

North-east Pilliga Forest Targeted threatened flora survey

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Project Manager	Martin Sullivan martinsullivan@ecoaus.com.au (02) 4910 0125 PO Box 1056, Newcastle 2300
Prepared by	Andrea Sabella
Approved by	Martin Sullivan
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Abbreviations

ABBREVIATION	DESCRIPTION
CMA	Catchment Management Authority
CSG	Coal Seam Gas
EA	Environment Assessment
EIA	Environmental Impact Assessment
ELA	Eco Logical Australia Pty Ltd
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
GPS	Global positioning system
NSW	New South Wales
OEH	Office of Environment and Heritage
PEL	Petroleum Exploration Licence
Primary Industries	NSW Department of Trade and Investment
RVC	Regional Vegetation Communities
Santos	Santos Limited
SCA	State Conservation Area
TSC Act	<i>Threatened Species Conservation Act 1995</i>

Definitions

TEXT IN REPORT	DESCRIPTION
Area surveyed	A 5 m wide transect along which each survey member searched for threatened flora as part of this survey
Locality	The Pilliga Forest
Pilliga (in reference to population estimates)	The boundary of the Pilliga and Pilliga Outwash CMA subregions that intersect the survey boundary
Survey boundary	A boundary that encloses the entire survey footprint
Survey footprint	The area within the 79 one ha sites surveyed as part of this survey

Executive Summary

This report details the results of the threatened flora surveys undertaken in the Pilliga Forest for Santos Limited (Santos). The scope of this report was to provide detailed information on population size, distribution and habitat requirements for threatened flora populations to more accurately address the potential impacts of coal seam gas (CSG) development within the Pilliga Forest.

Data obtained from previous surveys in the north-east Pilliga Forest was used as a basis for this study to investigate if known threatened flora populations occur more broadly across the Pilliga Forest.

Targeted surveys were undertaken in spring 2012, consisting of 79 sites within the Pilliga National Park, Pilliga Nature Reserve, Pilliga East State Conservation Area, Pilliga State Conservation Area, Pilliga East State Forest and Bibblewindi State Forest.

Eight threatened flora species were identified in this study:

- *Bertya oppositifolia*
- *Diuris tricolor*
- *Lepidium monophloeoides*
- *Polygala linariifolia*
- *Pomaderris queenslandica*
- *Pterostylis cobarensis*
- *Rulingia procumbens*
- *Tylophora linearis*

All threatened flora found are listed under the NSW *Threatened Species Conservation Act 1995* (TSC Act) (six as Vulnerable and two as Endangered) and four are also listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (three as Vulnerable and two as Endangered).

Data from field surveys was utilised to estimate threatened species population sizes in the Pilliga Forest through a stratified survey approach based on areas of suitable habitat. This study has found that the Pilliga Forest supports a much larger number of threatened flora populations than what was previously known.

1 Introduction

This report was prepared to investigate threatened flora populations in the Pilliga Forest for Santos Limited (Santos). The scope of the report was to provide information on population size, distribution and habitat requirements for threatened flora populations to more accurately address potential impacts of coal seam gas (CSG) development in the Pilliga Forest.

Threatened flora listed under the *Threatened Species Conservation Act 1995* (TSC Act) and / or *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) which are known to occur in the North-east Pilliga are *Bertya opposens*, *Diuris tricolor* (Pine Donkey Orchid), *Polygala linariifolia* (Native Milkwort), *Pterostylis cobarensis* (Greenhood Orchid), *Rulingia procumbens* and *Tylophora linearis*.

2 Methods

Potential habitat within the Pilliga Forest for the targeted threatened flora species is extensive. As such, the survey methodology stratified potential habitat in order to provide adequate data to estimate habitat preference, population size and distribution for the targeted threatened flora species without the need to physically survey the entire area.

2.1 VEGETATION TYPES

Vegetation mapping products available for this report consisted of landscape scale Namoi CMA regional vegetation community (RVC) mapping (ELA 2009) and forest type mapping (State Forests 2007). As the population modelling for this report required vegetation mapping for the entire Pilliga Forest (including conservation reserves), the Namoi CMA RVC vegetation types were utilised.

The following abbreviations in **Table 1** are used in the report for Namoi CMA RVC vegetation types:

Table 1 Namoi CMA RVC vegetation types

NAMOI CMA RVC VEGETATION TYPE	ABBREVIATION USED IN THIS REPORT
Broombush Shrubland of the Sand Plains of the Pilliga region, Brigalow Belt South	Broombush Shrubland
Ironbark - Brown Bloodwood - Black Cypress Pine Heathy Woodlands, Brigalow Belt South	Ironbark - Brown Bloodwood - Black Cypress Pine Heathy Woodlands
Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	Ironbark Shrubby Woodlands
Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland
Rough-barked Apple - Blakely's Red Gum Riparian Grassy Woodlands, Brigalow Belt South and Nandewar	Rough-barked Apple - Blakely's Red Gum Riparian Grassy Woodlands

2.2 TARGETED FLORA SURVEYS

2.2.1 Site selection

Sites were selected based on the specific habitat requirements of each threatened species (**Table 2**). The information on habitat requirements was collated from previous surveys within the north-east Pilliga Forest and habitat descriptions in the threatened species profiles (OEH 2011a) (**Figure 1**).

Table 2 Habitat preferences

SPECIES	HABITAT PREFERENCE (NAMOI RVCS)
<i>Bertya opposens</i>	<i>B. opposens</i> is known to occur in Jacks Creek State Forest in the Ironbark Shrubby Woodlands vegetation type.
<i>Diuris tricolor</i>	<i>D. tricolor</i> has been previously recorded in the following vegetation types within the north-east Pilliga Forest (Figure 1): • Rough-barked Apple - Blakely's Red Gum Riparian Grassy Woodlands • Ironbark Shrubby Woodlands
<i>Polygala linariifolia</i>	<i>P. linariifolia</i> has been previously recorded in the following vegetation types within the north-east Pilliga Forest (Figure 1): • Box - gum grassy woodlands, Brigalow Belt South and Nandewar • Ironbark Shrubby Woodlands • Rough-barked Apple - Blakely's Red Gum Riparian Grassy Woodlands
<i>Pterostylis cobarensis</i>	<i>P. cobarensis</i> has been previously recorded in the following vegetation types within the north-east Pilliga Forest (Figure 1): • Ironbark - Brown Bloodwood - Black Cypress Pine Heathy Woodlands • Fuzzy Box on Loams • Ironbark Shrubby Woodlands • Rough-barked Apple - Blakely's Red Gum Riparian Grassy Woodlands
<i>Rulingia procumbens</i>	<i>R. procumbens</i> has been previously recorded in the following vegetation types within the north-east Pilliga Forest (Figure 1): • Ironbark - Brown Bloodwood - Black Cypress Pine Heathy Woodlands • Ironbark Shrubby Woodlands
<i>Tylophora linearis</i>	<i>T. linearis</i> has been previously recorded in the following vegetation types within the north-east Pilliga Forest (Figure 1): • Broombush Shrubland • Ironbark - Brown Bloodwood - Black Cypress Pine Heathy Woodlands • Ironbark Shrubby Woodlands

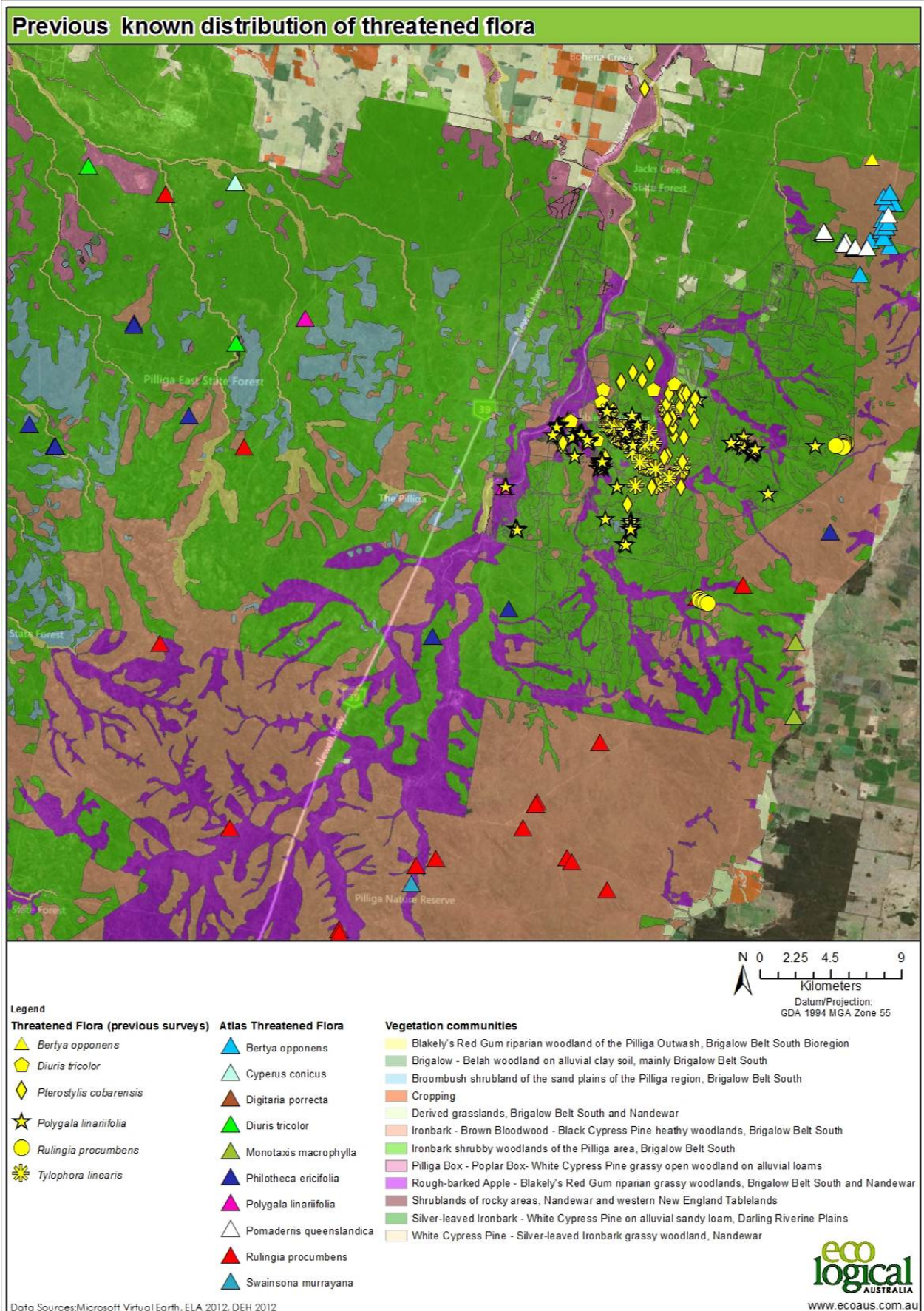


Figure 1: Previous known distribution of threatened flora

2.2.2 Survey techniques

Targeted surveys for threatened flora occurred over two weeks from 24 – 28 September 2012 and 8 – 12 October 2012, aligning with the flowering of cryptic orchid species. The surveys were undertaken by Eco Logical Australia (ELA) botanists Martin Sullivan, Will Introna, Brian Towle and Andrea Sabella (qualifications provided in **Table 3**). A total of 79 sites were surveyed over a range of habitat types, fire history and logging history in the north-east Pilliga Forest (**Figure 2**).

At each site, a team of two botanists traversed four fixed transects, with each transect covering approximately 250 m. Each transect involved surveying 100 m in from the road, 50 m parallel to the road and returning 100 m back to the road (**Figure 3**). Each team covered approximately 10 m width along each transect.

The location of each threatened flora individual (or where numerous individuals were encountered, a count of individuals within a 5 m radius) was recorded with a hand-held global positioning system (GPS). Details of vegetation type (canopy, midstorey and groundcover species), and life cycle attributes (e.g. flowering, fruiting, number of buds etc.) were recorded on printed pro-formas.

Table 3: ELA field teams and qualifications

STAFF MEMBER	ROLE	QUALIFICATIONS
Martin Sullivan	Senior Botanist / Team Leader	Bachelor of Science (Biodiversity and Conservation), Macquarie University, Sydney Accredited BioBanking Assessor under the TSC Act
Will Introna	Senior Botanist / Team Leader	Master of Science, University of Technology, Sydney. Bachelor of Science (Environmental Biology), University of Technology, Sydney Bachelor of Arts (Languages) (Hons), University of Sydney.
Brian Towle	Botanist	Bachelor of Environmental Science (Hons 1st Class), University of New South Wales
Andrea Sabella	Botanist	Bachelor of Environmental Science (Hons 1 st Class) Biology, University of New South Wales

2.2.3 Weather conditions

Rainfall in the two months preceding the survey was below the monthly average (calculated from 1870 to 2012). 14.2 mm and 12.2 mm were recorded at Narrabri Airport Weather Station (approximately 33 km north of the Pilliga Forest) in August and September respectively compared to the monthly median of 28.7 mm for August and 30.0 mm for September (BOM 2012). The median is used for rainfall as the high variability of daily rainfall has less effect on the median than the arithmetic mean.

Rainfall during the winter period leading in to the survey (during the developmental period for terrestrial orchids) was at or above average. 45.8 mm and 74.6 mm were recorded at Narrabri Airport Weather Station in June and July respectively compared to the monthly median of 43.0 for June and 38.2 mm for July (BOM 2012).

Temperatures in the two months preceding the survey were similar to monthly averages (BOM 2012).

Daily weather observations during surveys are shown in **Table 4**.

Table 4: Weather conditions during survey

DATE	MINIMUM TEMPERATURE (°C)	MAXIMUM TEMPERATURE (°C)	RAINFALL (MM)	RELATIVE HUMIDITY (%) AT 9AM	RELATIVE HUMIDITY (%) AT 3PM
24/9/2012	11.6	26.7	0	39	24
25/9/2012	4.7	27.0	0	40	9
26/9/2012	7.4	26.5	0	50	11
27/9/2012	9.8	27.5	0	55	20
28/9/2012	15.3	30.2	0	50	33
8/10/2012	6.4	26.1	0	57	20
9/10/2012	5.8	27.8	0	29	19
10/10/2012	7.8	30.6	0	41	17
11/10/2012	12.4	19.8	2.6	87	40
12/10/2012	6.0	17.5	4.8	81	45

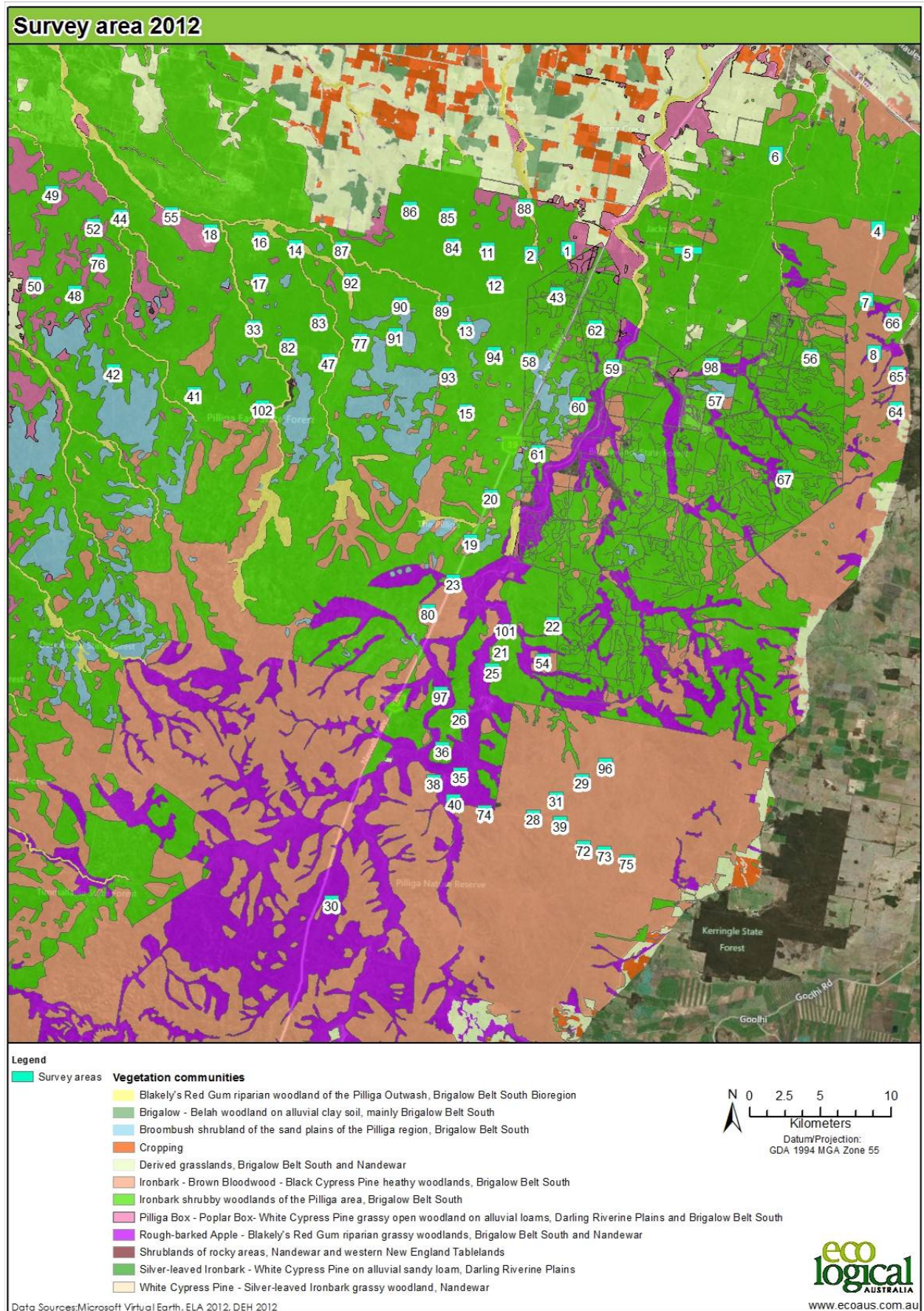


Figure 2: Survey area 2012

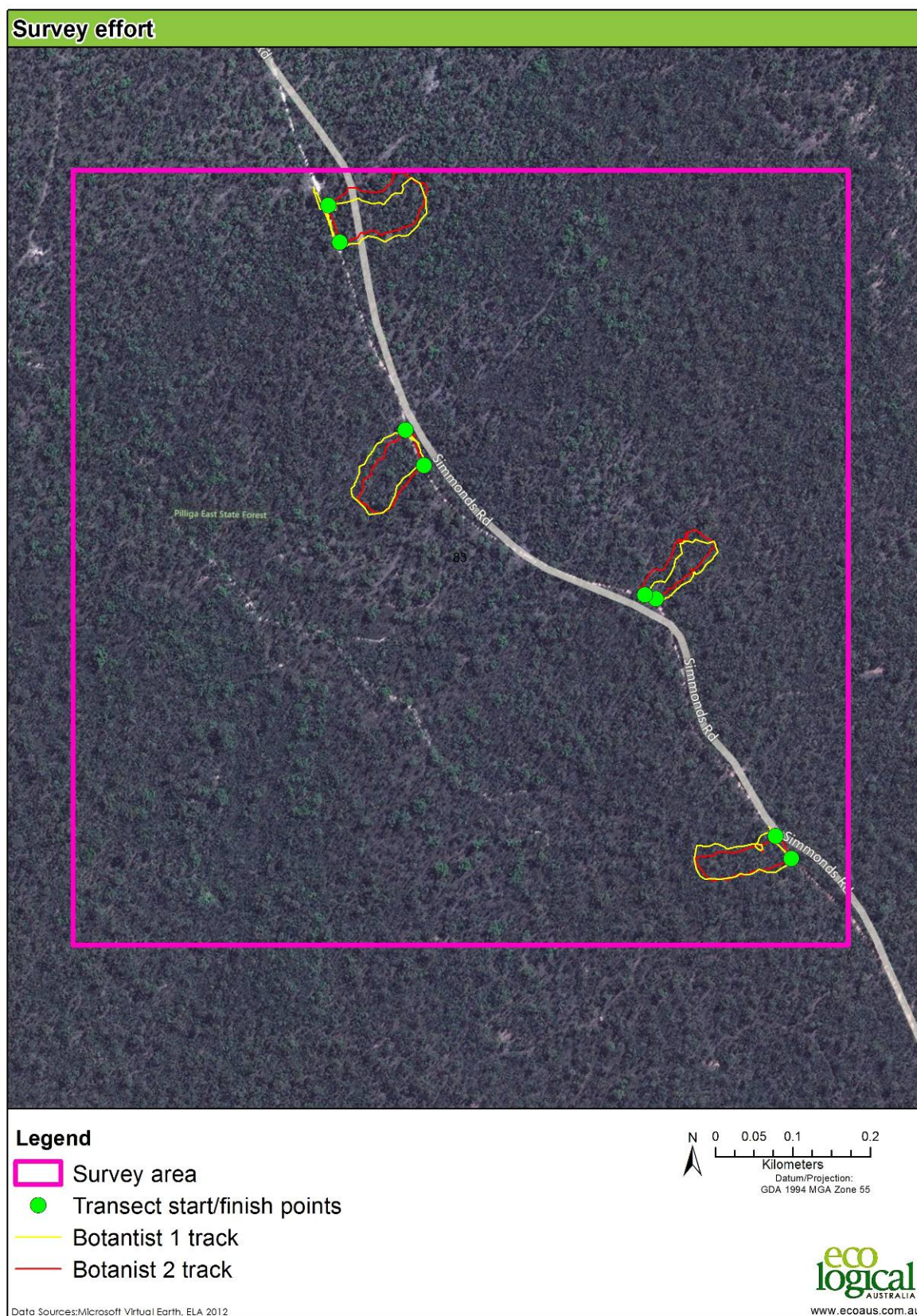


Figure 3: Survey effort

2.3 POPULATION CALCULATIONS

The population size and distribution of threatened flora in the Pilliga were estimated using the data collected from this survey. The calculations were undertaken using the process described in **Table 5**.

Table 5: Population calculation methodology

#	TASK	DATA USED	CALCULATIONS
1	Calculate area within the: area surveyed, survey footprint, survey boundary and Pilliga	CMA subregion boundaries	Area surveyed = length of transect (m) x 5 m width x number of surveyors Survey footprint = 79 sites x Area surveyed (m²) Survey boundary: develop boundary that encompasses all sites and calculate area within this boundary (m²) Pilliga: boundaries of CMA subregions Pilliga and Pilliga Outwash that encompass survey boundary and calculate area within this boundary (m²)
2	Calculate habitat available within each boundary listed in Task 1	Namoi CMA extant vegetation mapping (ELA 2009)*	Calculate area of each mapped vegetation type within each boundary listed in Task 1 Extract areas of preferred habitat types as found in results of this survey
3	Calculate estimations of population size for each threatened species at a regional scale	Area calculations from Task 2 Threatened species records from this survey	Estimated population size = number of individuals recorded in each habitat type / total area of suitable habitat surveyed x area of suitable habitat available

* Discussions on reliability of this data set in **Section 4**

3 Results

The field surveys traversed approximately 246 km over the two weeks covering an area of approximately 123 ha. This equates to an average transect length of 296 m, with a total survey area of approximately 2,500 m² per transect.

3.1 VEGETATION TYPES

Eight broad biometric vegetation types were identified during the survey which correlate with five Namoi RVCs (**Table 6**). At the time of writing, none of the communities identified during the survey are listed as threatened ecological communities (TECs) under the TSC Act or the EPBC Act.

Table 6: Vegetation communities identified in survey footprint

BIOMETRIC VEGETATION TYPE	NAMOI RVC	EXTENT IN NAMOI CMA (HA)
Blue-leaved Ironbark Heathy Woodland of the southern part of the Brigalow Belt South Bioregion	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	270,000
Broombush Shrubland of the Sand Plains of the Pilliga Region, Subtropical Sub-humid Climate Zone (Benson 141)	Broombush Shrubland of the Sand Plains of the Pilliga region, Brigalow Belt South	17,800
Brown Bloodwood - Cypress - Ironbark Heathy Woodland in the Pilliga Region of the Brigalow Belt South Bioregion	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	262,000
Mugga Ironbark - Pilliga Box - pine-Bulloak Shrubby Woodland on Jurassic Sandstone of outwash plains (Benson 255)	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	270,000
Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams Mainly of the Temperate (Hot Summer) Climate Zone (Benson 88)	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	89,600
Red Ironbark - Brown Bloodwood Shrubby Woodland of the Brigalow Belt South Bioregion	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	270,000
Rough-barked Apple Riparian Forb/Grass Open Forest of the Nandewar Bioregion	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	64,700
White Cypress Pine - Bulloak - Ironbark Woodland of the Pilliga Area of the Brigalow Belt South Bioregion	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	270,000

3.2 THREATENED SPECIES

Six threatened flora species were identified in the locality during the current survey (**Table 7**), all of which are listed under the TSC Act (five as Vulnerable and one as Endangered) with four also listed under the EPBC Act (three as Vulnerable and one as Endangered). **Figure 5** shows the location of all threatened flora recorded in the current and previous surveys undertaken by ELA for the project.

Table 7: Overview of threatened flora species recorded

SPECIES	TSC ACT	EPBC ACT	NUMBER OF INDIVIDUALS RECORDED			
			THIS SURVEY (ALONG TRANSECTS)	THIS SURVEY (OPPORTUNISTIC RECORDS)	PREVIOUS SURVEYS	TOTAL (2010 – 2012)
<i>Bertya opposens</i>	V	V	673	121#	50	844
<i>Diuris tricolor</i>	V	-	4	1	8	13
<i>Pterostylis cobarensis</i>	V	V	624	1	200	825
<i>Polygala linariifolia</i>	E	-	27	0	1,459	1,486
<i>Rulingia procumbens</i>	V	V	645	100	153	898
<i>Tylophora linearis</i>	V	E	33	0	161	194

The entire *B. opposens* population was not surveyed and is considered to be extensive

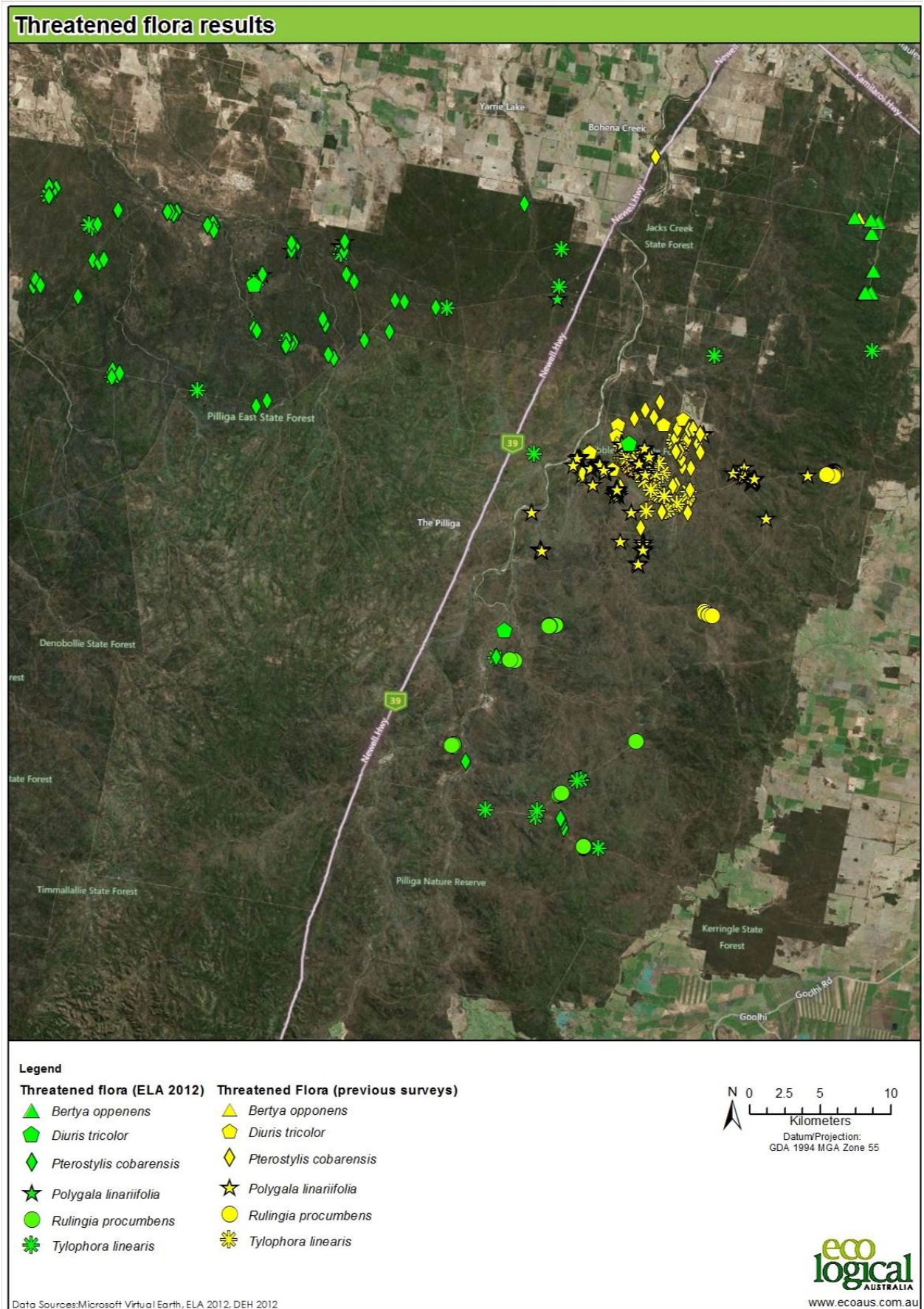


Figure 4: Threatened flora results

Population estimates for each species are outlined in **Table 8**. The results are discussed in detail for each species below. Population estimates for *B. opposens* were not modelled due to the habitat restrictions for the species and hence the potential overestimation when using vegetation mapping for habitat correlations.

Table 8: Population estimates of threatened flora species

AREA	SPECIES POPULATION ESTIMATE				
	<i>Diuris tricolor</i>	<i>Pterostylis cobarensis</i>	<i>Polygala linariifolia</i>	<i>Rulingia procumbens</i>	<i>Tylophora linearis</i>
Area surveyed	4	624	27	645	33
Survey footprint	290	48,158	1,960	55,678	2,496
Survey boundary	4,922	803,024	33,222	907,643	40,944
Pilliga	18,180	3,349,724	122,713	4,435,338	183,908

3.2.1 *Bertya opposens*

Distribution

B. opposens is restricted to habitat on slightly elevated ridges in Jacks Creek State Forest, in the north-east Pilliga Forest.

Physiographical / ecological associations

During previous surveys, *B. opposens* has been located in Red Ironbark – Brown Bloodwood Shrubby Woodland on elevated ridges. During this survey, it was also located in Blue-leaved Ironbark Heathy Woodland on elevated ridges. Both of these vegetation types are part of the Ironbark Shrubby Woodlands RVC. *B. opposens* was associated with a shrub layer also supporting *Philotheca ciliata*, *Phebalium squamulosum* and *Acacia* spp. and a sparse grassy groundcover.

Size of population

NPWS (2002) and the NSW Scientific Committee (2009) state that the Jacks Creek State Forest population of *B. opposens* is estimated to contain in excess of 5 million individuals, and that there are currently considered to be no threats to the Jacks Creek State Forest population.

B. opposens in Jacks Creek State Forest is a dominant species in the shrubby midstorey layer. Due to its restrictive distribution, habitat modelling using vegetation types across the Pilliga would not provide accurate estimation of population size.

Using data collected from transects that intersected *B. opposens* habitat only, a density of 162 individuals per ha was calculated. The variation in density calculated at each transect was high and fluctuated from 3 to 1,372 individuals per ha with the highest number of individuals located along existing tracks and associated with disturbance.

Tenure of the identified population

The population occurs in Jacks Creek State Forest and adjoining private land.

Plate 1 *B. opposens* fruit and foliagePlate 2 *B. opposens* habitat

3.2.2 *Diuris tricolor*

Distribution

D. tricolor is sporadically distributed on the western slopes of NSW, extending from south of Narrandera to the far north of NSW. *D. tricolor* has been located sporadically across the north-east Pilliga Forest (Figure 5).

Physiographical / ecological associations

Due to the relative scarcity of *D. tricolor* in the north-east Pilliga Forest, it is difficult to associate certain physiographical/ecological features with this species. During this survey, *D. tricolor* was recorded in White Cypress Pine – Bulloak – Ironbark Woodland dominated by *Eucalyptus crebra*. The midstorey was shrubby dominated by a combination of *Callitris glaucophylla*, *Allocasuarina luehmannii* and *Callitris endlicheri* at the three sites. The groundcover was predominantly sparse grasses and occasionally shrubby. Evidence of a low intensity fire and dense *E. crebra* regrowth was recorded at two of the sites.

D. tricolor has previously been recorded in a range of habitat types in the north-east Pilliga including grassy woodland and dense regrowth following fire.

D. tricolor has been recorded in the following vegetation types:

- Rough-barked Apple Riparian Forb/Grass Open Forest
- White Cypress Pine - Bulloak - Ironbark Woodland.

Size of population

One *D. tricolor* was observed opportunistically in full flower and four fruiting individuals were located during the current survey. During previous surveys, two individuals were observed in full flower and four fruiting individuals were located. The low numbers of *D. tricolor* located to date indicates a scattered occurrence in the north-east Pilliga Forest and makes an estimation of population size using habitat association difficult.

Using records of *D. tricolor* from this survey, it is estimated that 290 individuals could potentially occur in the suitable habitat present in the survey footprint. Within the survey boundary, the estimated population size is 4,922 individuals. In the Pilliga and Pilliga Outwash CMA subregions, the estimated population size is 18,180 individuals.

Tenure of the identified population

D. tricolor individuals have been recorded in Bibblewindi State Forest, Pilliga State Conservation Area (SCA) and Pilliga East SCA and a private landholding.



Plate 3 *Diuris tricolor*: flowering



Plate 4 *Diuris tricolor*: habitat

3.2.3 *Pterostylis cobarensis*

Distribution

P. cobarensis is known from the Nyngan, Cobar and Bourke district in the far western plains of NSW (OEH 2011a). There is one outlier record for *P. cobarensis* from 1989 adjacent to the Newell Highway approximately 20 km south of Narrabri, which was verified during surveys in 2011. However, the remainder of the records for this species are located at least 200 km to the south-west (OEH 2011b).

P. cobarensis was recorded across the north-east Pilliga Forest (**Figure 5**).

Physiographical / ecological associations

P. cobarensis was recorded in a broad range of vegetation types; however it was most often associated with a dense midstorey of *C. glaucophylla* and/or *A. luehmannii*. The groundcover was characterised by low shrub, grass and herb cover and high leaf litter with sandy soils. *P. cobarensis* was occasionally recorded within unburnt mosaics that remained within areas that were heavily burnt in the 2006/2007 bushfire.

P. cobarensis was recorded in the following vegetation types:

- Blue-leaved Ironbark Heathy Woodland
- Brown Bloodwood - Cypress - Ironbark Heathy Woodland
- Fuzzy Box on Loams
- Mugga Ironbark - Pilliga Box - pine- Bulloak Shrubby Woodland
- Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland
- Red Ironbark - Brown Bloodwood Shrubby Woodland
- Rough-barked Apple Riparian Forb/grass Open Forest
- White Cypress Pine - Bulloak - Ironbark Woodland.

Size of population

During this survey, 624 *P. cobarensis* were located along transects and one individual was located opportunistically. A number of *Pterostylis* spp. Individuals were located prior to flowering and hence identification to species level was not possible.

Using records of *P. cobarensis* from this survey, it is estimated that 48,158 individuals could occur in the suitable habitat present in the survey footprint. In the survey boundary, the estimated population size is 803,024 individuals. In the Pilliga and Pilliga Outwash CMA subregions, the estimated population size is 3,349,724 individuals.

Tenure of the identified population

P. cobarensis has been located in Bibblewindi State Forest (162 individuals), Crown Land (8 individuals), Pilliga East SCA (4 individuals), Pilliga East State Forest (28 individuals), Pilliga East State Forest (341 individuals), Pilliga National Park (68 individuals), Pilliga Nature Reserve (12 individuals), Pilliga SCA (236 individuals) and a private landholding (3 individuals).



Plate 5 *P. cobarensis*: flowering



Plate 6 *P. cobarensis*: habitat

3.2.4 *Polygala linariifolia*

Distribution

P. linariifolia is distributed from the north of Copeton Dam (northeast of Narrabri) and the Warialda area to Southern Queensland (OEH 2011a). *P. linearifolia* is also found on the NSW north coast near Casino and Kyogle with an isolated population in far western NSW near Weebah Gate (OEH 2011a). Prior to surveys undertaken in 2011, the nearest known record of *P. linariifolia* was approximately 122 km to the north east of the Pilliga Forest (OEH 2011b).

P. linariifolia has been recorded sporadically in the north-east Pilliga Forest (**Figure 5**). The distribution of this species is likely to be highly dependent on flooding and potentially also fire history due to the ephemeral nature of the species. The distribution of this species is likely to be much greater than that recorded during this season (due to conditions), with the majority of the population persisting in the soil seed bank.

Physiographical / ecological associations

P. linariifolia typically occurs in dry eucalypt forest and woodland dominated by *Eucalyptus caleyi*, *E. dealbata* and *Callitris* spp. with sandy soils (OEH 2011a). During this survey, *P. linariifolia* was recorded in White Cypress Pine - Bullock - Ironbark Woodland and Mugga Ironbark - Pilliga Box - pine-Bullock shrubby woodland. It was associated with a dense midstorey of *C. glaucophylla* and/or *A.*

luehmannii and a grassy understorey. However, previous surveys have recorded *P. linariifolia* a range of vegetation types, mostly characterised by a grassy understorey.

P. linariifolia has been recorded in the following vegetation types:

- Fuzzy Box on Loams
- Mugga Ironbark - Pilliga Box - pine- Bulloak shrubby
- Red Ironbark - Brown Bloodwood Shrubby Woodland
- Rough-barked Apple Riparian Forb/grass Open Forest
- White Cypress Pine - Bulloak - Ironbark Woodland.

Observations of the population of *P. linariifolia* from December 2010 show great fluctuations in population size and distribution. It is likely that the ecology of this species is driven by flood events, with seed being dispersed by overland flow. Significant flooding in November/December 2010 may have widely distributed the propagules of this species throughout the north-east Pilliga, leading to the large numbers of individuals recorded in December 2010. Due to the nature of the Pilliga Forests, it is not inconceivable that *P. linariifolia* may also be a fire ephemeral species. Most of the individuals observed during the surveys area considered to be annual only, with only those individuals in sheltered situations persisting for more than one season. *P. linariifolia* has been observed flowering/fruitleting in January, April and October in the north-east Pilliga Forest.

Size of population

During this survey only 27 *P. linariifolia* individuals were located with a sporadic distribution across the north-east Pilliga Forest.

Utilising records of *P. linariifolia* from this survey, a population estimate may be largely unrealistic due to the persistence of this species within the seed bank. However, the initial estimate of population size within the survey footprint is 1, 960 individuals. This number compares to the 2010 survey when 1,435 individuals were recorded, indicating that the population size within the persistent seed bank may be considerably higher. In the survey boundary, the estimated population size is 33,222 individuals. In the Pilliga and Pilliga Outwash CMA subregions, the estimated population size is 122,713 individuals.

Tenure of the identified population

P. linariifolia has been located in Bibblewindi State Forest, Pilliga East State Forest, Pilliga SCA and a private landholding.

Plate 7 *P. linariifolia*: floweringPlate 8 *P. linariifolia*: habitat

3.2.5 *Rulingia procumbens*

Distribution

R. procumbens is known from the Dubbo, Mendooran and Gilgandra region but has also been found in the Pilliga and Nymagee areas (OEH 2011a). Recent collections have been made from the Upper Hunter and Goonoo SCA in response to bushfires in 2007 (OEH 2011a). The nearest record for *R. procumbens* is within the Pilliga Nature Reserve (OEH 2011b).

R. procumbens has been recorded in the southern areas of the north-east Pilliga Forest (**Figure 5**).

Physiographical / ecological associations

R. procumbens typically occurs in sandy sites, often along roadsides (OEH 2011c). During this survey, *R. procumbens* was recorded in Brown Bloodwood - Cypress - Ironbark Healthy Woodland and Red Ironbark - Brown Bloodwood Shrubby Woodland. It was mainly found along roadsides although large numbers were also found in areas with dense low shrubs dominated by *Acacia pilligaensis* (Pilliga Wattle) and *Chloanthes parviflora* with evidence of recent fire (within the past five years). Many of the locations were observed to be down slope of rocky hills on red sand, although this was not always the case. All populations were observed to be flowering during the survey.

Previous surveys have located two populations of *R. procumbens*, both situated down slope from rocky hills. Soil types supporting these populations were red sand and sandy/rocky soils. One population was found along a roadside and extended at least 300 m from the road edge with the second population predominantly located more than 600 m from the road access. These populations were found in the same vegetation types as recorded during this survey.

Size of population

During this survey, 645 *R. procumbens* were located along transects and 100 individuals were located opportunistically. During previous surveys in 2010, 414 *R. procumbens* individuals were recorded. Due to the prostrate nature of *R. procumbens* and numerous plants present within any one area, it is difficult to accurately count the number of individuals. Counts for this species were estimated by counting the number of separate clumps.

Using records of *R. procumbens* found along transects from this survey, the estimate of population size within the survey footprint is 55,678 individuals. In the survey boundary, the estimated population size is 907,643 individuals. In the Pilliga and Pilliga Outwash CMA subregions that make up the locality, the estimated population size is 4,435,338 individuals. These numbers do not take into consideration the numbers of *R. procumbens* recorded whilst driving between transects that were recorded.

opportunistically although some transects intersected roadside populations to take into consideration the species preference for disturbed habitat.

Tenure of the identified population

R. procumbens has been located in Pilliga East State Forest (153 individuals recorded in 2010), Pilliga East SCA (459 individuals recorded in this survey, 261 individuals recorded in 2010) and Pilliga Nature Reserve (310 individuals recorded in this survey).



Plate 9 *R. procumbens* flowering



Plate 10 *R. procumbens* habitat

3.2.6 *Tylophora linearis*

Distribution

T. linearis is known from in the Barraba, Mendooran, Temora and West Wyalong districts in the northern and central western slopes of NSW, including Pilliga West State Forest (OEH 2011a).

T. linearis was recorded across the north-east Pilliga Forest (**Figure 5**).

Physiographical / ecological associations

T. linearis grows in dry scrub and open forest dominated by *Eucalyptus fibrosa*, *E. sideroxylon*, *E. albens*, *Callitris endlicheri*, *C. glaucophylla* and *Allocasuarina luehmannii* (OEH 2011a). During this survey, *T. linearis* was recorded in a broad range of vegetation types often associated with an ironbark canopy, shrubby midstorey dominated by *C. glaucophylla*, *A. luehmannii* and a sparse grassy groundcover. *T. linearis* was often found growing within *Gahnia aspera* (Rough Saw-sedge), around logs or the base of canopy regrowth. Sites where *T. linearis* was found often had evidence of disturbance from forestry or recent fire.

During previous surveys, *T. linearis* was recorded in a broad range of vegetation types; however it was most often found in areas of vegetation which had been heavily burnt by the 2007 wildfire, along track edges and in recently cut road drains. *T. linearis* was also recorded in unburnt vegetation. *T. linearis* was generally associated with regrowth *E. crebra* (Narrow-leaved Ironbark), *Acacia spectabilis* (Mudgee Wattle), *A. deanei* (Dean's Wattle), *A. luehmannii*, *Melaleuca erubescens*, *M. uncinata* (Broombush) and *Gahnia aspera*. *T. linearis* was frequently found at the base of coppicing *E. crebra*.

T. linearis was recorded in the following vegetation types:

- Blue-leaved Ironbark Heathy Woodland

- Broombush Shrubland
- Brown Bloodwood - Cypress - Ironbark Heathy Woodland
- Mugga Ironbark - Pilliga Box - pine- Bulloak Shrubby Woodland
- Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland
- Red Ironbark - Brown Bloodwood Shrubby Woodland
- White Cypress Pine - Bulloak - Ironbark Woodland.

Size of population

33 *T. linearis* individuals were located during this survey. 161 individuals have been recorded during previous surveys.

Using the records of *T. linearis* from this survey, the estimate of population size within the survey footprint is 2,496 individuals. In the survey boundary, the estimated population size is 40,944 individuals. In the Pilliga and Pilliga Outwash CMA subregions, the estimated population size is 183,908 individuals.

Tenure of the identified population

T. linearis has been located in Pilliga East State Forest (9 individuals), Pilliga SCA (9 individuals), Pilliga East SCA (1 individual) and Pilliga Nature Reserve (12 individuals) and Bibblewindi State Forest (2 individuals).



Plate 11 *Tylophora linearis*: flowering



Plate 12 *Tylophora linearis*: habitat

3.3 SIGNIFICANT FLORA

3.3.1 *Lepidium monoplocoides*

In addition to those species targeted as part of this survey, a population of *Lepidium monoplocoides* (Winged Peppercress) was recorded in Pilliga National Park. *L. monoplocoides* is listed as Endangered under the TSC Act and EPBC Act. This is a significant observation, as apart from a record from the south-west slopes from 1995, this species has not been recorded since 1950 (SEWPaC 2012).

A voucher specimen for *L. monoplocoides* has been filed with the National Herbarium of New South Wales.

3.3.2 *Pomaderris queenslandica*

A large population of *Pomaderris queenslandica* was recorded in Jacks Creek State Forest in similar habitat to *Bertya opposens*. *P. queenslandica* is listed as Endangered under the TSC Act.

As this species was not previously considered to occur within the locality, it did not form part of the targeted surveys and only incidental observations were made. Habitat within Jacks Creek State Forest is similar to that present across the eastern and southern parts of the Pilliga Forest. A voucher specimen for *P. queenslandica* has also been filed with the National Herbarium of New South Wales.

4 Discussion and conclusion

This survey has greatly increased understanding of threatened flora species distribution within the north-east Pilliga Forest and provides important context for the assessment of impacts for CSG development.

Data from field surveys was utilised to estimate threatened species population sizes in the Pilliga Forest through a stratified survey approach based on areas of suitable habitat.

Comparison of threatened flora observations across seasons is influenced by the cryptic nature of majority of the target species and their reliance on fluctuating climatic factors including fire, flood and rainfall. Only data collected during this current survey was utilised in the population estimation calculations due to the specific survey and assessment approach employed.

The extreme fire event in 2007 has clearly impacted on the threatened flora populations in the Pilliga Forest with significantly less threatened flora individuals located within heavily burnt areas. This factor influenced the survey design, with the second week of survey being modified to focus on those areas considered more likely to contain threatened flora habitat. Due to the nature of the Pilliga Forest, it is likely that the populations of threatened flora are adapted to the pressure of temporary habitat loss from bushfire. Habitat heavily affected by fire is likely to provide habitat for these species in the future as microhabitat features (such as leaf litter) develop.

The population modelling in this report was undertaken using Namoi CMA RVC vegetation mapping (ELA 2009) which is only considered to be only accurate at a landscape scale. While the population estimates contained within this report are considered conservative, care must be taken in the interpretation and use of this data. Based on the results of this survey and population estimations, it has been found that the Pilliga Forest supports a much larger number of threatened flora populations than what was previously known.

It is recommended that targeted surveys for all threatened flora species identified be undertaken in the appropriate season for CSG development in the Pilliga Forest in order to avoid and minimise impacts on these species.

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Appendix A:

SITE	TRANSECT	BIOMETRIC VEGETATION TYPE	NAMOI RVC TYPE	CANOPY	MIDSTOREY	GROUND	STRUCTURE	THREATENED SPECIES	COMMENTS
1	a	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Grassy woodland		Soil disturbance from forestry
1	b	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Grassy woodland		Soil disturbance from forestry
1	c	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i> , <i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Grassy woodland	<i>T. linearis</i> x 2	Shrubby midstorey to 5 m
1	d	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i> , <i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Grassy woodland		
2	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. pilligaensis</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Grassy woodland		Disturbance from tracks and forestry. High grass cover
2	b	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. chloroclada</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i> , <i>Acacia</i> sp.	Grassy	Grassy woodland		
2	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>C. glaucophylla</i>	<i>C. glaucophylla</i> , <i>Acacia</i> sp.	Grassy	Grassy woodland		
2	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>C. glaucophylla</i>	<i>C. glaucophylla</i> , <i>Acacia</i> sp.	Grassy	Grassy woodland		<i>E. chloroclada</i> at midpoint of transect
4	a	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i>	<i>P. ciliata</i> , <i>P. squamulosum</i> , <i>M. uncinata</i>	Grassy	Forest with heathy / shrubby understorey	<i>B. opposens</i>	
4	b	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i>	<i>L. polygalifolium</i> subsp. <i>transmontanum</i>	Grassy	Grassy woodland		
4	c	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>C. Trachyphloia</i> , <i>E. fibrosa</i> , <i>A. burrowii</i>	<i>P. ciliata</i> , <i>B. opposens</i>	Grassy	Forest with heathy understorey	<i>B. opposens</i>	100's of <i>B. opposens</i>
4	d	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i>	<i>P. squamulosum</i> , <i>P. ciliata</i>	Grassy	Open woodland with shrubby / heathy understorey	<i>B. opposens</i>	
5	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. beyeriana</i>	<i>C. glaucophylla</i> , <i>A. leiocalyx</i> subsp. <i>leiocalyx</i>	Grassy	Grassy forest		Relatively tall, denser canopy
5	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. beyeriana</i>	<i>C. glaucophylla</i>	Grassy	Grassy woodland		Forestry disturbance
5	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. beyeriana</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Grassy woodland		
5	d	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>C. trachyphloia</i>	<i>C. endlicheri</i>	Shrubby dominated by <i>G. floribunda</i> , <i>C. tetragona</i>	Low and mid shrubby open woodland		
6	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>P. squamulosum</i> , <i>A. luehmannii</i> , <i>Acacia</i> sp.	Grassy	Mid shrubby grassy woodland		Open and grassy
6	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i> , <i>A. leiocalyx</i> subsp. <i>leiocalyx</i>	Grassy	Mid shrubby grassy woodland		Open and grassy
6	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i> , <i>A. leiocalyx</i> subsp. <i>leiocalyx</i>	Grassy	Mid shrubby grassy woodland		
6	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i> , <i>A. leiocalyx</i> subsp. <i>leiocalyx</i>	Grassy	Mid shrubby grassy woodland		
7	a	Blue-leaved Ironbark heathy woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. nubila</i>	4-6 m: <i>Acacia</i> sp. 1-4 m: <i>Philotheca</i> sp., <i>P. squamulosum</i> , <i>B. opposens</i> , <i>Acacia</i> sp.	sparse grass	Shrubby woodland	<i>B. opposens</i>	<i>B. opposens</i> is very abundant
7	b	Blue-leaved Ironbark heathy woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. nubila</i> , <i>C. trachyphloia</i>	4-6 m: <i>Acacia</i> sp. 1-4 m: <i>Philotheca</i> sp., <i>B. opposens</i> , <i>P. squamulosum</i> , <i>Acacia</i> sp.	sparse grass	Shrubby woodland	<i>B. opposens</i>	
7	c	Blue-leaved Ironbark heathy woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. nubila</i>	3-4 m: <i>Acacia</i> sp. 0-2 m: <i>P. squamulosum</i> , <i>Acacia</i> sp.	Grassy	Shrubby woodland		<i>P. mitchellii</i>
7	d	Blue-leaved Ironbark heathy woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. nubila</i>	0-2 m: <i>P. squamulosum</i> , <i>Pomaderris</i> sp. 0-1 m: <i>Acacia</i> sp., <i>Philotheca</i> sp., <i>Babingtonia</i> sp., <i>Bursaria spinosa</i> subsp. <i>spinosa</i>	Grassy	Woodland		

SITE	TRANSECT	BIOMETRIC VEGETATION TYPE	NAMOI RVC TYPE	CANOPY	MIDSTOREY	GROUND	STRUCTURE	THREATENED SPECIES	COMMENTS
8	a	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. chloroclada</i> , <i>C. trachyphloia</i> , <i>E. fibrosa</i>	2 m: <i>A. luehmannii</i> and dense lower shrubs	Grassy / herbaceous	Open woodland		
8	b	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. fibrosa</i> , <i>E. chloroclada</i> , <i>E. pilligaensis</i>	0-3 m: <i>Melaleuca</i> sp., <i>Philotheca</i> sp.	<i>G. rotundifolia</i> , grassy	Open woodland	<i>T. linearis</i>	No <i>E. blakelyi</i> in site
8	c	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. fibrosa</i>	1-3 m: <i>C. tetragona</i> , <i>Philotheca</i> sp., <i>Acacia</i> sp.	<i>G. rotundifolia</i> , grassy	Open woodland		
8	d	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>C. trachyphloia</i> , <i>E. fibrosa</i> , <i>E. chloroclada</i>	<i>Leptospermum</i> sp., <i>P. squamulosum</i> , <i>Philotheca</i> sp.	Grassy / herbaceous	Woodland		Lots of logs and litter
11	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. pilligaensis</i> , <i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i> , <i>C. endlicheri</i>	Grassy	Grassy woodland		More open at midpoint of transect
11	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i>	Grassy	Grassy / shrubby woodland		
11	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i>	Grassy	Grassy woodland		
11	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i>	Grassy	Grassy woodland		Disturbance from forestry
12	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	Grassy	Shrubby woodland		Disturbance from forestry and pigs
12	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	Grassy	Shrubby woodland		Disturbance from forestry and pigs
12	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i>	Grassy	Shrubby woodland		Disturbance from wide logging tracks
12	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i>	Grassy	Shrubby woodland		Disturbance from wide logging tracks with deep tyre treads indicating work done during wet conditions
13	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	Grassy / shrubby ecotone	Grassy woodland		Ecotone between Broombush woodland adjacent and <i>E. crebra</i>
13	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	Grassy / shrubby	Grassy woodland		
13	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	Grassy / shrubby	Grassy woodland		
13	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	Grassy / shrubby	Grassy woodland		
14	a	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>A. floribunda</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	<i>C. tetragona</i>	Shrubby woodland		<i>P. mutica</i> , <i>P. setifera</i> , <i>P. minor</i>
14	b	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i> , <i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	<i>C. tetragona</i> , sparse grass	Mid shrubby woodland	<i>P. cobarensis</i> x 11	
14	c	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i> , <i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Open woodland	<i>P. cobarensis</i> x 27, <i>P. linariifolia</i> x 2	<i>P. sp.</i> "Big Red" x 7
14	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Open woodland	<i>P. cobarensis</i> x 4	Open canopy but preferred <i>P. cobarensis</i> habitat
15	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>D. viscosa</i> , <i>A. luehmannii</i>	<i>G. aspera</i> , grassy	Mid shrubby woodland		Fire disturbance, low orchid habitat
15	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. caroleae</i> , <i>A. luehmannii</i> , <i>D. viscosa</i>	<i>G. aspera</i> , grassy	Mid shrubby woodland		Fire disturbance, low orchid habitat
15	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. fibrosa</i>	<i>A. caroleae</i> , <i>A. deanei</i>	sparse grass	Mid shrubby woodland		Fire disturbance, low orchid habitat, potential <i>T. linearis</i> habitat
15	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. caroleae</i> , <i>D. viscosa</i>	Grassy / shrubby	Low shrubby woodland		Recovery from fire with dense shrubs including <i>A. caroleae</i>
16	a	Not surveyed	Not surveyed						Site skipped but <i>P. sp.</i> "Big Red" observed from road
17	a	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i> , <i>E. crebra</i>	<i>C. glaucophylla</i>	<i>C. tetragona</i> , grassy	Mid shrubby woodland	<i>P. cobarensis</i> x 5, <i>P. linariifolia</i>	
17	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Mid shrubby open woodland	<i>T. linearis</i> x 2	
17	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. sideroxylon</i>	<i>C. glaucophylla</i>	Grassy / shrubby	Mid shrubby woodland	<i>D. tricolor</i> (up to 3), <i>T.</i>	Low heat fire evidence

SITE	TRANSECT	BIOMETRIC VEGETATION TYPE	NAMOI RVC TYPE	CANOPY	MIDSTOREY	GROUND	STRUCTURE	THREATENED SPECIES	COMMENTS
								<i>linearis</i> , <i>P. linariifolia</i>	
17	d	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. chloroclada</i> , <i>C. glaucophylla</i>	<i>C. glaucophylla</i> , <i>C. tetragona</i>	sparse grass	Mid shrubby woodland		Opposite side of the road has evidence of severe fire. High density of <i>A. spectabilis</i> and burnt trees
18	a	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	<i>C. tetragona</i> , sparse grass	Mid shrubby forest	<i>P. cobarensis</i> x 22	Pilliga NR
18	b	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. chloroclada</i>	<i>C. glaucophylla</i>	<i>C. tetragona</i> , grassy	Mid shrubby open woodland	<i>P. cobarensis</i> x 4	<i>P. sp.</i> "Big Red" x 5, Gilgai's
18	c	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>A. luehmannii</i> , <i>E. pilligaensis</i> , <i>E. chloroclada</i>	<i>A. luehmannii</i>	sparse grass	Shrubby woodland	<i>P. cobarensis</i>	Adjoining large Gilgai
18	d	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Mid shrubby woodland	<i>P. cobarensis</i> x 4	<i>P. sp.</i> "Big Red" x 41
19	a	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i>	<i>C. endlicheri</i>	Low shrubby	Low shrubby woodland		Recently burnt (~5 years) and regenerating with abundant dead standing stems
19	b	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i>	None	Low shrubby, <i>A. subglauc</i> var. <i>filiformis</i>	Low shrubby woodland		Regenerating from very recent fire (1-2 years)
19	c	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i>	None	Low shrubby, <i>A. caroleae</i>	Low shrubby woodland		Regenerating from recent fire (~5 years)
19	d	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i>	<i>E. dwyeri</i>	Low shrubby heath, <i>A. caroleae</i> , <i>C. tetragona</i>	Low shrubby woodland		Regenerating from recent fire (~5 years)
20	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>		Grassy	Grassy open woodland		Regenerating from very recent fire (1-2 years)
20	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. caroleae</i>	Low shrubs, <i>W. cheelii</i>	Low shrubby open woodland		Regenerating from recent fire (~5 years)
20	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. caroleae</i>	Low shrubs, <i>W. cheelii</i>	Low shrubby open woodland		Regenerating from recent fire (~5 years)
20	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. caroleae</i>	Low shrubs, <i>W. cheelii</i>	Low shrubby open woodland		Regenerating from recent fire (~5 years)
21	a	White Cypress Pine - Bulloak - Ironbark Woodland / Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	1. <i>E. crebra</i> 2. <i>E. fibrosa</i>	1. <i>A. caroleae</i> 2. <i>A. caroleae</i>	1. Grassy 2. 1.5 m heathy	Shrubby open woodland		<i>R. procumbens</i> east from this point on road
21	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Open woodland	<i>P. cobarensis</i> x 3, <i>T. linearis</i>	
21	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Open woodland		
21	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Open woodland		
22	a	White Cypress Pine - Bulloak - Ironbark Woodland / Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	1. <i>E. crebra</i> 2. <i>E. fibrosa</i> , <i>C. trachyphloia</i>	1. <i>C. glaucophylla</i> , <i>A. luehmannii</i> 2. <i>C. endlicheri</i>	1. sparse grass 2. sparse heath	1. Mid shrubby woodland 2. Woodland		Evidence of low grass fire opposite track
22	b1	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	1. <i>E. crebra</i>	1. <i>C. glaucophylla</i>	1. sparse grass, <i>P. foliolosa</i>	1. Mid shrubby woodland		<i>R. procumbens</i> found in undisturbed area subject to light grass fire (> 3 years)
22	b2	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	2. <i>E. fibrosa</i>	2. <i>C. endlicheri</i>	2. sparse heath	2. Woodland	2. <i>R. procumbens</i> x 3	
22	c	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i>	<i>C. endlicheri</i>	sparse heath	Woodland		Slight rock outcropping sloping site to south
22	d	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i>	1. <i>C. endlicheri</i> 2. <i>absent / burnt</i>	1. sparse heath 2. Heath	Open woodland	2. <i>R. procumbens</i> x 377	Large population of <i>R. procumbens</i> in burnt area (< 5 years) north of track. Habitat is heathy, dominated by <i>A. pilligaensis</i> , <i>C. parviflora</i>
23	a	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. blakelyi</i> , <i>A. floribunda</i>	<i>Kunzea sp.</i> , <i>Acacia sp.</i>	Grassy	Woodland		

SITE	TRANSECT	BIOMETRIC VEGETATION TYPE	NAMOI RVC TYPE	CANOPY	MIDSTOREY	GROUND	STRUCTURE	THREATENED SPECIES	COMMENTS
23	b	White Cypress Pine - Bulloak - Ironbark Woodland / Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. beyeriana</i>	<i>C. glaucophylla</i> , <i>Acacia</i> sp.	Gahnia sp., grassy	Woodland		
23	c	White Cypress Pine - Bulloak - Ironbark Woodland / Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. beyeriana</i>	<i>Acacia</i> sp., <i>C. tetragona</i> , <i>Hibbertia</i> sp., <i>Pultenaea</i> sp.	sparse grass	Open woodland		
23	d	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. blakelyi</i> , <i>A. floribunda</i>	<i>Kunzea</i> sp., <i>Acacia</i> sp.	sparse grass	Open woodland		
24	b	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>E. rossii</i> , <i>C. trachyphloia</i> , <i>E. macrorhyncha</i>	<i>C. endlicheri</i> , <i>A. pilligaensis</i>	1.5 m heathy	Open woodland		Fire over ten years ago
25	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. chloroclada</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Mid shrubby forest		Site relocated
25	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. chloroclada</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse heath	Mid shrubby woodland		Sandy yellow / orange soil. Plot 200 m long
26	a	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	1. <i>E. chloroclada</i> , <i>A. floribunda</i> 2. <i>E. fibrosa</i>	<i>C. endlicheri</i> , <i>C. glaucophylla</i>	Grassy / low shrubs	Shrubby woodland		Walked 400 m. Site discontinued due to lack of suitable habitat. Site started in <i>E. chloroclada</i> / <i>A. floribunda</i> and crossed into <i>E. fibrosa</i> shrubby woodland
27	a	Not surveyed	Not surveyed						Site not surveyed due to lack of suitable habitat. Very dense young <i>C. glauca</i> .
28	a	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. beyeriana</i> , <i>E. fibrosa</i> , <i>C. trachyphloia</i> , <i>E. chloroclada</i> , <i>A. luehmannii</i>		1 m heathy	Heathy open woodland		Burnt > 5 years
28	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>A. spectabilis</i>	sparse grass	Mid shrubby open woodland	<i>T. linearis</i>	
28	c	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>A. leiocarpa</i>	None	Low heath	Heath woodland		High bird activity
28	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>E. crebra</i> , <i>A. luehmannii</i>	sparse grass	Mid shrubby woodland	<i>T. linearis</i> x 2	<i>P. woollsii</i>
29	a	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. fibrosa</i>	<i>C. glaucophylla</i> , <i>A. caroleae</i>	Grassy / heathy	Mid shrubby forest	<i>T. linearis</i> x 5	<i>P. woollsii</i>
29	b	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. fibrosa</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Mid shrubby forest	<i>T. linearis</i> x 2	Red / orange lateritic soil
29	c	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i>	<i>C. endlicheri</i>	sparse heath	Mid shrubby open woodland		Yellow soil
29	d	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i>	<i>A. pilligaensis</i>	Heathy	Shrubby open woodland		
30	a	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>E. blakelyi</i>	<i>A. tindaleae</i>	sparse grass / low shrubs	Shrubby woodland		
30	b	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. macrorhyncha</i> , <i>E. chloroclada</i>	<i>C. endlicheri</i> , <i>A. tindaleae</i>	sparse grass / low shrubs	Shrubby woodland		
30	c	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i>	<i>C. endlicheri</i> , <i>A. caroleae</i>	sparse grass / low shrubs	Shrubby woodland		
30	d	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. macrorhyncha</i> , <i>E. chloroclada</i>	<i>C. endlicheri</i>	sparse grass / low shrubs	Shrubby woodland		
31	a	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>A. leiocarpa</i> , <i>E. blakelyi</i> , <i>E. sideroxylon</i>	<i>A. pilligaensis</i> , <i>L. polygalifolium</i>	Heathy	Heathy woodland and drainage line		
31	b	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	1. <i>E. beyeriana</i> 2. <i>A. leiocarpa</i> , <i>E. chloroclada</i>	None	Low heath	Heathy woodland		
31	c	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. beyeriana</i> , <i>E. dwyeri</i>	sparse <i>C. endlicheri</i> , <i>A. diminuta</i> subsp. <i>diminuta</i> , <i>A. pilligaensis</i>	Low heath	Heathy woodland	<i>R. procumbens</i> x 42	
31	d	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i>	<i>A. pilligaensis</i> , <i>E. dwyeri</i>	Low heath	Heathy woodland	<i>R. procumbens</i> x 100	Opportunistic counts or <i>R. procumbens</i> on roadside as well
33	a	White Cypress Pine - Bulloak - Ironbark Woodland / Rough-barked Apple Riparian Forb/Grass Open Forest	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South / Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. crebra</i> , <i>A. floribunda</i> , <i>E. chloroclada</i> , <i>E. blakelyi</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass with shrubs along creek	Shrubby woodland		
33	b	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. chloroclada</i> , <i>A. floribunda</i>	<i>C. glaucophylla</i>	Shrubby with <i>C. tetragona</i>	Shrubby woodland	<i>P. cobarensis</i>	<i>P. boormanii</i> , <i>P. setifera</i> and hybrids

SITE	TRANSECT	BIOMETRIC VEGETATION TYPE	NAMOI RVC TYPE	CANOPY	MIDSTOREY	GROUND	STRUCTURE	THREATENED SPECIES	COMMENTS
33	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass with occasional <i>C. tetragona</i>	Shrubby woodland	<i>P. cobarensis</i> x 2	<i>P. boormanii</i>
33	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Shrubby woodland	<i>P. cobarensis</i> x 46	<i>P. boormanii</i> , <i>P. setifera</i>
35	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. chloroclada</i>	<i>A. luehmannii</i>	sparse grass	Woodland		
35	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. chloroclada</i>	<i>A. luehmannii</i>	sparse grass	Woodland		
35	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. melliodora</i> , <i>E. crebra</i> , <i>E. chloroclada</i>	<i>C. glaucophylla</i>	Grassy	Grassy woodland		
35	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. melliodora</i> , <i>E. crebra</i> , <i>E. chloroclada</i>	<i>C. glaucophylla</i>	Grassy	Grassy woodland		
36	a	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i>	<i>C. glaucophylla</i> , <i>C. tetragona</i>	Low shrubs	Shrubby woodland	<i>R. procumbens</i> x 6	
36	b	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i>	<i>C. glaucophylla</i> , <i>C. tetragona</i>	Low shrubs	Shrubby woodland		
36	c	Not surveyed	Not surveyed						site discontinued due to lack of suitable habitat
38	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i>	sparse grass	Woodland		
38	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. chloroclada</i>	<i>C. glaucophylla</i>	sparse grass	Woodland		
38	c	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. crebra</i> , <i>E. fibrosa</i> , <i>C. trachyphloia</i>	<i>C. glaucophylla</i>	sparse grass	Woodland		Area of rocky outcrop
38	d	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>E. chloroclada</i>	<i>C. glaucophylla</i>	sparse grass	Woodland		
39	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>A. spectabilis</i> , <i>C. endlicheri</i>	sparse grass	Shrubby woodland	<i>P. cobarensis</i> x 2	
39	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Shrubby woodland	<i>P. cobarensis</i> x 2	
39	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Shrubby woodland	<i>P. cobarensis</i> x 4	
39	d	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i>	<i>C. glaucophylla</i> , <i>L. muticus</i>	Grasses / low shrubs	Shrubby woodland		
40	a	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>A. floribunda</i>	None	Grassy	Forest		
40	b	Not surveyed	Not surveyed	<i>E. melliodora</i>	None	Grassy	Woodland	Box - Gum Woodland	On flats above creek <i>E. melliodora</i> x <i>E. sideroxylon</i> (1 individual)
40	c	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>A. floribunda</i>	None	Grassy	Woodland		
40	d	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>A. floribunda</i>	None	Grassy	Woodland		
41	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Shrubby woodland	<i>T. linearis</i>	
41	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>Acacia</i> sp.	sparse grass	Shrubby woodland		
41	c	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>C. trachyphloia</i> , <i>E. chloroclada</i> , <i>E. beyeriana</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Shrubby woodland		
41	d	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. beyeriana</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Shrubby woodland		
42	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i> , <i>E. chloroclada</i>	Grassy	Forest	<i>P. cobarensis</i> x 4	Prime habitat for <i>P. cobarensis</i>
42	b	Blue-leaved Ironbark heathy woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. nubila</i> , <i>E. fibrosa</i> , <i>E. crebra</i>	<i>C. glaucophylla</i>	Sparse grass and shrubs	Woodland	<i>P. cobarensis</i> x 2, <i>T. linearis</i>	High disturbance from forestry - bulldozed tracks
42	c	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. beyeriana</i> , <i>E. crebra</i>	<i>A. burrowii</i> , <i>A. buxifolia</i> subsp. <i>buxifolia</i>	<i>P. ciliata</i> , and sparse grass	Mid shrubby woodland	<i>P. cobarensis</i> x 4	<i>P. sp.</i> "Big Red" x 5, <i>P. boormanii</i>
42	d	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. beyeriana</i>	<i>C. glaucophylla</i> , <i>A. burrowii</i> , <i>A. buxifolia</i> subsp. <i>buxifolia</i>	sparse grass	Mid shrubby woodland		
43	a	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i> , <i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Dense grass	Open woodland	<i>T. linearis</i>	Recent thinning
43	b	White Cypress Pine - Bulloak - Ironbark	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. chloroclada</i> , <i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy /	Grassy woodland		Dense <i>C. glaucophylla</i>

SITE	TRANSECT	BIOMETRIC VEGETATION TYPE	NAMOI RVC TYPE	CANOPY	MIDSTOREY	GROUND	STRUCTURE	THREATENED SPECIES	COMMENTS
		Woodland				herbaceous			midstorey
43	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Open woodland		Areas with moderately dense midstorey
43	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. chloroclada</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy / shrubby	Open woodland	<i>P. liniarifolia</i>	Very recent forestry activity. Occurrences of <i>C. trachyphloia</i> near drainage line
44	a	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i> , <i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Open shrubby woodland	<i>P. cobarensis</i> x 28	
47	a	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. chloroclada</i> , <i>C. glaucophylla</i>	<i>C. glaucophylla</i> , <i>A. deanei</i> subsp. <i>deanei</i>	sparse grass / herbs	Woodland		
47	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. chloroclada</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass / herbs / <i>G. aspera</i>	Shrubby woodland	<i>P. cobarensis</i> x 56	
47	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Shrubby with <i>Westringia</i> sp., <i>D. viscosa</i> , <i>G. aspera</i>	Shrubby woodland		
47	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Shrubby woodland	<i>P. cobarensis</i> x 4	
48	a	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Shrubby woodland		Disturbance from forestry
48	b	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Shrubby woodland		Disturbance from forestry
48	c	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Shrubby woodland	<i>P. cobarensis</i>	Disturbance from forestry
48	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Shrubby woodland		
49	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. sideroxylon</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Mid shrubby woodland	<i>P. cobarensis</i> x 21	Disturbance from forestry
49	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. sideroxylon</i> , <i>E. pilligaensis</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Mid shrubby woodland	<i>P. cobarensis</i> x 3, <i>T. linearis</i>	Very dry
49	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. pilligaensis</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Mid shrubby woodland	<i>P. cobarensis</i> x 3	Dry
49	d	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i> , <i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Mid shrubby woodland	<i>P. cobarensis</i> x 15, <i>T. linearis</i>	Dry. Abundant circular clearings of approx 20 cm diameter and burrows
50	a	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i> , <i>E. crebra</i>	<i>G. parviflora</i> , <i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Woodland	<i>P. cobarensis</i> x 3	
50	b	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i> , <i>A. luehmannii</i>	<i>G. parviflora</i>	sparse grass	Woodland		
50	c	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>A. floribunda</i> , <i>E. chloroclada</i>	<i>C. glaucophylla</i>	Shrubby with <i>H. obtusifolia</i> , <i>B. daphnoides</i> , <i>C. tetragona</i>	Shrubby woodland	<i>P. cobarensis</i> x 41	
50	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Shrubby woodland	<i>P. cobarensis</i> x 2	
52	a	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i> , <i>E. pilligaensis</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass, <i>Acacia</i> sp.	Mid shrubby open woodland	<i>P. cobarensis</i> x 5	Dry
52	b	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i> , <i>E. pilligaensis</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass, <i>Acacia</i> sp.	Mid shrubby open woodland	<i>T. linearis</i>	Dry
52	c	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i> , <i>E. pilligaensis</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Mid shrubby woodland	<i>T. linearis</i> x 2	Dry
52	d	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Mid shrubby open woodland		Dry
54	a	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. rossii</i> , <i>E. sideroxylon</i> , <i>E. fibrosa</i>	<i>E. dwyeri</i> , <i>C. trachyphloia</i>	Low heath	Heathy open woodland		
54	b	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. beyeriana</i> , <i>C. trachyphloia</i> , <i>E. rossii</i>	<i>E. dwyeri</i> , <i>C. endlicheri</i>	Low heath	Heathy open woodland		
54	c	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. beyeriana</i>	<i>C. trachyphloia</i> , <i>E. dwyeri</i>	Low heath	Heathy open woodland		
54	d	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i>	<i>C. endlicheri</i> , <i>E. dwyeri</i>	1.5 m sparse heath	Heathy open woodland		
55	a	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>A. luehmannii</i>	<i>C. glaucophylla</i>	<i>C. tetragona</i>	Shrubby woodland	<i>P. cobarensis</i> x 15	<i>P. praetermissa</i> , <i>P. sp.</i> "Big Red" and potential

SITE	TRANSECT	BIOMETRIC VEGETATION TYPE	NAMOI RVC TYPE	CANOPY	MIDSTOREY	GROUND	STRUCTURE	THREATENED SPECIES	COMMENTS
									hybrids
55	b	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	<i>C. tetragona</i>	Shrubby woodland	<i>P. cobarensis</i> x 11	
55	c1	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	<i>C. tetragona</i>	Shrubby woodland	<i>P. cobarensis</i> x 2	<i>P. praetermissa</i> x 2
55	c2	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. blakelyi</i> , <i>A. floribunda</i>	Not recorded	Not recorded	Riparian woodland		
55	d	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	<i>C. tetragona</i>	Shrubby woodland	<i>P. cobarensis</i> x 8	Some <i>P. cobarensis</i> not in typical habitat but in bare ground patches with open canopy
56	a	Blue-leaved Ironbark heathy woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. nubila</i> ?	<i>C. glaucophylla</i>	Grassy / herbaceous	Open forest		
56	b	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. beyeriana</i> , <i>E. nubila</i>	<i>C. glaucophylla</i>	Grassy / shrubby	Open forest		
56	c	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. beyeriana</i> , <i>E. nubila</i> , <i>E. chloroclada</i>	<i>C. glaucophylla</i>	Grassy / shrubby	Open forest		
56	d	Blue-leaved Ironbark heathy woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. nubila</i>	<i>A. triptera</i> , <i>M. uncinata</i> , <i>P. ciliata</i>	sparse	Open heathy woodland		
57	a	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>A. floribunda</i> , <i>E. chloroclada</i>	<i>M. uncinata</i> , <i>Grevillea</i> sp., <i>Pultenaea</i> sp.	sparse herbs, <i>Dampiera</i> sp.			
57	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>A. luehmannii</i> , <i>E. chloroclada</i>	<i>A. luehmannii</i> , <i>C. tetragona</i> , <i>Pultenaea</i> sp.	Grassy / herbaceous with <i>G. rotundifolia</i>			
57	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. chloroclada</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy / herbaceous with <i>G. rotundifolia</i>			<i>D. goonooensis</i>
57	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. glaucophylla</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i> , <i>Pultenaea</i> sp., <i>C. tetragona</i>	Grassy			<i>Calochilus</i> sp., <i>P. setifera</i>
58	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i>		Shrubby open woodland		Evidence of fire; dense <i>A. luehmannii</i> shrub layer with sparse groundcover
58	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i>		Shrubby open woodland		
58	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i>		Shrubby open woodland		Heavily impacted by fire
58	d	Broombush Shrubland	Broombush Shrubland of the Sand Plains of the Pilliga region, Brigalow Belt South	None	<i>M. uncinata</i> , <i>A. caroleae</i> , <i>C. tetragona</i>		Shrubland up to 1 m		
59	a	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>C. glaucophylla</i> , <i>A. floribunda</i>	<i>Grevillea</i> sp., <i>B. daphnoides</i> , <i>Acacia</i> sp.	Grassy			Red sandy soil, low shrubby layer
59	b	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. blakelyi</i> , <i>C. glaucophylla</i>	<i>Acacia</i> sp., <i>C. glaucophylla</i>	<i>I. cylindrica</i> , grassy			Deep river sand
59	c	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. blakelyi</i> , <i>C. glaucophylla</i> , <i>E. chloroclada</i> , <i>A. floribunda</i>	<i>Acacia</i> sp.	<i>D. repens</i> , grasses			Sandy. <i>P. setifera</i>
59	d	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>A. floribunda</i> , <i>C. glaucophylla</i>	<i>Acacia</i> sp.	Grassy			Diuris sp.
60	a	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. chloroclada</i> , <i>A. floribunda</i> , <i>C. glaucophylla</i>	<i>C. tetragona</i> , <i>Micromyrtus</i> sp.	<i>I. cylindrica</i> , <i>L. longifolia</i>			Sandy soils, light brown / orange
60	b	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>A. floribunda</i> , <i>E. chloroclada</i> , <i>E. pilligaensis</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass			Sandy soils, light brown / orange. <i>C. fuscata</i>
60	c	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i> , <i>E. crebra</i> , <i>E. chloroclada</i> , <i>A. floribunda</i>	<i>Eucalyptus</i> sp., <i>A. luehmannii</i>	sparse grass			Sandy soils, light brown / orange
60	d	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i> , <i>A. luehmannii</i> , <i>E. crebra</i>	<i>A. luehmannii</i> , <i>Kunzea</i> sp., <i>C. glaucophylla</i> , <i>Acacia</i> sp.	Grassy			Sandy soils, light brown / orange
61	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>M. uncinata</i> , <i>C. tetragona</i>	Heathy <i>W. cheelii</i> , <i>H. flavescens</i> , <i>Pultenaea</i> sp.	Heathy open woodland / Broombush shrubland		Regenerating from recent fire (~5 years). Broombush ecotone
61	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. caroleae</i> , <i>A. luehmannii</i> , <i>C. endlicheri</i>	sparse grass	Mid shrubby open woodland		Disturbance from forestry and fire
61	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. endlicheri</i> , <i>D. falcata</i>	Grassy	Mid shrubby open woodland		Heavily impacted by fire and forestry

SITE	TRANSECT	BIOMETRIC VEGETATION TYPE	NAMOI RVC TYPE	CANOPY	MIDSTOREY	GROUND	STRUCTURE	THREATENED SPECIES	COMMENTS
61	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i>	sparse grass	Mid shrubby open woodland	<i>T. linearis</i>	
62	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>Dodonaea</i> sp.	Grassy	Shrubby woodland		Disturbance from forestry and pigs
62	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. pilligaensis</i>	<i>C. glaucophylla</i>	Grassy	Shrubby woodland		Disturbance from forestry and pigs
62	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i>	Grassy	Shrubby woodland		Disturbance from forestry and pigs
62	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i>	Grassy	Shrubby woodland		Disturbance from forestry and pigs
64	a	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>C. trachyphloia</i> , <i>C. glaucophylla</i>	8 m: <i>Acacia</i> sp. 1-2m: <i>Philotheca</i> sp., <i>Kunzea</i> sp.	sparse grassy	Woodland		
64	b	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>C. trachyphloia</i> , <i>C. glaucophylla</i>	<i>Philotheca</i> sp., <i>L. muticus</i>	sparse grassy	Woodland		High density of leaf litter
64	c	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>C. trachyphloia</i> , <i>E. crebra</i> , <i>C. glaucophylla</i>	<i>C. tetragona</i> , <i>Philotheca</i> sp.	Grassy	Woodland		Regenerating from recent fire (~5-8 years)
64	d	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i>	<i>Philotheca</i> sp., <i>Hibbertia</i> sp., <i>Acacia</i> sp.	<i>Hibbertia</i> sp., grassy	Woodland		
65	a	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>C. trachyphloia</i> , <i>E. crebra</i>	<i>C. tetragona</i> , <i>P. squamulosum</i>	Grassy / herbaceous	Woodland		
65	b	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. blakelyi</i> , <i>E. chloroclada</i> , <i>A. floribunda</i> , <i>C. trachyphloia</i>	<i>P. squamulosum</i> , <i>Acacia</i> sp.	<i>Gahnia</i> sp., grassy, <i>Chrysocephalum</i> sp.	Open woodland		
65	c	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. chloroclada</i> , <i>E. blakelyi</i> , <i>E. albens</i> , <i>A. floribunda</i>	<i>C. glaucophylla</i>	<i>Gahnia</i> sp., grassy	Woodland		Transect on either side of creek
65	d	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>C. glaucophylla</i> , <i>E. fibrosa</i> , <i>E. crebra</i> , <i>E. dwyeri</i> , <i>A. floribunda</i>	<i>A. diminuta</i> subsp. <i>diminuta</i> , <i>Philotheca</i> sp.	<i>Gahnia</i> sp., grassy	Forest		
66	a	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>Acacia</i> sp., <i>E. dwyeri</i> , <i>C. trachyphloia</i>	<i>P. squamulosum</i> , <i>Acacia</i> sp.	sparse grass, <i>Goodenia</i> sp.	Tall shrubland		<i>Calochilus</i> sp.
66	b	Unknown	Unknown						
66	c	Unknown	Unknown	<i>E. nubila</i>					
66	d	Unknown	Unknown						
67	a	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i>	<i>C. endlicheri</i>	Shrubby <i>P. salsifolia</i>	Mid shrubby heathy woodland		Mature woodland
67	b	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i>	<i>C. endlicheri</i>	<i>A. triptera</i> , <i>Prostanthera</i> sp., <i>C. amara</i>	Shrubby grassy woodland		
67	c	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>C. trachyphloia</i> , <i>E. fibrosa</i> , <i>E. chloroclada</i>	<i>C. endlicheri</i>	sparse	Mid shrubby heathy woodland		
67	d	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i>	<i>C. endlicheri</i>	sparse	Heathy woodland		
72	a	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i>	Shrubby	sparse grass / herbaceous and low shrubs	Woodland		<i>Calochilus</i> sp.
72	b	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. dwyeri</i> , <i>E. crebra</i>	<i>Acacia</i> sp., <i>B. glabra</i> , <i>A. diminuta</i> subsp. <i>diminuta</i>	Low shrubs and herbs	Low shrubby woodland	<i>R. procumbens</i> x 117	Approximately 110 <i>R. procumbens</i>
72	c	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. crebra</i> , <i>A. leiocarpa</i>	<i>A. luehmannii</i> , <i>C. endlicheri</i>	sparse grass and low shrubs	Shrubby woodland		
72	d	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>A. leiocarpa</i> , <i>E. crebra</i> , <i>A. floribunda</i>	<i>C. arcuata</i> , <i>L. muticus</i> , <i>B. daphnoides</i>	sparse grass and herbs	Shrubby woodland		
73	a	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>E. dwyeri</i> , <i>E. macrorhyncha</i> , <i>C. trachyphloia</i>	<i>C. arcuata</i> , <i>C. parviflora</i>	sparse grass and herbs	Shrubby woodland		
73	b	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>E. dwyeri</i> , <i>C. trachyphloia</i>	<i>C. endlicheri</i> , <i>C. arcuata</i>	sparse grass and herbs	Shrubby woodland		
73	c	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. fibrosa</i>	<i>A. luehmannii</i> , <i>C. endlicheri</i>	sparse grass and herbs	Shrubby woodland		<i>P. boormanii</i>
73	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>A. floribunda</i>	<i>C. endlicheri</i> , <i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass and herbs	Shrubby woodland	<i>T. linearis</i>	<i>Diuris</i> sp., <i>P. woollsii</i>
74	a	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. crebra</i> , <i>A. leiocarpa</i> , <i>C. trachyphloia</i>	<i>A. tindaleae</i>	Shrubby with <i>G. aspera</i>	Shrubby woodland		

SITE	TRANSECT	BIOMETRIC VEGETATION TYPE	NAMOI RVC TYPE	CANOPY	MIDSTOREY	GROUND	STRUCTURE	THREATENED SPECIES	COMMENTS
74	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. caroleae</i> , <i>M. uncinata</i>	sparse grass and herbs with <i>G. aspera</i>	Shrubby woodland	<i>T. linearis</i>	
74	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>A. caroleae</i>	sparse grass <i>G. aspera</i> , <i>D. revoluta</i>	Shrubby woodland		
74	d	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>A. leiocarpa</i>	None	<i>B. rhombifolia</i> subsp. <i>concolor</i> , <i>C. arcuata</i>	Shrubby woodland		
75	a	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>A. floribunda</i> , <i>E. blakelyi</i> , <i>E. macrorhyncha</i> , <i>A. leiocarpa</i>	<i>C. arcuata</i>	sparse grass and herbs	Shrubby woodland		Very sandy
75	b	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. blakelyi</i> , <i>E. fibrosa</i> , <i>E. beyeriana</i> ?, <i>C. endlicheri</i>	<i>C. endlicheri</i> , <i>C. arcuata</i> , <i>P. foliolosa</i>	sparse grass and herbs	Shrubby woodland		<i>P. boormanii</i>
75	c	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. blakelyi</i> , <i>C. trachyphloia</i> , <i>E. fibrosa</i> , <i>A. leiocarpa</i>	<i>C. arcuata</i> , <i>Acacia</i> sp., <i>B. daphnoides</i>	sparse grass and herbs	Shrubby woodland		Sandy
75	d	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i> , <i>Eucalyptus</i> sp.	<i>C. arcuata</i> , <i>D. peduncularis</i> , <i>B. daphnoides</i>	sparse grass and herbs	Shrubby woodland		
76	a	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. pilligaensis</i> , <i>E. sideroxylon</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Shrubby woodland	<i>P. cobarensis</i> x 16	
76	b	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. pilligaensis</i> , <i>E. sideroxylon</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Shrubby woodland	<i>P. cobarensis</i> x 2	
76	c	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. pilligaensis</i> , <i>E. sideroxylon</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Shrubby woodland		
76	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. pilligaensis</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Shrubby woodland	<i>P. cobarensis</i> x 45	
77	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. pilligaensis</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Shrubby woodland	<i>P. cobarensis</i> x 6	
77	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Shrubby woodland		
77	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. pilligaensis</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Shrubby woodland		<i>P. setifera</i>
77	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. chloroclada</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass with <i>C. tetragona</i>	Shrubby woodland		<i>P. setifera</i>
80	a	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i>	<i>C. glaucophylla</i> , <i>Acacia</i> sp.	Grasses / herbs	Open woodland		Burnt recently
80	b	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i>	<i>Acacia</i> sp., <i>C. tetragona</i> , <i>Dodonaea</i> sp.	<i>Dampiera</i> sp., herbs	Open woodland		Burnt recently
80	c	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i> , <i>E. crebra</i>	<i>Acacia</i> sp., <i>C. tetragona</i> , <i>Dodonaea</i> sp.	<i>Dampiera</i> sp., herbs	Open woodland		Burnt recently
80	d	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i> , <i>E. crebra</i> , <i>E. rossii</i>	<i>C. endlicheri</i> , <i>C. tetragona</i> , <i>Grevillea</i> sp., <i>Hibbertia</i> sp., <i>Dodonaea</i> sp., <i>Prostanthera</i> sp.	sparse grass and herbs	Open woodland		<i>Calochilus</i> sp.
82	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass with occasional shrubs <i>Acacia</i> spp., <i>C. tetragona</i> , <i>Micromyrtus</i> sp.	Shrubby woodland	<i>P. cobarensis</i> x 53	
82	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Shrubby, <i>C. tetragona</i> , <i>Micromyrtus</i> sp., <i>Acacia</i> sp.	Shrubby woodland		<i>P. cobarensis</i> on other side of road opposite transect
82	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>A. floribunda</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass with occasional shrubs <i>Daviesia</i> sp.	Shrubby woodland	<i>P. cobarensis</i> x 5, <i>T. linearis</i>	<i>P. cobarensis</i> hybrids
82	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass with occasional shrubs <i>Daviesia</i> sp.	Shrubby woodland	<i>P. cobarensis</i> x 15	
83	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Shrubby woodland	<i>P. cobarensis</i> x 8	
83	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. sideroxylon</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Sparse grass with occasional <i>Acacia</i> sp and <i>Gahnia</i> sp.	Shrubby woodland	<i>P. cobarensis</i> x 24	
83	c	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i> , <i>E. chloroclada</i> , <i>A. floribunda</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Shrubby, <i>C. tetragona</i> and	Shrubby woodland		

SITE	TRANSECT	BIOMETRIC VEGETATION TYPE	NAMOI RVC TYPE	CANOPY	MIDSTOREY	GROUND	STRUCTURE	THREATENED SPECIES	COMMENTS
						sparse grasses			
83	d	Mugga Ironbark - Pilliga Box - pine-Bulloak shrubby woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. sideroxylon</i> , <i>E. chloroclada</i> , <i>A. floribunda</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Shrubby, <i>C. tetragona</i> and sparse grasses	Shrubby woodland		
84	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>C. glaucophylla</i>	<i>A. luehmannii</i> , <i>Dodonaea</i> sp., <i>Acacia deanei</i> subsp. <i>deanei</i>	sparse grass	Shrubby woodland		<i>P. setifera</i>
84	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>C. glaucophylla</i>	<i>A. luehmannii</i> , <i>Dodonaea</i> sp., <i>Acacia deanei</i> subsp. <i>deanei</i>	Grassy	Shrubby woodland		
84	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>C. glaucophylla</i>	<i>A. luehmannii</i> , <i>Dodonaea</i> sp., <i>Acacia deanei</i> subsp. <i>deanei</i>	Grassy	Shrubby woodland		Dumped rubbish
84	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>C. glaucophylla</i>	<i>A. luehmannii</i> , <i>Dodonaea</i> sp., <i>Acacia deanei</i> subsp. <i>deanei</i>	Grassy	Shrubby woodland		Disturbance from forestry
85	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. pilligaensis</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Shrubby woodland		Disturbance from forestry
85	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Shrubby woodland		Disturbance from forestry
85	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Shrubby woodland		<i>P. setifera</i>
85	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Shrubby woodland		Disturbance from forestry
86	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Shrubby woodland		Disturbance from forestry
86	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. pilligaensis</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Shrubby woodland		
86	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Shrubby woodland		
86	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	Grassy	Shrubby woodland		<i>P. setifera</i>
87	a1	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	1. <i>E. crebra</i>	1. <i>A. luehmannii</i> , <i>C. glaucophylla</i>	1. Grassy	1. Mid shrubby woodland	<i>T. linearis</i>	<i>T. linearis</i> in Gahnia in <i>E. crebra</i> woodland
87	a2	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	2. <i>E. chloroclada</i>	2. <i>C. tetragona</i>	2. herbaceous	2. Riparian woodland		
87	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	Grassy	Mid shrubby open woodland	<i>P. cobarensis</i> x 5	Preferred <i>P. cobarensis</i> habitat
87	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. chloroclada</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Mid shrubby open woodland	<i>Polygala linariifolia</i> x 21	<i>P. linariifolia</i> along drainage depression
87	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Mid shrubby open woodland	<i>P. cobarensis</i> x 2, <i>P. linariifolia</i>	
88	a	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. chloroclada</i> , <i>A. floribunda</i> , <i>C. endlicheri</i>	<i>C. tetragona</i>	<i>L. longifolia</i>	Shrubby woodland		Creek line at midpoint
88	b	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. chloroclada</i> , <i>C. glaucophylla</i>	<i>A. luehmannii</i>	sparse grass	Grassy woodland		<i>P. setifera</i>
88	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. beyeriana</i> , <i>C. glaucophylla</i>	<i>A. luehmannii</i>	sparse grass	Grassy woodland	<i>P. cobarensis</i> x 2	<i>P. setifera</i>
88	d	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Grassy woodland		
89	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. pilligaensis</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Mid shrubby open woodland	<i>T. linearis</i>	<i>P. setifera</i> , <i>P. mutica</i> present and flowering
89	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. pilligaensis</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Mid shrubby open woodland		
89	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i>	sparse grass	Mid shrubby open woodland		<i>P. setifera</i> , <i>P. mutica</i> present and flowering. Transect on edge of Goona Creek
89	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Mid shrubby open woodland	<i>P. cobarensis</i> x 3	Two confirmed <i>P. cobarensis</i> but possibly more individuals (flowers not open)
90	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Mid shrubby open woodland	<i>P. cobarensis</i>	
90	b	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i> , <i>E. chloroclada</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Mid shrubby open woodland		
90	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. conica</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Mid shrubby open woodland	<i>P. cobarensis</i> x 4	

SITE	TRANSECT	BIOMETRIC VEGETATION TYPE	NAMOI RVC TYPE	CANOPY	MIDSTOREY	GROUND	STRUCTURE	THREATENED SPECIES	COMMENTS
90	d	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i> , <i>M. uncinata</i>	Grassy / shrubby	Mid shrubby open woodland / Broombush		
91	a	Broombush Shrubland	Broombush Shrubland of the Sand Plains of the Pilliga region, Brigalow Belt South	None	<i>M. uncinata</i>	<i>D. boroniifolia</i> , <i>M. urceolatus</i>	Low heath		Recently burnt (~ 1 year) Broombush. Scattered <i>E. crebra</i> emergents
91	b	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland	Pilliga Box - Poplar Box- White Cypress Pine Grassy Open Woodland on Alluvial Loams, Darling Riverine Plains and Brigalow Belt South	<i>E. pilligaensis</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Mid shrubby open woodland	<i>P. cobarensis</i>	<i>P. cobarensis</i>
91	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Mid shrubby open woodland		Possible habitat for <i>P. cobarensis</i>
91	d	Broombush Shrubland	Broombush Shrubland of the Sand Plains of the Pilliga region, Brigalow Belt South	None	<i>A. caroleae</i> , <i>M. uncinata</i>	<i>D. adpressa</i> , <i>G. macbarronii</i> , grasses	Shrubland		Broombush early successional post fire (< 5 years)
92	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. beyeriana</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grass	Mid shrubby open woodland	<i>P. cobarensis</i> x 43	<i>P. sp.</i> "Big Red", <i>P. praetermissa</i> , <i>P. setifera</i> , <i>P. mutica</i> , moderate leaf litter
92	b	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. chloroclada</i> , <i>C. trachyphloia</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	<i>C. tetragona</i> , herbs	Low heathy riparian woodland		Areas of moderate <i>Callitris</i>
92	c	White Cypress Pine - Bulloak - Ironbark Woodland / Broombush shrubland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South / Broombush Shrubland of the Sand Plains of the Pilliga region, Brigalow Belt South	None	1. <i>A. luehmannii</i> , <i>C. glaucophylla</i> 2. <i>A. deanei</i> subsp. <i>deanei</i> , <i>A. caroleae</i>	Grass / heath	Shrubby woodland		All canopy trees severely burnt
92	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	1. <i>E. crebra</i> 2. <i>E. chloroclada</i>	1. <i>A. luehmannii</i> , <i>C. glaucophylla</i> 2. <i>C. tetragona</i>	1. Grassy 2. sparse	1. Mid shrubby open woodland 2. Riparian woodland	<i>P. cobarensis</i> x 3	<i>P. mitchellii</i> , <i>P. mutica</i> , <i>P. setifera</i>
93	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	Grassy	Mid shrubby open woodland		
93	b	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>A. floribunda</i> , <i>E. chloroclada</i>	<i>A. pilligaensis</i>	Low heathy shrubs	Low shrubby open woodland		<i>E. crebra</i> present in west of transect. Sandy alluvial floodplain
93	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. spectabilis</i> , <i>A. luehmannii</i>	<i>P. cinerascens</i> , <i>D. revoluta</i> , grasses	Mid shrubby open woodland		Regenerating from recent fire (~5 years)
93	d	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>E. crebra</i> , <i>E. chloroclada</i> , <i>A. floribunda</i> , <i>C. trachyphloia</i>	<i>A. polybotrya</i> , <i>A. pilligaensis</i>	Low shrubs	Low shrubby open woodland		Regenerating from recent fire (~5 years)
94	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. chloroclada</i>	<i>A. luehmannii</i> , <i>C. endlicheri</i> , <i>C. glaucophylla</i>	sparse grassy	Shrubby open woodland		
94	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i>	sparse grassy	Shrubby open woodland		<i>E. sideroxylon</i> also present, dense midstorey
94	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	<i>C. tetragona</i> , <i>Pultenaea</i> sp., <i>M. uncinata</i>	Low shrubby open woodland		Dense low shrub layer < 1 m
94	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>A. floribunda</i> , <i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	<i>C. tetragona</i> , <i>Pultenaea</i> sp., <i>M. uncinata</i> , <i>G. floribunda</i>	Low shrubby open woodland		In east <i>A. floribunda</i> is dominant with <i>E. crebra</i> increasing in dominance to the west. <i>E. chloroclada</i> also present
96	a	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i> , <i>E. dwyeri</i>	None	Heathy	Heathy open woodland		Yellow soils
96	b	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i> , <i>E. dwyeri</i>	None	heathy	Mid shrubby woodland		
96	c	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i> , <i>E. dwyeri</i>	None	Heathy	Mid shrubby woodland		
96	d	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. fibrosa</i> , <i>C. trachyphloia</i> , <i>E. dwyeri</i>	None	Heathy	Mid shrubby woodland		
97	a	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. beyeriana</i>	<i>C. glaucophylla</i> , <i>C. endlicheri</i> , <i>A. tindaleae</i>	Gassy	Shrubby woodland		<i>Calochilus</i> sp.
97	b	Red Ironbark - Brown Bloodwood Shrubby Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. beyeriana</i>	<i>A. tindaleae</i>	sparse grass	Shrubby woodland		
97	c	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. chloroclada</i> , <i>A. floribunda</i>	<i>A. deanei</i> subsp. <i>deanei</i> , <i>A. tindaleae</i>	<i>C. arcuata</i> , sparse grass	Shrubby woodland		
97	d	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. chloroclada</i> , <i>A. floribunda</i>	<i>C. endlicheri</i> , <i>A. pilligaensis</i>	Low shrubs	Shrubby woodland		

SITE	TRANSECT	BIOMETRIC VEGETATION TYPE	NAMOI RVC TYPE	CANOPY	MIDSTOREY	GROUND	STRUCTURE	THREATENED SPECIES	COMMENTS
98	a1	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	1. <i>E. crebra</i>	1. <i>C. glaucophylla</i>	1. Grassy	1. Mid shrubby grassy forest	1. <i>T. linearis</i> x 2	Transect half <i>C. trachyphloia</i> woodland and half <i>E. crebra</i> forest. Site relocated
98	a2	Brown Bloodwood - Cypress - Ironbark Heathy Woodland	Ironbark - Brown Bloodwood - Black Cypress Pine heathy woodlands, Brigalow Belt South	<i>C. trachyphloia</i>	<i>Not recorded</i>	Not recorded	Shrubby woodland		
98	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i>	Grassy	Mid shrubby grassy woodland		End of transect with shrubby understorey
98	c	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>A. floribunda</i> , <i>E. chloroclada</i>	<i>C. endlicheri</i>	Grassy / herbaceous	Mid shrubby grassy riparian woodland		
98	d	Rough-barked Apple Riparian Forb/Grass Open Forest	Rough-barked Apple - Blakely's Red Gum riparian grassy woodlands, Brigalow Belt South and Nandewar	<i>E. macrorhyncha</i>	<i>C. endlicheri</i> , <i>A. diminuta</i> subsp. <i>diminuta</i>	Heathy	Low heathy woodland		
101	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i>	Grassy	Open woodland		
101	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i> , <i>C. endlicheri</i>	Grassy	Woodland		
101	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>A. luehmannii</i> , <i>C. endlicheri</i>	sparse grass	Regrowth woodland		
101	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. chloroclada</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i> , <i>C. endlicheri</i>	sparse grass	Regrowth woodland	<i>D. tricolor</i>	<i>D. tricolor</i> in dense <i>E. crebra</i> regrowth
102	a	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. beyeriana</i> , <i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i>	sparse grass	Mid shrubby woodland	<i>P. cobarensis</i>	Bulldozer and chain tracks by forestry
102	b	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i> , <i>E. dealbata</i>	<i>A. luehmannii</i> , <i>C. glaucophylla</i> , <i>A. tindaleae</i> , <i>D. viscosa</i>	sparse grass	Shrubby woodland	<i>P. cobarensis</i> x 19	<i>P. lingua</i> , <i>P. setifera</i> , <i>P. boormanii</i>
102	c	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. dealbata</i> , <i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i> , <i>A. tindaleae</i>	Grasses and low shrubs	Shrubby woodland		
102	d	White Cypress Pine - Bulloak - Ironbark Woodland	Ironbark Shrubby Woodlands of the Pilliga area, Brigalow Belt South	<i>E. crebra</i>	<i>C. glaucophylla</i> , <i>A. luehmannii</i> , <i>A. tindaleae</i>	Grasses and low shrubs	Shrubby woodland		

**HEAD OFFICE**

Suite 4, Level 1
2-4 Merton Street
Sutherland NSW 2232
T 02 8536 8600
F 02 9542 5622

CANBERRA

Level 2
11 London Circuit
Canberra ACT 2601
T 02 6103 0145
F 02 6103 0148

COFFS HARBOUR

35 Orlando Street
Coffs Harbour Jetty NSW 2450
T 02 6651 5484
F 02 6651 6890

PERTH

Suite 1 & 2
49 Ord Street
West Perth WA 6005
T 08 9227 1070
F 08 9322 1358

DARWIN

16/56 Marina Boulevard
Cullen Bay NT 0820
T 08 8989 5601

SYDNEY

Level 6
299 Sussex Street
Sydney NSW 2000
T 02 8536 8650
F 02 9264 0717

NEWCASTLE

Suites 28 & 29, Level 7
19 Bolton Street
Newcastle NSW 2300
T 02 4910 0125
F 02 4910 0126

ARMIDALE

92 Taylor Street
Armidale NSW 2350
T 02 8081 2681
F 02 6772 1279

WOLLONGONG

Suite 204, Level 2
62 Moore Street
Austinmer NSW 2515
T 02 4201 2200
F 02 4268 4361

BRISBANE

PO Box 1422
Fortitude Valley QLD 4006
T 0400 494 366

ST GEORGES BASIN

8/128 Island Point Road
St Georges Basin NSW 2540
T 02 4443 5555
F 02 4443 6655

NAROOMA

5/20 Cauty Street
Narooma NSW 2546
T 02 4476 1151
F 02 4476 1161

MUDGEES

Unit 1, Level 1
79 Market Street
Mudgee NSW 2850
T 02 4302 1230
F 02 6372 9230

GOSFORD

Suite 5, Baker One
1-5 Baker Street
Gosford NSW 2250
T 02 4302 1220
F 02 4322 2897