing linkages to other remnant vegetation areas. The land surrounding the reserve is primarily cleared land for grazing or agriculture, and the value of any timbered remnant blocks in the area is high.

Speckled Warbler	<i>Chthonicola saggitatus</i>	<i>Vulnerable</i>
Glossy Black Cockatoo	<i>Calyptorhynchus lathami</i>	<i>Vulnerable</i>
Diamond Firetail	<i>Stagonopleura guttata</i>	<i>Vulnerable</i>
Brown Treecreeper	<i>Climacteris picumnus</i>	<i>Vulnerable</i>
Black-chinned Honeyeater	<i>Melithreptus gularis</i>	<i>Vulnerable</i>
Regent Honeyeater	<i>Xanthomyza Phrygia</i>	<i>Endangered</i>
Gilberts Whistler	<i>Pachycephala inornata</i>	<i>Vulnerable</i>
Grey-crowned Babbler	<i>Pomatostomus temporalis</i>	<i>Vulnerable</i>
Hooded Robin	<i>Melanodryas cucullate</i>	<i>Vulnerable</i>
Superb Parrot	<i>Polytelis swainsonii</i>	<i>Vulnerable</i>

Swift Parrot	<i>Lathamus discolor</i>	<i>Endangered</i>
Barking Owl	<i>Ninox connivens</i>	<i>Vulnerable</i>
Yellow-bellied Sheath-tailed Bat	<i>Saccolaimus flaviventris</i>	<i>Vulnerable</i>
Little Pied Bat	<i>Chalinolobus picatus</i>	<i>Vulnerable</i>
Eastern Long-eared Bat	<i>Nyctophilus timoriensis</i>	<i>Vulnerable</i>
Grey Headed Flying Fox	<i>Pteropus poliocephalus</i>	<i>Vulnerable</i>

2.9 Fire

Fire is a natural process in the Australian environment, and many native plants and animals are generally adapted to occasional fire events. Too frequent fire events however, have the ability to alter the vegetation communities within an area, and therefore also impact upon the fauna species that live there.

The fire history of the reserve is largely unknown, however it is considered that the area would have been affected in the 1984 fire that burnt out 7800 hectares (RFS Orana Team, pers. comm.)

All lots within Yarrabar Reserve are mapped as ‘High Bush Fire Prone Category’ by Dubbo City Council. The new subdivisions bordering the reserve are likely to increase the necessity for hazard reduction of the reserve to protect the neighbouring assets.

The reserve is located in the Rural Fire Service’s Western Region, and the local fire team is the Orana (Dubbo) District Rural Fire Team.

3.0 Basis for Management

3.1 Current Impacts and Uses

The Reserve is currently used for recreation by horse and trail bike riders, and possibly by adjacent landholders for bushwalking.

Fossicking or mining appears to have been carried out at some time in one portion of Lot 7010 in the form of diggings.

3.1.1 Reserve Access

Formed legal access to Yarrabar Reserve is available via Morey Place (off Panai Avenue) and also from the Newell Highway via a roughly formed access track. Unformed Crown roads also adjoin the property from the north and north west however these Crown road corridors are heavily timbered, non trafficable and therefore do not provide practicable public road access to the reserve.

The front boundary of the reserve has recently been fenced, and a gate placed at the highway entrance point. Public access through these routes presents no significant issues. Vandalism of signs, fences and gates has occurred in the past.

Some rationalisation of the tracks within the reserve is recommended, with severely eroded areas being rehabilitated and tracks that are already undergoing natural regeneration closed off. Formalisation of closed tracks should be carried out, through signs and barricades to assist in discouraging horse and trail bike riding.



Figure 6 Front access from Yarrabar Reserve onto the Newell Highway.

3.1.2 Introduced Species

Weeds

Very few weed species were noted throughout the reserve, and those that were observed occur predominantly near rubbish and soil dumps. These isolated invasions could be readily controlled.

Vertebrate Pest Species

Predation by cats, dogs and foxes may be considerable on mammals, lizards, frogs and birds. Rabbits graze on seedlings and regenerating shoots affecting native vegetation cover leading to erosion, and also compete with native fauna for resources.

Several vertebrate feral species are likely to be present within the reserve, most likely foxes, cats and adjacent landholder's dogs. Very few predator scats were noted during site visits. Rabbits are also likely to occur throughout the reserve.

3.1.3 Firewood Collection



Figure 7. Tree cut down for future firewood supply.

Firewood collection is a predominant threat to the vegetation of Yarrabar Reserve with many areas retaining old tree stumps and showing other impacts of long-term firewood collection. Some of this evidence may be a result of the high demand for cypress pine in the 1950's and 1960's for floorboards and weatherboards. Live trees, especially eucalypts, are still being cut down to provide future firewood when the timber is aged.

It is likely that much of this firewood collection is occurring from the adjacent landholders for household heating purposes. This history of timber and firewood collection has led to a dearth of old growth and/or dead trees with hollows, which provide essential habitat. Only a few dead standing trees remain in the reserve and these are under immediate threat.

3.1.4 Rubbish Dumping

Rubbish dumping is evident throughout the reserve, but primarily occurs on the front portion of Lot 7010, due to its proximity and easy access from the highway. The construction of a fence along the front boundary has been carried out which should assist in restricting the dumping of rubbish in the future.



Figure 8 Dumped rubbish on reserve

In addition to domestic rubbish dumping, road refuse has also been dumped in the past at the front of the block, and dead livestock have also been noted.

3.1.5 Unauthorised Vehicle Use, Track Erosion

The reserve has unrestricted vehicle access to the majority of areas within the bushland. This has resulted in a network of vehicle tracks being established leading to fragmentation of native vegetation as well as track degradation and erosion. Numerous unsealed tracks are present throughout the reserve, some of which are accessible by 2WD vehicles, while others are deeply eroded and only trafficable by 4WD vehicles. Some tracks are grown over with vegetation, but many are still used by trail bikes which create deep ruts on the existing dirt tracks.

A few of the tracks are showing signs of deep gullying from water flows and inappropriate vehicle use. Minor trackworks and stabilisation should remedy this issue.

3.1.6 Fire

There are several areas of high density *Callitris* regrowth which are likely to be a result of former clearing. This dense regrowth will thin out naturally over time. There are no built assets currently on the reserve, however the Rural Fire Service is likely to require a hazard reduction burn at suitable intervals for the protection of adjacent property.

Under the Rural Fires Act 1997, the Department of Lands is responsible for managing fire on Yarrabar Reserve. Fire is an event that will occur from time to time in the reserve. The predominant aim of fire management is to protect the adjoining properties and to maintain the reserve's natural values.

The recommended fire regime for dry sclerophyll shrub/grass forest is that fire should not occur within 15 years of a previous fire, and should be burnt within 50 years of any previous fire, although *Callitris* sp. tend to be sensitive to frequent fire regimes (NSW NPWS 2002).

3.1.7 Management

Although all three lots are owned by the Crown, the lots are managed by different authorities. Lot 104 is managed by the Department of Lands and Lots 7010 and 7011 are managed by the Livestock Health and Pest Authority (formerly RLPB) as a travelling stock route.

An Incentive Management Agreement with the Central West CMA has been entered into by the Livestock Health and Pest Authority (formerly RLPB). This agreement is aimed at managing remnant vegetation to conserve biodiversity, improve plant diversity and wildlife habitat and to reduce exotic weed and pest animal impact. Funds have been provided through this agreement for fencing and regeneration on the reserve. As a result of this agreement, the front highway boundary has been fenced. This action should assist in restricting access to the site and reduce the amount of rubbish and refuse dumped within the reserve, and may also assist in restricting firewood collectors. Fencing of the dams is aimed at excluding stock and will assist in protecting the dam walls and surrounding vegetation from trampling.

4.0 Management Issues, Strategies and Actions

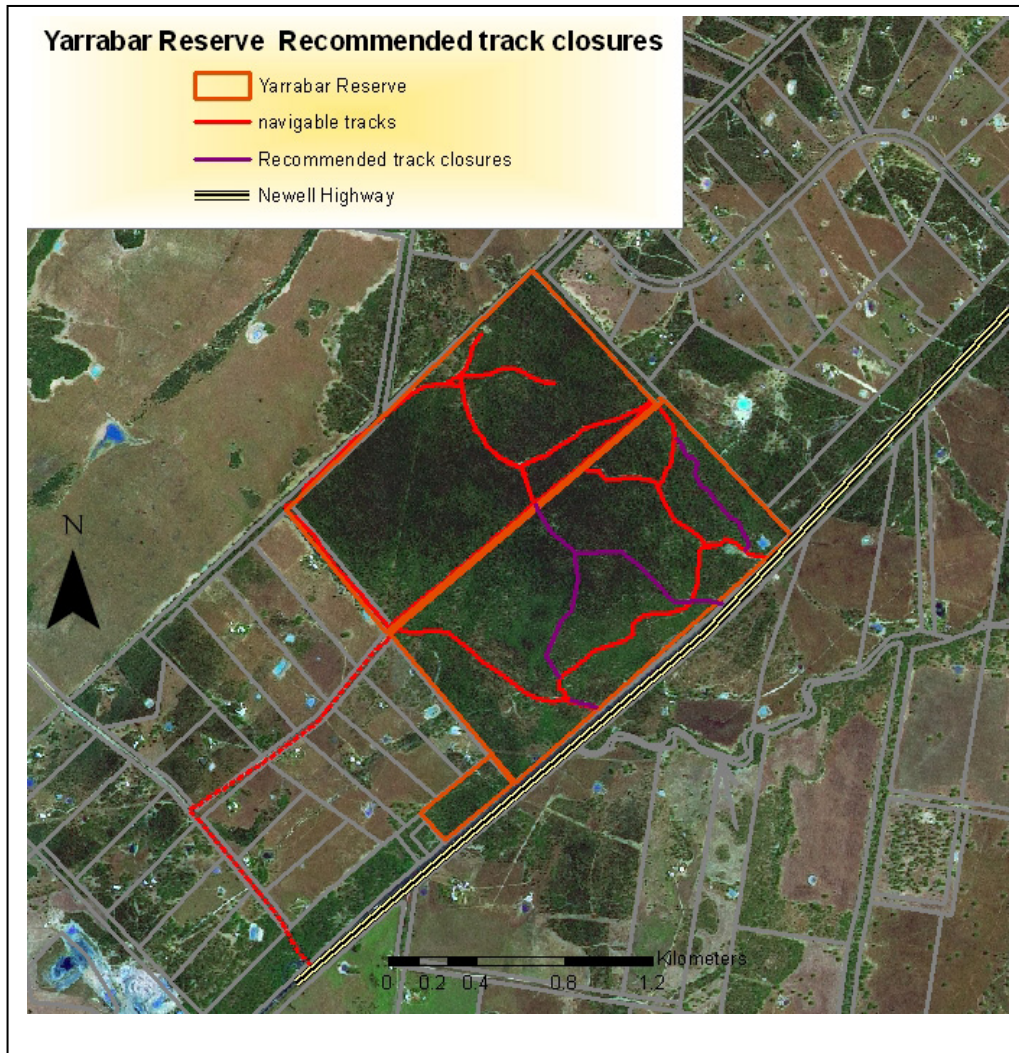
4.1 Identification, Access and Recreation

Currently there is no signage to identify the reserve or its purpose. It is likely that many people who use the reserve have no knowledge of its Crown Reserve status nor what this means.

Consideration should be given to establishing a Conservation Agreement through the Department of Environment and Climate Change (DECC) over at least a portion of the reserve. This will enhance the reserve's conservation security now and into the future.

Strategies and actions

- Install signs at the two public entry points to the reserve and on the highway boundaries, to communicate the reserve's name, managing agency and protected status.
- Maintain current access roads.
- Review tracks and trails. Close some trails and allow them to rehabilitate (see Map 4 for recommended trail closures).
- Inform all neighbours and the local community of the reserve's status and that certain activities are illegal (unauthorised vehicle access, timber collection).
- Retain public pedestrian access for low impact, nature-based recreation such as bushwalking and birdwatching.
- Establish a Conservation Agreement over a portion of the reserve, for example all of Lots 7010 and 7011, and part of Lot 104, to enhance the conservation security of the reserve.



Map 4. Recommended track closures

4.2 Introduced Species

Few introduced weed species occur on the reserve. This situation should be maintained by carrying out spot checks for weed invasion twice yearly, and treating them immediately. Feral animal control should be carried out in conjunction with current control programs throughout the district.

Strategies and actions

- Treat weed invasions as they occur throughout the reserve. Carry out inspections and treatment twice yearly.
- Carry out feral animal control in conjunction with programs run by the Livestock Health and Pest Authority (LHPA).

4.3 Firewood Collection

Firewood collection is a significant and damaging issue for this reserve.

Strategies and actions

- Carry out spot checks (LHPA rangers) for illegal firewood poaching, especially in autumn.
- Place signage at all entry points to the reserve stating that firewood collection is illegal within the reserve.

4.4 Rubbish Dumping

Rubbish dumping occurs widely throughout the reserve. Fencing that has been erected along the front boundary may improve this situation.

Strategies and actions

- Maintain fencing and ensure signage is installed and is visible stating the status of the reserve and activities that are illegal on the reserve.
- Register Yarrabar Reserve as a 'Clean up Australia Day' site, and involve the community (especially reserve neighbours) in cleaning up the reserve and instilling a sense of 'ownership' of the reserve.

4.5 Fire

Strategies and actions

- Liaise with the Dubbo Branch of the Rural Fire Service to carry out prescribed burns as required within the reserve, and consistent with appropriate fire interval thresholds.

4.6 Potential Reserve Lessees

The Crown Land Legislation Amendment Act 2005 permits Crown Lands to be leased to third parties for appropriate use. In a reserve such as Yarrabar, any lessee may provide an important role in establishing a 'presence' within the reserve and thereby discouraging inappropriate behaviour within the reserve. In the absence of any regular ranger patrols or similar, the presence of lessees will offer the reserve the greatest protection from illegal activities. Obtaining a lessee is likely to be the single most effective way of protecting this reserve from further degradation.

The notified purpose of the reserve is for 'Future Public Requirement; Preservation of Fauna and Preservation of Native Flora'. In addition, the Incentive Management Agreement undertaken between the Department of Lands and the Central West CMA states that the area is to be managed as a Conservation Reserve for the next 10 years (until 2018) therefore any potential use of the reserve needs to be considered carefully so as to be compatible with this objective.

Strategies and actions

- Seek expressions of interest from potential lessees of the reserve (or part thereof) whose use will be compatible with the area's status as a conservation reserve. Representatives from Department of Lands and the Livestock Health and Pest Authority (LHPA) to assess and nominate any suitable potential lessee.
- Ensure that the nominated lessee abides by items set out in 4.6.1 and any development requirements as determined by Dubbo City Council.

4.6.1 Assessments of Development Proposals

The Land and Property Management Authority is obliged to consider certain issues when deciding whether a particular land use or development is appropriate including:

- The compatibility of the proposal with the notified purpose of the reserve;
- The impact on the existing use of the reserve;
- The compatibility with the vision and management objectives established for the reserve;
- The need for the proposal and whether it will promote and be ancillary to the use and enjoyment of the reserve, as distinct from satisfying a requirement generated by an adjoining property or by an independent or collateral community need;
- The advantage and benefit that the development would bring to the normal Reserve user;
- The management responsibility and public availability of the development to reserve users;
- The need for a lease and its draft terms, conditions and rental that would apply.



The Dubbo City Council's Local Environment Plan has zoned this area Zone 1 (A) Dryland Agriculture Zone and (29) Wildlife Habitat. Any proposed use of the area would be required to adhere to this zoning (see Appendix) and to go through the relevant planning processes with Dubbo City Council.

5.0 Implementation

The management actions specified in section 4.0 above will be implemented by the NSW Land and Property Management Authority, or any subsequent managing authority, according to the resources available and the broad priorities indicated in Table 1.

The Land and Property Management Authority will monitor and assess the implementation of this plan according to the criteria shown in Table 1.

Table 1. Management priorities and performance criteria

Strategy/Action	Priority	Performance Criteria
4.1 Identification, Access and Recreation		
Install signs at two public entry points to the reserve, and at the highway boundaries, communicating the reserve's name, managing agency and protected status.	High	- Signs are installed and maintained.
Maintain current access roads.	High Ongoing	- Roads and trails are effectively maintained.
Review tracks and trails. Close some trails and allow them to rehabilitate.	Medium	- Unwanted trails are rehabilitated.
Inform all neighbours and the local community of the reserve's status and that certain activities are illegal (unauthorised vehicle access, timber collection, rubbish dumping).	High Ongoing	- Human impacts and illegal activity are reduced. - Neighbours & community are involved in reserve management.
Retain public pedestrian access for low impact, nature-based recreation such as bushwalking and birdwatching.	High Ongoing	- Pedestrian access remains unrestricted.
Establish a Conservation Agreement over a portion of the reserve, for example all of Lots 7010 and 7011, and part of Lot 104, to enhance the conservation security of the reserve.	Medium	- Conservation Agreement is established.
4.2 Introduced Species		
Treat weed invasions as they occur	High	- Bi-annual weed inspections

throughout the reserve. Carry out inspections and treatment twice yearly.	Ongoing	occur. - No new weed species become established.
Carry out feral animal control in conjunction with programs run by the Livestock Health and Pest Authority (LHPA).	High Ongoing	- Occurrence of feral animals is steadily reduced. - No new feral animal species become established.
4.3 Firewood Collection		
Carry out spot checks (LHPA rangers) for illegal firewood poaching, especially in autumn.	High Ongoing	- Impacts of firewood collection are reduced.
Place signage at all entry points to the reserve stating that firewood collection is illegal within the reserve.	High	- Signs are installed and maintained.
4.4 Rubbish Dumping		
Maintain fencing and ensure signage is installed and is visible stating the status of the reserve and the activities that are illegal on the reserve.		- Fencing and signs are maintained. - Incidence of rubbish dumping is reduced.
Register Yarrabar Reserve as a 'Clean up Australia Day' site, and involve the community (especially reserve neighbours) in cleaning up the reserve and instilling a sense of 'ownership' of the reserve.	Medium Ongoing	- Reserve is maintained generally clear of rubbish.

Strategy/Action	Priority	Performance Criteria
4.5 Fire		
Liaise with the Dubbo Branch of the Rural Fire Service to carry out prescribed burns as required within the reserve, and consistent with appropriate fire interval thresholds.	High Ongoing	<ul style="list-style-type: none"> - Fire is effectively managed on the reserve. - Vegetation communities are maintained within appropriate fire thresholds.
4.6 Potential Lessees		
Seek expressions of interest from potential lessees of the reserve (or part thereof) whose use will be compatible with the area's status as a conservation reserve. Representatives from Department of Lands and the Livestock Health and Pest Authority (LHPA) to assess and nominate any suitable potential lessee.	Medium	- A suitable lessee is obtained.
Ensure that the nominated lessee abides by items set out in 4.6.1 and any development requirements as determined by Dubbo City Council.	Medium Ongoing	- Lessee complies with legal requirements.

6.0 References

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7.0 Appendix

Dubbo Local Environmental Plan 1997—Rural Areas

Division 2 Zone 1 (A) Dryland Agriculture Zone

19 Primary development controls for Zone 1 (A)

(1) Objectives of the zone

The objectives of Zone 1 (A) are as follows:

- (a) to ensure the primary role of land within the zone is for carefully managed agricultural pursuits (including agroforestry) and that land within the zone is not used as an alternative location for residential accommodation,
- (b) to enhance the economic value of land within the zone for agriculture by promoting consolidation and enlargement of holdings,
- (c) to protect that land from inefficiencies posed by excessive and non-productive improvements, reduction in holding size, and conflict between land uses,
- (d) to ensure the use of sustainable natural resource management principles and promote the protection, enhancement and conservation of areas of significance for nature conservation, habitat of threatened species, populations and communities and areas of native vegetation,
- (e) to permit agriculturally-based land uses and other rural uses that complement the primary role of the zone,
- (f) to reduce the need for improvements to the provision of services above those required to service the existing rural community,
- (g) to permit rural industries which do not have a significant adverse impact on existing or potential agricultural production on adjoining land,
- (h) to ensure mineral resources are not sterilised by competing land uses.

(2) Development without development consent

Development for the purpose of the following may be carried out on land within Zone 1 (A) without development consent:

agriculture; biosolid waste applications; environmental conservation; home based child care establishments; water treatment sludge applications.

(3) Development only with development consent

Development for the purpose of the following may be carried out on land within Zone 1 (A) only with development consent:

abattoirs; additional dwellings; aerodromes; animal cemeteries; animal establishments; aquaculture; artificial water bodies; bed and breakfast accommodation; boarding houses; bulk fuel stores; cabin or caravan sites; camp sites; car parks; cemeteries; child care centres; clubs; club houses; communications facilities; community centres; composting; correctional centres; cotton farming; crushing, grinding or separating works; dairies; depots; dwelling houses; educational establishments; extractive industries; farmstay establishments; forestry; group homes; guest houses or hostels; helipads; home businesses; home industries; home occupations; intensive agriculture; intensive livestock keeping establishments; kennels; mining; plant nurseries; recreation areas; refreshment areas; roadside stalls (where not fronting the Newell or Mitchell Highway); rural industries; sawmills; stock and sale yards; tourist accommodation; tourist facilities; transfer stations; treated waste applications; turf farming; vehicle body repair workshops; veterinary hospitals; any other building, works, places or land uses that are not included in subclause (2) or (4).

(4) Prohibited development

Development for the purpose of the following is prohibited on land within Zone 1 (A):

assisted accommodation; brothels; bulky goods sales rooms or showrooms; business premises; car wrecking yards; community service centres; convenience service stations; corner stores; cultural centres; dry cleaners; dual occupancies; entertainment facilities; exhibition homes; funeral establishments; hospitals; hotels; industries; landfill sites; laundromats; light industries; machinery dealerships; major retail attractors; materials recycling depots; medical consulting rooms; medium density housing; motor and recreational vehicle dealerships; offensive or hazardous industries; office premises; passenger transport terminals; places of assembly; places of worship; public buildings; recreation facilities; restaurants; restricted premises; roadside stalls (where fronting the Newell or Mitchell Highway); road transport terminals; semi-detached housing; service stations; shops; taverns; transport depots; vehicle repair stations; warehouses or distribution centres; waste management facilities.

29 Wildlife habitat

(1) The environmental management objective of this plan for wildlife habitat (and the objective of this clause) is to achieve a network of habitats able to support the flora and fauna native to land to which this plan applies.

(2) This clause applies to land within Zone 1 (A) and identified on the zoning map as Environmentally Sensitive and as Habitat on the map entitled "Habitat", dated January 1997.

(3) A person must not, except with the consent of the Council, carry out any development on land to which this clause applies which involves the removal or destruction of native vegetation.

(4) This clause does not require consent for any such development if there is a requirement made by or under an Act other than the *Environmental Planning and Assessment Act 1979* for the development to be licensed or approved by a public authority other than the Council.

(5) Consent must not be granted for any such development unless the Council has considered a wildlife habitat impact assessment that demonstrates how the development is consistent with the objective of this clause. The wildlife impact habitat assessment must address the following matters:

(a) the potential impact of the proposed development on fauna habitat,

(b) any mitigation measures proposed to be undertaken.