28ºS ENVIRONMENTAL

Double Jump Road Residential Estate Development

Preliminary Documentation Report

EPBC Referral 2024-09825

Volume 3.9

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29 July 2026

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Appendix 14.1: Woolshed Biocondition Data Sheets

HABITAT QUALITY ASSESSMENT

Date:	16.07.2024	**Collector:**	Chris Hansen, Sally Thompson, Jackson Merrigan	**OA AU1 Transect 1 (HQP 1a)**
Time:	13:35	**Job No.**	2019-100e	
Mapped RE:	12.9-10.2	**Description:**	*Corymbia citriodora subsp. variegata +/- Eucalyptus crebra* open forest on sedimentary rocks	
Field RE:	12.9-10.2	**Description:**	*Corymbia citriodora subsp. variegata +/- Eucalyptus crebra* open forest	
Pre-clear RE:	12.9-10.2	**Description:**	*Corymbia citriodora subsp. variegata +/- Eucalyptus crebra* open forest on sedimentary rocks	
Notes:	Patch with reasonably consistent cover but fragmented by historic timber cutting (stumps and discarded crowns evident). More prevalent on spur crest (easier access).			

Slope:	**Aspect:**	**Landform (local):**	**Landform (broad):**
10%	160	Crest + upper slopes	Low spur off range.
Slope Shape:	Flat +/- convex		

50x20m Area	All logs >10cm, >0.5m with 50 x 20m plot boundary		**100x50m Area**	(NB: *Ecologically Dominant Layer. Tree defined as single stemmed over 2m. All tree species in the 100 x 50m (not just EDL species) – Specify species	
Coarse Woody Debris	**Site Total: 102m** **Per ha Total: 1,020m**		Total Native **Tree** Spp. Richness	Dominant / Codominant: *Corymbia citriodora*	Associated / Suppressed: *Eucalyptus crebra* *Corymbia intermedia* *Acacia leiocalyx* *Alphitonia excelsa* *Allocasuarina littoralis* *Petalostigma pubescens* *Psydrax odorata*
				Proportion of EDL species with evidence of recruitment (Specify recruiting species)	*100%*
				Recruitment is assessed as the proportion of dominant species present at a site that are regenerating:	

50x10m area	Native plant species richness	(NB: List species if known or count if unknown. Shrub is defined as single stemmed below 2m or multi-stemmed from base or below 20cm)	**Total**
Shrub	*Alphitonia excelsa, Allocasuarina littoralis, Petalostigma pubescens, Psydrax odorata, Cassinia sp., Jacksonia scoparia, Dodonea viscosa, Acacia irrorate, Carissa ovata, Alstonia constricta, Denhamia cunninghamii, Trema tomentosa, Dodenea sp., Psydrax odorata, Solanum nemophilum*		12
Grass	*Cymbopogon refractus,Panicum simile, Imperata cylindrica, Aristida vagans, Digitaria sp., Digitaria breviglumis, Themeda triandra, Aristida gracilipes, Entolasia stricta*		10
Forb	*Eustrephus latifolius, Hardenbergia violacea, Lomandra longifolia, Lomandra filiformis, Dianella caerulea, Peripleura diffusa, Desmodium gunnii, Vittadinia sp., Glycine clandestine, Desmodium rhtidophyllum, Gahnia aspera, Goodenia hederacea, Scleria mackaviensis*		14
Non-native plant cover			24.1%

Five 1x1m plots	*attributes are essential to assess as used in scoring, however assessment of all attributes improves your ability to more accurately visualise proportions of each of the attributes					
Ground Cover type	**1**	**2**	**3**	**4**	**5**	**Ave.**
Native other grass (if relevant)*	5	10	3	5	3	5.2
Native forbs and other species (non-grass)	5	15	7	10		7.4
Native shrubs (<1m in height)	5	10	5			4
Non-native grass	10	3				2.6
Non-native forbs and shrubs				15	5	4
Litter	70	60	65	55	70	64
Rock						0
Bare ground	5	2		10	20	7.4

Other (e.g. timber, inorganic refuse)			20	5	2	5.4
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

100x50m Area:	*from benchmark doc				
Eucalypt large tree DBH:	380mm	No. of large eucalypt trees in plot:	14	Total Large Trees (ha):	**28**
Non-eucalypt large tree DBH:	n/a	No. of large non-eucalypt trees in plot:	n/a		

Plot based weed data	Record all weed species within the 10 x 50 sub-plot
Species	**notes**
Melanis repens	Occasional
Phyllanthus sp.	Occasional
Erigeron sp.	Occasional
Passiflora suberosa	Occasional
Asparagus africanus	Occasional
Opuntia tomentosa	Occasional
Lantana camara	Occasional

***Derived Koala Spot Assessment Technique (SAT)**	Record all koala scats at the base of eucalypts >100 mm DBH and taller than 4 m height.	
Number of trees assessed (record number – target is 30)	**Number of scats and tree species where scats were recorded**	
30	*0*	*0*

Plot based tree data	Record all eucalypt trees over **<u>300mm dbh</u>** and non-eucalypts **<u>>200mm dbh</u>** within the 100 x 50 plot – record multiple stems in parentheses this way (230, 250, 190)
Species	**DBH**
Corymbia citriodora subsp *variegata*	*360, **380**, 330, **440**, 300, 340, 370, **380**, **400**, 370, 330, 300, 300, **410**, **400**, **390**, **420**, 330, **460**, 300, **600**, 340, **460**, **580**, (310, 180), **470**, **810**, 360*
Eucalyptus crebra	*330, 300, 300, 370, **380**, 370*
Dead tree	*360*

canopy species regeneration and number of stems	Record all species and count number of stems <50mm and 50-299mm DBH (500m^2). Ensure stems class is denoted. Use parenthesise for <50mm viz *Eucalyptus tereticornis* (11), 13
Species:	**20x50m**
Corymbia citriodora subsp *variegata*	19
Eucalyptus crebra	10
Corymbia intermedia	2

100m Transect Tree Canopy Cover Intercept	(Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. *If trees are in the same layer and continuous along the transect group them). Canopy layer includes T1 and T2 layers, but not T3.					
Species	Strata (C or S or E)	Height (m)	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Corymbia citriodora subsp *variegata*	T1	22.2	14.2	22.6	8.4	7.0
Corymbia citriodora subsp *variegata*	T1	22.1	16.2	21.2	5.0	
Corymbia citriodora subsp *variegata*	T1	21.6	31.5	38.8	7.3	7.3
Corymbia citriodora subsp *variegata*	T1	23.5	47.3	53.5	6.2	6.2
Corymbia citriodora subsp *variegata*	T1	23.9	50.7	56.8	6.1	6.1
Corymbia citriodora subsp *variegata*	T1	20.0	60.3	66.4	6.1	6.1
Corymbia citriodora subsp *variegata*	T1	24.1	71.3	79.0	7.7	7.7
Corymbia citriodora subsp *variegata*	T1	23.2	81.6	91.6	10.0	10.0
Corymbia citriodora subsp *variegata*	T1	22.1	90.5	96.8	6.3	6.3

Corymbia citriodora subsp *variegata*	T2	12.1	0.0	0.3	0.3	5.2
Corymbia citriodora subsp *variegata*	T2	14.2	0.0	4.7	4.7	
Corymbia citriodora subsp *variegata*	T2	11.7	0.6	5.2	4.6	
Corymbia citriodora subsp *variegata*	T2	16.3	5.3	11.8	6.5	6.5
Corymbia citriodora subsp *variegata*	T2	13.0	21.5	28.0	6.5	6.5
Angophora leiocarpa	T2	13.5	42.6	46.8	4.2	7.4
Corymbia citriodora subsp *variegata*	T2	14.2	46.3	50.4	4.1	
Corymbia citriodora subsp *variegata*	T2	16.2	57.5	61.3	3.8	3.8
Eucalyptus crebra	T2	18.5	64.6	69.8	5.2	5.2
Eucalyptus crebra	T2	10.6	89.9	92.7	2.8	2.8
Eucalyptus crebra	T2	11.3	95.8	100	4.2	4.2
Alphitonia excelsa	T3	7.8	3.2	6.9	3.7	3.7
Corymbia citriodora subsp variegata	T3	6.0	4.1	4.9	0.8	
Petalostigma pubescens	T3	7.2	8.8	12.5	3.7	3.7
Allocasuarina littoralis	T3	6.2	`18.2	22.1	3.9	3.9
Petalostigma pubescens	T3	6.6	25.5	28.9	3.4	3.4
Acacia leiocalyx	T3	3.2	42.4	45.9	3.5	3.5
Acacia deanei	T3	6.1	47.3	50.1	2.8	2.8
Alphitonia excelsa	T3	6.8	51.3	54.6	3.3	3.3
Alphitonia excelsa	T3	5.5	54.7	56.0	1.3	1.3
Alphitonia excelsa	T3	3.8	57.5	58.2	0.7	0.7
Acacia leiocalyx	T3	6.0	63.4	66.5	3.1	3.1
Acacia leiocalyx	T3	4.0	75.8	76.6	0.8	0.8
Psydrax orodora	T3	4.1	81.0	82.8	1.8	1.8
Corymbia intermedia	T3	9.9	84.6	86.5	1.9	1.9
Psydrax odorata	T3	6.1	86.6	93.7	7.1	7.1
Psydrax odorata	T3	11.3	95.8	100.0	4.2	4.2
Total Canopy (T1) Cover					56.7m (56.7%) Med ht: 22.2m	
Total Sub-canopy (T2) Cover					41.6m (41.6%) Med ht: 13.5m	
Total Sub-canopy (T3) Cover					45.2 m (45.2%) Med ht: 6.1 m	

100m Transect **Shrub canopy cover**	* denote as native or exotic. Only native shrub cover is used in the scoring. **Shrub** - Woody plant that is multi-stemmed from the base (or within 200 mm from ground level) **<8 m tall**, or if single stemmed, **less than 2 m tall**					
Species	Strata: Shrub	Height (m)	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Acacia sp.	Shrub	2.6	7.2	8.1	0.9	0.9
Acacia leiocalyx	Shrub	2.8	28.2	29.6	1.4	1.4
Alphitonia excelsa	Shrub	2.4	29.3	31.1	1.8	1.8
Dodenea viscosa	Shrub	3	37.5	39.2	1.7	1.7
Corymbia citriodora subsp variegata	Shrub	2.5	40.1	41.1	1.0	1.0
Acacia leoicalyx	Shrub	2.5	40.3	42.3	2.0	2.0
Eucalyptus crebra	Shrub	1.0	57.6	58.2	0.6	0.6
Cassina laevis	Shrub	1.0	62.3	62.6	0.3	0.3
Cassinia laevis	Shrub	1.0	68.3	68.7	0.4	0.4
Corymbia citriodora subsp variegata	Shrub	1.0	69.9	70.4	0.5	0.5
Cassinia laevis	Shrub	0.9	70.2	70.5	0.3	0.3
Cassinia laevis	Shrub	1.1	77.1	77.2	0.1	0.1
Cassinia laevis	Shrub	1.0	77.1	78.0	0.9	0.9
Psydrax ordorata	Shrub	1.0	78.3	78.8	0.5	0.5
Casinia laevis	Shrub	1.5	78.7	78.9	0.2	0.2
Alphitonia constricta	Shrub	1	79.2	81.8	2.6	2.6
Alphitonia constricta	Shrub	1.1	82.4	82.8	0.4	0.4
Alphitonia constricta	Shrub	0.9	83	83.5	0.5	0.5
Acacia leiocalyx	Shrub	1.8	98.8	99.5	0.7	0.7
Total Native Shrub Cover					10.8m (10.8%) Med ht: 1.5m	
Total Non-native Shrub Cover					0.0 (0.0%) Med ht: 0 m	

Site Photos

Start of Transect

End of Transect

Northern View from Centre of Transect

Eastern View from Centre of Transect

Southern View from Centre of Transect

Western View from Centre of Transect

HABITAT QUALITY ASSESSMENT

Date:	17.07.2024	**Collector:**	CJH, ST, JM	**OA AU1 Transect 2 (HQP 3a)**
Time:	10:50	**Job No.**	2019-100e	
Mapped RE:	12.9-10.2	**Description:**	*Corymbia citriodora subsp. variegata +/- Eucalyptus crebra* open forest on sedimentary rocks	
Field RE:	12.9-10.2	**Description:**	*Corymbia citriodora subsp. variegata +/- Eucalyptus crebra* open forest	
Pre-clear RE:	12.9-10.2	**Description:**	*Corymbia citriodora subsp. variegata +/- Eucalyptus crebra* open forest on sedimentary rocks	
Notes	Patch reasonably intact but with canopy 'holes' from more intensive (historic) timber cutting. Large trees are present but no significantly large trees occur; stumps and discarded crown prevalent in patch. Lantana* cover is variable. Patch extends downslope into gully before a change in geology to the east.			

Slope:	**Aspect:**	**Landform (local):**	**Landform (broad):**
18-25%	E	Mid-slope	Undulated rise of low spur
Slope Shape:	Flat to convex		

50x20m Area	All logs >10cm, >0.5m with 50 x 20m plot boundary		**100x50m Area**	(NB: *Ecologically Dominant Layer. Tree defined as single stemmed over 2m. All tree species in the 100 x 50m (not just EDL species) – Specify species	
Coarse Woody Debris	**Site Total: 119** **Per ha Total: 1,190m/ha**		Total Native **Tree** Spp. Richness	Dominant / Codominant: *Corymbia citriodora*	Associated / Suppressed: *Eucalyptus crebra* *Alphitonia excelsa* *Acacia irrorata* *Pittosporum angustifolium*
				Proportion of EDL species with evidence of recruitment (Specify recruiting species)	*100%*
				Recruitment is assessed as the proportion of dominant species present at a site that are regenerating:	

50x10m area	Native plant species richness	(NB: List species if known or count if unknown. Shrub is defined as single stemmed below 2m or multi-stemmed from base or below 20cm)	**Total**
Shrub	*Atalaya salicifolia, Myoprum montanum. Eustrephus latifolius, Psydrax odorata, Jasminum suavissimum, Acacia leiocalyx, Alphitonia excelsa, Acacia irrorate, Callitris baileyi, Acacia maidenii, Acacia disparrima, Pittosporum angustifolium, Alstonia constrica, Acacia salicina, Abutilon otocarpum, Trema tomentosa, Psydrax buxifolia, Denhamia cunninghamii*		14
Grass	*Sporobolus elongatus, Digitaria sp., Themeda triandra, Panicum simile, Cymbopogon refractus, Panicum effusum, Microlaena stipoides, Chloris sp., Aristada calycina, Chloris ventricose, Aristida gracillipes*		12
Forb	*Desmodium gunnii, Glctia tenuifolia, Solanum nemophilum, Eremophila debilis, Desmodium rhytidophyllum, Scleria mackaviensis, Sida hackettiana, Dichondra repens, Glycine clandestina, Cyanthillium cinereum, Lobelia purpurascens, Cyperus gracilis, Lomandra filiformis, Veronica plebeia, Smilax australis, Secamore elliptica, Brunoniella australis, Laxmania gracilis, Achyranthes aspera, Plantago debilis, Gahnia aspera, Grewia latifolia*		23
Non-native plant cover	*Cirsium vulgare, Passiflora subpeldata, Passiflora suberosa, Tecoma stans, Erigeron sp., Salvia coccinea, Melanis repens, Opuntia tomentosa, Lantana camara*		23.7

Five 1x1m plots	*attributes are essential to assess as used in scoring, however assessment of all attributes improves your ability to more accurately visualise proportions of each of the attributes					
Ground Cover type	**1**	**2**	**3**	**4**	**5**	**Ave.**
Native other grass (if relevant)*	10		15	30		11
Native forbs and other species (non-grass)	8	15	10	20	20	14.6
Native shrubs (<1m in height)		25	5		15	9
Non-native grass	10		10			4
Non-native forbs and shrubs	7					1.4
Litter	55	35	40	45	40	43
Rock						0
Bare ground			20			4
Other (e.g. timber, inorganic refuse)	10	25		5	25	13
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

100x50m Area:	*from benchmark doc				
Eucalypt large tree DBH:	380mm	No. of large eucalypt trees in plot:	28	Total Large Trees (ha):	**56**
Non-eucalypt large tree DBH:	n/a	No. of large non-eucalypt trees in plot:	n/a		

Plot based weed data	Record all weed species within the 10 x 50 sub-plot
Species	**notes**
*Cirsium vulgare**	Occasional
*Passiflora subpeldata**	Occasional
*Passiflora suberosa**	Occasional
*Tecoma stans**	Occasional
*Erigeron sp**	Occasional
*Salvia coccinea**	Occasional
*Melanis repens**	Occasional
Opuntia tomentosa (WoNS)*	Occasional
Lantana camara (WoNS)*	Common

***Derived Koala Spot Assessment Technique (SAT)**	Record all koala scats at the base of eucalypts >100 mm DBH and taller than 4 m height.	
Number of trees assessed (record number – target is 30)	**Number of scats and tree species where scats were recorded**	
30	*1 – Eucalyptus tereticornis*	
	1 – Eucalyptus tereticornis	

Plot based tree data	Record all eucalypt trees over **<u>300mm dbh</u>** and non-eucalypts **<u>>200mm dbh</u>** within the 100 x 50 plot – record multiple stems in parentheses this way (230, 250, 190)
Species	**DBH**
C. citriodora	***390, 530, 440, 400, 460,*** *330,* ***490, 490, 390, 460, 400,*** *360, 350,* ***510, 470,*** *320,* ***600, 400, 380, 460, 520, 520,*** *350,* ***500,*** *370,* ***490, 520, 420, 440,*** *360, 360,* ***450, 450, 390,***
Dead tree	***390, 520***

canopy species regeneration and number of stems	Record all species and count number of stems <50mm and 50-299mm DBH (500m^2). Ensure stems class is denoted. Use parenthesise for <50mm viz *Eucalyptus tereticornis* (11), 13
Species:	**20x50m**
C. citriodora	25
E. crebra	1

100m Transect Tree Canopy Cover Intercept	(Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. *If trees are in the same layer and continuous along the transect group them). Canopy layer includes T1 and T2 layers, but not T3.					
Species	Strata (C or S or E)	Height (m)	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Corymbia citriodora subsp *variegata*	T1	28.4	2.0	6.5	4.5	12.3
Corymbia citriodora subsp *variegata*	T1	28.4	4.0	14.3	10.3	
Corymbia citriodora subsp *variegata*	T1	24.9	18.2	26.3	8.1	15.5
Corymbia citriodora subsp *variegata*	T1	21.5	26.3	33.7	7.4	
Corymbia citriodora subsp *variegata*	T1	26.6	44.8	49.0	4.2	10.0
Corymbia citriodora subsp *variegata*	T1	19.6	47.9	54.8	6.9	
Corymbia citriodora subsp *variegata*	T1	21.0	49.8	60.4	10.6	13.6
Corymbia citriodora subsp *variegata*	T1	23.9	56.4	63.4	7.0	
Corymbia citriodora subsp *variegata*	T1	26.8	68.3	79.8	11.5	11.5
Corymbia citriodora subsp *variegata*	T1	19.9	96.0	100.0	4.0	4.0

Corymbia citriodora subsp *variegata*	T2	15.7	15.8	18.1	2.3	2.3
Eucalyptus crebra	T2	12.3	28.2	32.3	4.1	4.1
Corymbia citriodora subsp *variegata*	T2	15.0	69.5	71.7	2.2	2.2
Corymbia citriodora subsp *variegata*	T2	14.9	78.7	81.1	2.4	2.4
Corymbia citriodora subsp *variegata*	T2	16.2	84.5	87.9	3.4	11.4
Eucalyptus crebra	T2	12.4	84.8	86.2	1.4	
Corymbia citriodora subsp *variegata*	T2	10.9	86.1	92.3	6.2	
Corymbia citriodora subsp *variegata*	T2	10.0	91.6	95.15	3.55	
Corymbia citriodora subsp *variegata*	T2	12.8	92.8	95.9	3.1	
Total Canopy (T1) Cover					66.9m (66.9%) Med ht: 24.4m	
Total Sub-canopy (T2) Cover					22.4m (22.4%) Med ht: 12.8m	

100m Transect **Shrub canopy cover**	* denote as native or exotic. Only native shrub cover is used in the scoring. **Shrub** - Woody plant that is multi-stemmed from the base (or within 200 mm from ground level) **<8 m tall**, or if single stemmed, **less than 2 m tall**					
Species	Strata: Shrub	Height (m)	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Myoporum montanum	Shrub	1.0	4.9	5.3	0.4	0.4
Alphitonia excelsa	Shrub	1.5	6.7	7.2	0.5	0.5
Corymbia citriodora subsp *variegata*	Shrub	0.5	9.7	9.9	0.2	0.2
Corymbia citriodora subsp *variegata*	Shrub	1.1	22.0	22.4	0.4	0.4
Corymbia citriodora subsp *variegata*	Shrub	0.6	31.6	31.9	0.3	0.3
Corymbia citriodora subsp *variegata*	Shrub	1.7	34.7	35.1	0.4	0.4
Alphitonia excelsa	Shrub	1.0	35.3	35.5	0.2	0.2
Corymbia citriodora subsp *variegata*	Shrub	0.5	36.1	36.3	0.2	0.2
Alphitonia excelsa	Shrub	2.0	37.6	38.0	0.4	0.4
Bridelia leichhardtii	Shrub	2.0	39.5	39.8	0.3	0.3
Alphitonia excelsa	Shrub	2.0	41.9	42.9	1.0	1.0
Ficus opposita	Shrub	1.2	50.2	50.9	0.7	0.7
Corymbia citriodora subsp *variegata*	Shrub	1.0	64.5	64.6	0.1	0.1
Alphitonia excelsa	Shrub	2.0	74.8	75.2	0.4	0.4
Mallotus philippensis	Shrub	1.0	90.6	91.3	0.7	0.7
Acacia maidenii	Shrub	2.0	91.6	92.0	0.4	0.4
Myoporum montanum	Shrub	1.8	92.7	93.3	0.6	0.6
Psydrax odorata	Shrub	2.0	97.0	99.7	2.7	2.7
Total Native Shrub Cover					9.9 (9.9%) Med ht: 1.35 m	

Site Photos

Start of Transect

End of Transect

Northern View from Centre of Transect

Eastern View from Centre of Transect

Southern View from Centre of Transect

Western View from Centre of Transect

HABITAT QUALITY ASSESSMENT

Date:	17.07.2024	**Collector:**	CJH, ST, JM	**OA AU1 Transect 3 (HQP 2a)**
Time:	13:30	**Job No.**	2019-100e	
Mapped RE:	12.9-10.2	**Description:**	*Corymbia citriodora subsp. variegata* +/- *Eucalyptus crebra* open forest on sedimentary rocks	
Field RE:	12.9-10.2	**Description:**	*Corymbia citriodora subsp. variegata* +/- *Eucalyptus crebra* open forest	
Pre-clear RE:	12.9-10.2	**Description:**	*Corymbia citriodora subsp. variegata* +/- *Eucalyptus crebra* open forest on sedimentary rocks	
	Patch is reasonably intact but evidence of timber cutting impacts; canopy holes and discarded crowns. Variable shrub and mid-storey cover, and pockets of moderate groundcover. Variable densities of Lantana* (WoNS). Very old koala scat at base of T2 *Eucalyptus tereticornis*.			

Slope:	**Aspect:**	**Landform (local):**	**Landform (broad):**
12-14	WNW	Upper slopes	Undulated rise of low spur
Slope Shape:	Flat		

50x20m Area	All logs >10cm, >0.5m with 50 x 20m plot boundary		**100x50m Area**	(NB: *Ecologically Dominant Layer. Tree defined as single stemmed over 2m. All tree species in the 100 x 50m (not just EDL species) – Specify species	
Coarse Woody Debris	**Site Total: 37m** **Per ha Total: 370m/ha**		Total Native **Tree** Spp. Richness	Dominant / Codominant: *Corymbia citriodora*	Associated / Suppressed: *Eucalyptus crebra* *Corymbia tessellaris* *Eucalyptus tereticornis* *Alphitonia excelsa* *Mallotus phillippensis* *Acacia leiocalyx* *Acacia disparrima*
				Proportion of EDL species with evidence of recruitment (Specify recruiting species)	*100%*
				Recruitment is assessed as the proportion of dominant species present at a site that are regenerating:	*Corymbia citriodora* *Eucalyptus crebra*

50x10m area	Native plant species richness	(NB: List species if known or count if unknown. Shrub is defined as single stemmed below 2m or multi-stemmed from base or below 20cm)	**Total**
Shrub	*Mallotus philippensis, Alphitonia excelsa, Acacia maidenii, Acacia leoicalyx, Acacia disparrima, Psydrax odorata, Dodenea, viscosa, Denhamia cunninghamii. Alstonia constricta, Myoporum montanum, Acacia salicina,*		9
Grass	*Eragrostis leptostachya, Chloris ventricose, Themeda triandra, Heteropogon contortus, Sporobolus elongatus, Aristida calycina, Cymbopogon refractus, Panicum effusum, Eragrostis spartinoides, Bothriochloa decipiens, Eremochloa bimaculate, Aristada sp.,*		10
Forb	*Desmodium varians, Cyperus gracilis, Lobelia purpurescens, Galactia tenuiflora, Brunoniella australis, Sida hackettiana, Glossocardia bidens, Rostellularia adscendens, Goodenea hederacea, Desmodium gunnii, Glycine clandestine, Dianella brevipedunculatm, Desmodium rhytidophyllum, Pilea sp,, Lomandra filiformis, Peripleura diffusa, Eustrephus latifolius, Grewia latifoliam, Chrysocephalum apiculatum,*		10
Non-native plant cover	*Tagetes minuta, Melanis repens, Passiflora suberosa, Lantana camara`*		10.3%

Five 1x1m plots	*attributes are essential to assess as used in scoring, however assessment of all attributes improves your ability to more accurately visualise proportions of each of the attributes					
Ground Cover type	**1**	**2**	**3**	**4**	**5**	**Ave.**
Native other grass (if relevant)*	18	60	20	40		27.6
Native forbs and other species (non-grass)	10	13	10	3		7.2
Native shrubs (<1m in height)				2		0.4
Non-native grass						0
Non-native forbs and shrubs	2					0.4
Litter	65	25	55	50	75	54

Rock	5				5	2
Bare ground			13	5	18	7.2
Other (e.g. timber, inorganic refuse)		2	2		2	1.2
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

100x50m Area:	*from benchmark doc				
Eucalypt large tree DBH:	380mm	No. of large eucalypt trees in plot:	17	Total Large Trees (ha):	**34**
Non-eucalypt large tree DBH:	n/a	No. of large non-eucalypt trees in plot:	n/a		

Plot based weed data	Record all weed species within the 10 x 50 sub-plot
Species	**notes**
Lantana camara (WoNS)*	Common
*Passiflora suberosa**	Occasional
*Tagetes minuta**	Occasional
*Melanis repens**	Common

***Derived Koala Spot Assessment Technique (SAT)**	Record all koala scats at the base of eucalypts >100 mm DBH and taller than 4 m height.	
Number of trees assessed (record number – target is 30)	**Number of scats and tree species where scats were recorded**	
30	*0*	*0*

Plot based tree data	Record all eucalypt trees over **<u>300mm dbh</u>** and non-eucalypts **<u>>200mm dbh</u>** within the 100 x 50 plot – record multiple stems in parentheses this way (230, 250, 190)
Species	**DBH**
Corymbia citriodora subsp. variegata	**520**, 350, 310, 320, 310, **430**, **460**, **410**, **500**, 370, 340, **520**, **890**, 370, **440**, **400**, 360, **490**, 370, 360, 300, **400**, 370, **480**, 330, **430**, (**380, 220**)
Eucalyptus crebra	**600**, **400**, 300, 330, **400**
Dead tree	470

canopy species regeneration and number of stems	Record all species and count number of stems <50mm and 50-299mm DBH (500m^2). Ensure stems class is denoted. Use parenthesise for <50mm viz *Eucalyptus tereticornis* (11), 13
Species:	**20 x 50m**
Corymbia citriodora subsp. variegata	4
Eucalyptus crebra	4
Corymbia tessellaris	5
Eucalyptus tereticornis	1

100m Transect Tree Canopy Cover Intercept	(Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. *If trees are in the same layer and continuous along the transect group them). Canopy layer includes T1 and T2 layers, but not T3.					
Species	Strata (C or S or E)	Height (m)	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Corymbia citriodora subsp. variegata	T1	24.0	1.6	4.3	2.7	10.5
Corymbia citriodora subsp. variegata	T1	19.0	2.4	12.1	9.7	
Corymbia citriodora subsp. variegata	T1	21.0	26.0	37.7	11.7	23.6
Corymbia citriodora subsp. variegata	T1	19.0	37.6	44.1	6.5	
Corymbia citriodora subsp. variegata	T1	22.0	42.3	49.6	7.3	
Corymbia citriodora subsp. variegata	T1	27.0	59.6	66.2	6.6	33.4
Corymbia citriodora subsp. variegata	T1	23.0	59.4	67.1	7.7	
Corymbia citriodora subsp. variegata	T1	22.0	66.6	73.1	6.5	
Corymbia citriodora subsp. variegata	T1	20.0	71.2	79.3	8.1	
Corymbia citriodora subsp. variegata	T1	26.0	74.7	86.6	11.9	

Corymbia citriodora subsp. variegata	T1	23.0	82.5	100.0	17.5	
Corymbia citriodora subsp. variegata	T2	10.0	0.0	1.2	1.2	6.3
Corymbia citriodora subsp. variegata	T2	17.0	0.6	6.3	5.7	
Corymbia citriodora subsp. variegata	T2	14.0	20.7	25.0	4.3	4.3
Corymbia citriodora subsp. variegata	T2	13.0	25.5	31.5	6.0	6.0
Eucalyptus crebra	T2	10.0	49.9	52.5	5.6	2.6
Corymbia citriodora subsp. variegata	T2	14	55.0	64.0	9.0	9.0
Eucalyptus sp.	T3	7.0	17.1	18.4	1.3	1.3
Eucalyptus tereticronis	T3	9.0	18.0	19.6	1.6	1.6
Eucalyptus tereticronis	T3	8.0	24.1	25.2	1.1	1.1
Total Canopy (T1) Cover					67.5m (67.5%) Med ht: 22.0 m	
Total Sub-canopy (T2) Cover					28.2m (28.2%) Med ht: 13.5m	
Total Sub-canopy (T3) Cover					4 m (4%) Med ht: 8 m	

100m Transect **Shrub canopy cover**	* denote as native or exotic. Only native shrub cover is used in the scoring. **Shrub** - Woody plant that is multi-stemmed from the base (or within 200 mm from ground level) **<8 m tall**, or if single stemmed, **less than 2 m tall**					
Species	Strata: Shrub	Height (m)	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Dodenea viscosa	Shrub	1.1	36.4	37.2	0.8	0.8
Alstonia constricta	Shrub	1.0	58.7	59.0	0.3	0.3
Acacia maidenii	Shrub	1.2	59.9	60.7	0.8	0.8
Acacia maidenii	Shrub	1.0	92.9	94.4	1.5	1.5
Acacia maidenii	Shrub	1.0	95.4	95.7	1.3	1.3
Alphitona excelsa	Shrub	2.0	90.1	91.1	1.0	1.0
Total Native Shrub Cover					5.7 m (5.7%) Med ht: 0.9 m	

Site Photos

Start of Transect

End of Transect

Northern View from Centre of Transect

Eastern View from Centre of Transect

Southern View from Centre of Transect

Western View from Centre of Transect

Koala scats

Koala scats

HABITAT QUALITY ASSESSMENT

Date:	17/01/2025	**Collector:**	CM, ST	**Site: OA AU2 Transect 1** *(Transect 4 (1) – Jan 2025)*
Time:		**Job No.**	2019-100e	
Mapped RE:	RE 12.8.17	**Description:**	Mixed woodland with combinations of *Eucalyptus crebra*, *E. melanophloia*, *E. tereticornis*, *Corymbia tessellaris*, *C. intermedia* woodland on Cainozoic igneous rocks	
Field RE:	RE 12.8.17	**Description:**	Mixed woodland dominated by *Eucalyptus crebra* with *Eucalyptus tereticornis* and *Corymbia tessellaris*. Basalt derived soil, abundant rocks. Transect follows the edge of a track cleared through heavy *Lantana camara* infestation. Quadrat extends 50 m to east of the tape due to changed RE to the west of the track.	

Slope:	**Aspect:**	**Landform (local):**	**Landform (broad):**
	west	Relatively flat area at base of slope	Hilly
Slope Shape:	Concave		

50x20m Area	All logs >10cm, >0.5m with 50 x 20m plot boundary		**100x50m Area**	(NB: *Ecologically Dominant Layer. Tree defined as single stemmed over 2m. All tree species in the 100 x 50m (not just EDL species) – Specify species	
Coarse Woody Debris	**Site Total:** **Per ha Total:**	1 10	Total Native **Tree** Spp. Richness: **9 species**	Dominant / Codominant: *Eucalyptus crebra* (T1) *Corymbia tessellaris* (T2) *Eucalyptus tereticornis* (T2)	Associated / Suppressed: *Eucalyptus melanophloia* *Alphitonia excelsa* *Acacia leiocalyx* *Acacia salicina* *Erythrina vespertilio* *Psydrax odorata*
				Proportion of EDL species with evidence of recruitment (Specify recruiting species)	*Eucalyptus crebra* *Eucalyptus tereticornis*
				Recruitment is assessed as the proportion of dominant species present at a site that are regenerating:	66 %

50x10m area	Native plant species richness	(NB: List species if known or count if unknown. Shrub is defined as single stemmed below 2m or multi-stemmed from base or below 20cm)	**Total**
Shrub	*Grewia latifolia. E. tesselaris,* Unknown shrub		3
Grass	*Bothriochloa decipiens, Sporobolus sp., Fairy grass, Aristida sp., Echinopogon nutans, Chloris ventricose, Paspalum sp.*		7
Forb	*Lobelia concolor, Fimbristylis sp., Sigesbeckia orientalis, Centella asiatica, Dianella caerulea, Lobelia purpurascens, Geitonoplesium cymosum, Rhynchospora corymbosa, Eustrephus latifolius, Evolvulus alsinoides, Veronica sp.*		11
Non-native plant cover	Dominant species: *Lantana camara.* Other species observed: *Gomphocarpus physocarpus, Bidens pillosa, Sida rhombifolia, Asparagus africanus / plumosus* (smothering canopy when present), *Solanum seaforthium, Echinochloa colona, Crotalaria* sp, *Siratro* sp		80 %

Five 1x1m plots	*attributes are essential to assess as used in scoring, however assessment of all attributes improves your ability to more accurately visualise proportions of each of the attributes					
Ground Cover type	**1**	**2**	**3**	**4**	**5**	**Ave.**
Native perennial ('decreaser') grass cover*	25		9	15	20	13.8
Native other grass (if relevant)*					10	2
Native forbs and other species (non-grass)	10	30	1	10		10.2
Native shrubs (<1m in height)						0
Non-native grass						0
Non-native forbs and shrubs	45	40	80	60	30	51
Litter	20	30	10	15	40	23
Rock					1	0.2
Bare ground						
Other (e.g. timber, inorganic refuse)						

TOTAL		100%	100%	100%	100%	100%	100%
100x50m Area:	*from benchmark doc						
Eucalypt large tree DBH:	380	No. of large eucalypt trees in plot:		9	Total Large Trees (ha):		**18**
Non-eucalypt large tree DBH:		No. of large non-eucalypt trees in plot:					

Plot based tree data	Record all eucalypt trees over **300mm dbh** and non-eucalypts **>200mm dbh** within the 100 x 50 plot – record multiple stems in parentheses this way (230, 250, 190)
Species	**DBH**
Eucalyptus crebra	6
Corymbia tessellaris	1
Eucalyptus tereticornis	2
Note: Base of trees were inaccessible due to *Lantana camara* infestation, above indicates a count of trees estimated to be above the threshold.	

100m Transect **Tree Canopy Cover Intercept**	(Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. *If trees are in the same layer and continuous along the transect group them). Canopy layer includes T1 and T2 layers, but not T3.					
Species	Strata (C or S or E) T1 = 20 – 26m T2 = 13 – 16 m T3 = 4 – 10 m	Height (m)	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Eucalyptus crebra	T1		0.0	5.6	5.6	5.6
Eucalyptus crebra	T1		4.8	9.7	4.9	6.6
Eucalyptus crebra	T1		9.1	11.4	2.3	
Eucalyptus crebra	T1		66.0	73.0	7	7
Eucalyptus crebra	T1		85.0	98.0	13	13
Corymbia tessellaris	T2		3.1	4.4	1.3	1.3
Corymbia tessellaris	T2		18.6	27.5	8.9	8.9
Corymbia tessellaris	T2		29.7	35.7	6	6
Corymbia tessellaris	T2		44.3	49.0	4.7	4.7
Corymbia tessellaris	T2		54.5	64.5	10	10
Corymbia tessellaris	T2		56.8	64.0	7.2	
Corymbia tessellaris	T3		44.4	45.5	1.1	1.1
Alphitonia excelsa	T3		92.0	93.3	1.3	1.3
Total Canopy (T1) Cover					32.2 m (32.2 %) Med ht: 21 m	
Total Sub-canopy (T2) Cover					30.9 m (30.9 %) Med ht: 15 m	
Total Sub-canopy (T3) Cover					2.4 m (2.4 %) Med ht: 6 m	

100m Transect **Shrub canopy cover**	* denote as native or exotic. Only native shrub cover is used in the scoring. **Shrub** - Woody plant that is multi-stemmed from the base (or within 200 mm from ground level) **<8 m tall**, or if single stemmed, **less than 2 m tall**					
Species	Strata: Shrub	Height (m)	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Lantana camara	S	1.5	0.0	45.0	45.0	45.0
Corymbia tessellaris	S	1.5	48.1	48.2	0.1	0.1
Lantana camara	S	1.5	65.0	100.0	35.0	35.0
Total Native Shrub Cover					0.1 (0.1 %) Med ht: 1.5 m	
Total Non-native Shrub Cover					80 (80 %) Med ht: 1.5 m	

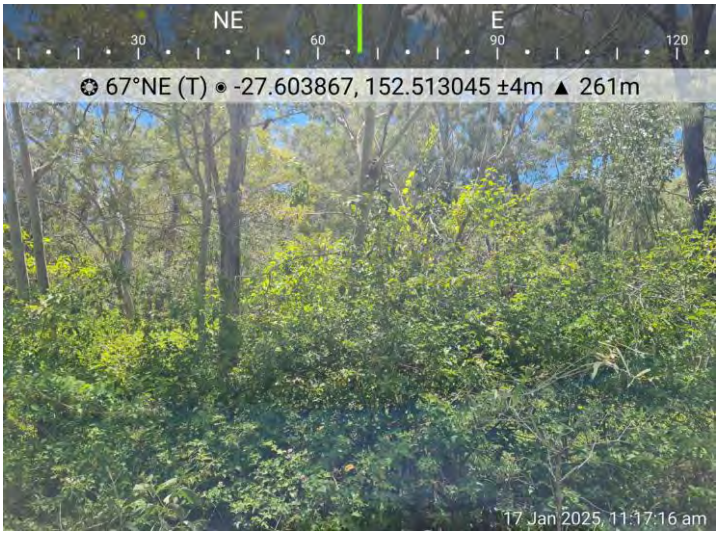
Site Photos

Landscape (panorama) photo/s of the general terrain

Start of Transcect

End of Transect

Northern View from Centre of Transect



Eastern View from Centre of Transect (not included in plot)

Southern View from Centre of Transect

Western View from Centre of Transect

View to the east of the transect from 29 m

HABITAT QUALITY ASSESSMENT

Date:	17/01/2025	**Collector:**	CM, ST	**Site: OA AU2 Transect 2** *(Transect 5 (2) – Jan 2025)*
Time:		**Job No.**	2019-100e	
Mapped RE:	12. 8.17	**Description:**	Mixed woodland with combinations of *Eucalyptus crebra, Eucalyptus melanophloia, Eucalyptus tereticornis, Corymbia tessellaris, Corymbia intermedia* woodland on Cainozoic igneous rocks	
Field RE:	12.8.17	**Description:**	Mixed woodland dominated by *Eucalyptus crebra* with *Eucalyptus tereticornis* and *Corymbia tessellaris*. Basalt derived soil, abundant surface rocks. **This is a 50 x 20m transect.** Transect follows the edge of a track cleared through heavy *Lantana camara* infestation.	

Slope:	**Aspect:**	**Landform (local):**	**Landform (broad):**
	North west	Rocky slope	Rolling steep hills
Slope Shape:	Convex E-W, slight concave N-S down ridge		

50x20m Area	All logs >10cm, >0.5m with 50 x 20m plot boundary		**100x50m Area**	(NB: *Ecologically Dominant Layer. Tree defined as single stemmed over 2m. All tree species in the 100 x 50m (not just EDL species) – Specify species	
Coarse Woody Debris	**Site Total:** **Per ha Total:**	10 100	Total Native **Tree** Spp. Richness 8	Dominant / Codominant: *Corymbia tessellaris* *Eucalyptus melanophloia*	Associated / Suppressed: *Eucalyptus tereticornis* *Eucalyptus crebra* *Acacia disparima* *Acacia salicina* *Petalostigma sp.* *Aphananthe philippinensis*
				Proportion of EDL species with evidence of recruitment (Specify recruiting species)	50 %
				Recruitment is assessed as the proportion of dominant species present at a site that are regenerating:	*Corymbia tessellaris*

50x10m area	Native plant species richness	(NB: List species if known or count if unknown. Shrub is defined as single stemmed below 2m or multi-stemmed from base or below 20cm)	**Total**
Shrub	*Acacia sp.*, *Mallotus phillipinenses*, unknown tree, *Acacia disparrima*		4
Grass	Unknown 1, *Themada triandra*, *Heteropogon contortus*		3
Forb	*Sigesbekia orientalis, Ipoema plebian, Cyperus gracilis, Glycine sp.*, Native cucumber		5
Non-native plant cover	Dominant species: *Lantana camara.* Other species observed: *Megathyrsus maximus* var. *pubiglumis*, *Bidens pilosa*, *Passiflora suberosa, Passiflora subpeltata*, *Asparagus africanus / plumosus* (smothering canopy when present), *Solanum seaforthium*, *Abutilon* sp., *Rivinia humilis*, *Crassocephalum crepidioides*, *Setaria pumila* subsp. *pumila, Sorghum halepense*, *Melinis repens*		100 %

Five 1x1m plots	*attributes are essential to assess as used in scoring, however assessment of all attributes improves your ability to more accurately visualise proportions of each of the attributes					
Ground Cover type	**1**	**2**	**3**	**4**	**5**	**Ave.**
Native perennial ('decreaser') grass cover*	1					0.2
Native other grass (if relevant)*	2					0.4
Native forbs and other species (non-grass)						0
Native shrubs (<1m in height)						0
Non-native grass						0
Non-native forbs and shrubs	70	100	90	100	100	92
Litter	15		5			4
Rock	10		5			3
Bare ground	2					0.4
Other (e.g. timber, inorganic refuse)						0

TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

100x50m Area:	*from benchmark doc				
Eucalypt large tree DBH:	380	No. of large eucalypt trees in plot:	3	Total Large Trees (ha):	**6**
Non-eucalypt large tree DBH:	n/a	No. of large non-eucalypt trees in plot:	n/a		

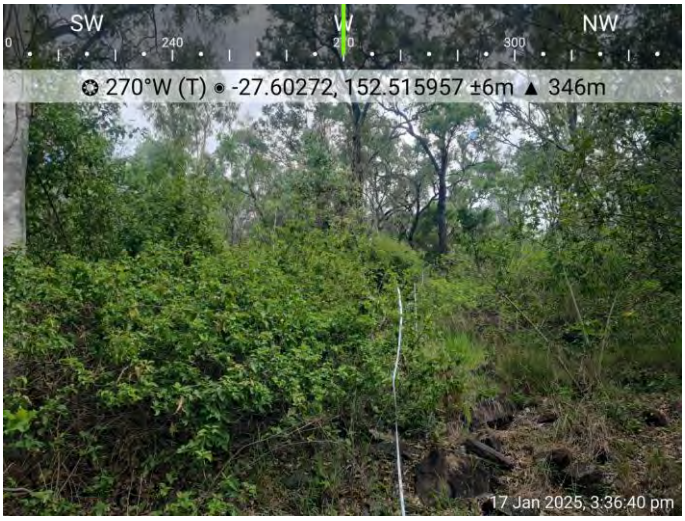
Plot based tree data	Record all eucalypt trees over **300mm dbh** and non-eucalypts **>200mm dbh** within the 100 x 50 plot – record multiple stems in parentheses this way (230, 250, 190)
Species	**DBH**
Eucalyptus melanophloia	3 specimens
Note: Base of trees were inaccessible due to *Lantana camara* infestation, above indicates a count of trees estimated to be above the threshold.	

100m Transect **Tree Canopy Cover Intercept**	(Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. *If trees are in the same layer and continuous along the transect group them). Canopy layer includes T1 and T2 layers, but not T3.					
Species	Strata (C or S or E) T1 = 10 – 15 m T2 = 4 – 10 m	Height (m)	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Note: Cover is an estimate of cover running parallel to the track. Size estimate difficult due to slope and lantana.						
Eucalyptus melanophloia	T1		10.1	13.7	3.6	3.6
Eucalyptus melanophloia	T1		35.0	41.6	6.6	6.6
Eucalyptus melanophloia	T1		48.5	50	1.5	1.5
Bridelia leichhardtii	T2		0	1.4	1.4	1.4
Ficus sp.	T2		1.7	5.7	4	5.7
Acacia salicina	T2		3.8	7.4	3.6	
Corymbia tessellaris	T2		10.7	12.2	1.5	1.5
Petalostigma pubescens	T2		12.8	14.5	1.7	1.7
Corymbia tessellaris	T2		18.6	21.7	3.1	3.1
Corymbia tessellaris	T2		29.9	31.4	1.5	1.5
Eucalyptus melanophloia	T2		32.3	35.1	2.8	2.8
Eucalyptus melanophloia	T3		15.0	15.3	0.3	0.3
Total Canopy (T1) Cover					11.7 m (23.4 %) Med ht: 12 m	
Total Sub-canopy (T2) Cover					17.7 m (35.4 %) Med ht:8 m	
Total Sub-canopy (T3) Cover					0.3 m (0.6 %) Med ht: 3 m	

100m Transect **Shrub canopy cover**	* denote as native or exotic. Only native shrub cover is used in the scoring. **Shrub** - Woody plant that is multi-stemmed from the base (or within 200 mm from ground level) **<8 m tall**, or if single stemmed, **less than 2 m tall**					
Species	Strata: Shrub	Height (m)	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Lantana camara	S	1.5	0.0	50.0	50	50
Total Non-native Shrub Cover					50 (100 %) Med ht: 1.5 m	

Site Photos

Landscape (panorama) photo/s of the general terrain



Start of Transect

End of Transect

Northern View from Centre of Transect

Eastern View from Centre of Transect

Southern View from Centre of Transect

Western View from Centre of Transect

HABITAT QUALITY ASSESSMENT

Date:	17/01/2025	**Collector:**	CM, ST	**Site: OA AU3 Transect 1** *(Transect 6 (3) – Jan 2025)*
Time:		**Job No.**	2019-100e	
Mapped RE:	12.8.17 (incorrectly mapped)	**Description:**	Mixed woodland with combinations of *Eucalyptus crebra*, *Eucalyptus melanophloia*, *Euclayptus tereticornis*, *Corymbia tessellaris*, *Corymbia intermedia* woodland on Cainozoic igneous rocks	
Field RE:	12.8.24	**Description:**	**Technical description RE 12.8.24:** *Corymbia citriodora* subsp. *variegata* open forest on Cainozoic igneous rocks especially trachyte *Corymbia citrodora* subsp. *variegata* open forest with *Eucalyptus crebra*. Basalt derived soil, with scattered small igneous rocks. Transect follows the edge of a track cleared through heavy *Lantana camara* infestation.	

Slope:	**Aspect:**	**Landform (local):**	**Landform (broad):**
	north	hills	Rolling hills
Slope Shape:	Convex to north, gradual concave to south.		

50x20m Area	All logs >10cm, >0.5m with 50 x 20m plot boundary		**100x50m Area**	(NB: *Ecologically Dominant Layer. Tree defined as single stemmed over 2m. All tree species in the 100 x 50m (not just EDL species) – Specify species	
Coarse Woody Debris	**Site Total:** **Per ha Total:**	10 100	Total Native **Tree** Spp. Richness 9	Dominant / Codominant: *Corymbia citriodora* subsp. *variegata*	Associated / Suppressed: *Eucalyptus crebra* *Acacia disparrima* *Mallotus phillipinensis* *Ficus* sp. *Aphananthe phillipinensis* *Alphitonia excelsa* *Brachychyton sp.* *Bridelia sp.*
				Proportion of EDL species with evidence of recruitment (Specify recruiting species)	33 %
				Recruitment is assessed as the proportion of dominant species present at a site that are regenerating:	*Corymbia citriodora*

50x10m area	Native plant species richness	(NB: List species if known or count if unknown. Shrub is defined as single stemmed below 2m or multi-stemmed from base or below 20cm)	**Total**
Shrub	*Alphitonia excelsa, Mallotus phillipinensis, Eucalyptus tereticornis, Grewia latifolia, Trema tomentosa, Petalostigma* sp.		6
Grass	*Oplismenus sp.*		1
Forb	*Glycine* sp., *Enchylaena tomentosa, Sigesbekia orientalis, Cyperus gracilis, Native cucumber, Commelina diffusa, Desmodium* sp.		7
Non-native plant cover	Dominant species: *Lantana camara*. Other species include: *Megathyrsus maximus* var. *pubiglumis*, *Bidens pilosa, Ricinus humilis, Solanum seaforthium, Physalis sp.*, *Tagetes minuta*, *Solanum nigrum*, *Asparagus africanus / plumosus* (smothering canopy when present), *Passiflora subpeltata*, *Senecio madagascariensis*		100 %

Five 1x1m plots	*attributes are essential to assess as used in scoring, however assessment of all attributes improves your ability to more accurately visualise proportions of each of the attributes					
Ground Cover type	**1**	**2**	**3**	**4**	**5**	**Ave.**
Native perennial ('decreaser') grass cover*						
Native other grass (if relevant)*						
Native forbs and other species (non-grass)						
Native shrubs (<1m in height)						
Non-native grass						
Non-native forbs and shrubs	100	100	100	100	100	100
Litter						
Rock						
Bare ground						

Other (e.g. timber, inorganic refuse)						
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

100x50m Area:	*from benchmark doc				
Eucalypt large tree DBH:	420	No. of large eucalypt trees in plot:	8	Total Large Trees (ha):	**16**
Non-eucalypt large tree DBH:		No. of large non-eucalypt trees in plot:			

Plot based tree data	Record all eucalypt trees over **300mm dbh** and non-eucalypts **>200mm dbh** within the 100 x 50 plot – record multiple stems in parentheses this way (230, 250, 190)
Species	**DBH**
Eucalyptus crebra	1
Corymbia citriodora subsp. *variegata*	7
Note: Base of trees were inaccessible due to dense *Lantana camara* infestation, above indicates a count of trees estimated to be above the threshold.	

100m Transect **Tree Canopy Cover Intercept**	(Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. *If trees are in the same layer and continuous along the transect group them). Canopy layer includes T1 and T2 layers, but not T3.					
Species	Strata (C or S or E) T1 = 17 – 25 m T2 = 10 – 17 m T3 = 5 – 10 m	Height (m)	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Corymbia citriodora subsp. *variegata*	T1	20	9	15.8	6.8	6.8
Corymbia citriodora subsp. *variegata*	T1	17	10	12.2	2.2	
Corymbia citriodora subsp. *variegata*	T1	20	19.6	23.1	3.5	3.5
Eucalyptus crebra	T1	20	25.1	30.4	5.3	5.3
Corymbia citriodora subsp. *variegata*	T1	22	38	46.1	8.1	8.1
Corymbia citriodora subsp. *variegata*	T1	23	46.4	65.4	19	19
Corymbia citriodora subsp. *variegata*	T1	25	58.2	64.2	6	6
Corymbia citriodora subsp. *variegata*	T1	21	66.4	75.0	8.6	8.6
Corymbia citriodora subsp. *variegata*	T1	23	77.9	84.5	6.6	6.6
Corymbia citriodora subsp. *variegata*	T1	17	93.3	100	6.7	6.7
Acacia disparrima	T2	12	2	5.5	3.5	3.5
Eucalyptus crebra	T2	10	10.7	16.8	6.1	6.1
Corymbia citriodora subsp. *variegata*	T2	12	21	25.6	4.6	4.6
Acacia disparrima	T2	10	44.4	50.1	5.7	5.7
Eucalyptus crebra	T2	13	84.4	86.2	1.8	7.1
Corymbia citriodora subsp. *variegata*	T2	12	85.1	91.5	6.4	
Brachychyton populneus	T2	11	86.2	90.8	4.6	
Acacia disparrima.	T3	6	17.5	17.6	0.1	0.1
Corymbia citriodora subsp. *variegata*	T3	7	36.0	38.6	2.6	2.6
Bridelia leichhardtii	T3	8	42.6	43.4	0.8	0.8
Acacia melanoxylon	T3	8	66.0	70.7	4.7	4.7
Total Canopy (T1) Cover					70.6 m (70.6 %) Med ht: 21 m	
Total Sub-canopy (T2) Cover					27 m (27 %) Med ht: 12 m	
Total Sub-canopy (T3) Cover					8.2 m (8.2 %) Med ht: 7 m	

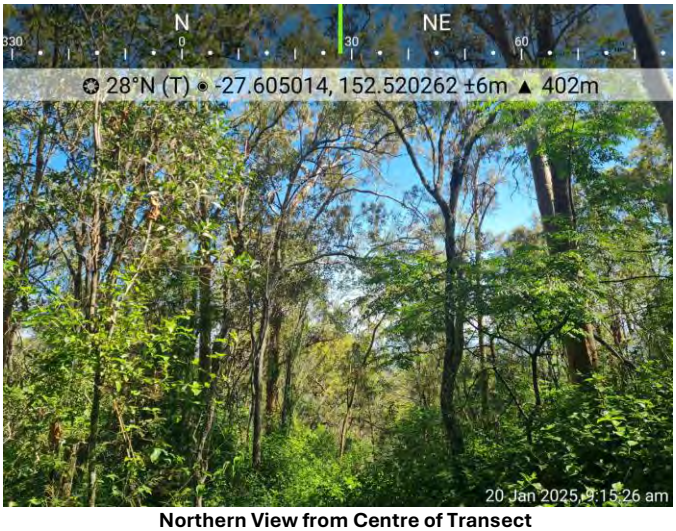
100m Transect **Shrub canopy cover**	* denote as native or exotic. Only native shrub cover is used in the scoring. **Shrub** - Woody plant that is multi-stemmed from the base (or within 200 mm from ground level) **<8 m tall**, or if single stemmed, **less than 2 m tall**					
Species	Strata: Shrub	Height (m)	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Lantana camara	S	1.5	0.0	100.0	100.0	100.0
Total Non-native Shrub Cover					100.0 (100 %) Med ht: 1.5 m	

Site Photos

Landscape (panorama) photo/s of the general terrain

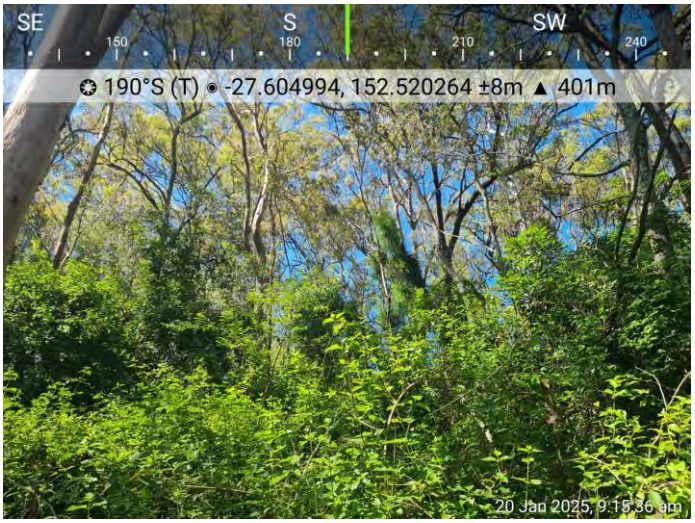
Start of Transect

End of Transect



Northern View from Centre of Transect

Eastern View from Centre of Transect



Southern View from Centre of Transect

Western View from Centre of Transect

HABITAT QUALITY ASSESSMENT

Date:	17/01/2025	**Collector:**	CM, ST	**Site: OA AU3 Transect 2** *(Transect 7 (4) – Jan 2025)*
Time:		**Job No.**	2019-100e	
Mapped RE:	2.8.17	**Description:**	Mixed woodland with combinations of *Eucalyptus crebra*, *E. melanophloia*, *E. tereticornis*, *Corymbia tessellaris*, *C intermedia* woodland on Cainozoic igneous rocks	
Field RE:	12.8.24	**Description:**	**Technical description RE 12.8.24:** *Corymbia citriodora* subsp. *variegata* open forest on Cainozoic igneous rocks especially trachyte. Mixed woodland dominated by *Eucalyptus crebra* with *Corymbia citriodora* subsp. *variegata*, occasional *Eucalyptus melanophloia*. Basalt derived soils, some rocks. **This is a 50 x 20m transect.** Transect follows the edge of a track cleared through heavy Lantana camara infestation. Quadrat extends 20 m to north of the tape due to changed cleared paddock to the south and slope to north.	

Slope:	**Aspect:**	**Landform (local):**	**Landform (broad):**
	North	Undulating hills	Hilly
Slope Shape:	Concave. Near flat on top, drops to N facing slope. Slight undulations E-W.		

50x20m Area	All logs >10cm, >0.5m with 50 x 20m plot boundary		**100x50m Area**	(NB: *Ecologically Dominant Layer. Tree defined as single stemmed over 2m. All tree species in the 100 x 50m (not just EDL species) – Specify species	
Coarse Woody Debris	**Site Total:** **Per ha Total:**	3 30	Total Native **Tree** Spp. Richness: 4	Dominant / Codominant: *Eucalyptus crebra*	Associated / Suppressed: *Corymbia citriodora* – Associated *Eucalyptus melanophloia* – suppressed *Acacia sp.* - suppressed
				Proportion of EDL species with evidence of recruitment (Specify recruiting species)	*nil*
				Recruitment is assessed as the proportion of dominant species present at a site that are regenerating:	0 %

50x10m area	Native plant species richness	(NB: List species if known or count if unknown. Shrub is defined as single stemmed below 2m or multi-stemmed from base or below 20cm)	**Total**
Shrub	*Erythrina vespitilio*		1
Grass	*Oplismenus sp., Echinopogon nutans*		2
Forb	*Sigesbekia orientalis, Desmodium* sp., Native cucumber, *Cyperus gracilis, Ipoema plebia,* Native daisy, *Veronica* sp.		7
Non-native plant cover	Dominant species: *Lantana camara*. Other species recorded include: *Megathyrsus maximus* var. *pubiglumis Bidens pilosa*, *Passiflora foetida*, *Crotilaria* sp., *Asparagus africanus / plumosus* (smothering canopy when present), *Tagetes minuta, Sida rhombifolia, Stachytarpheta indica, Macrotyloma axillare, Physalis sp., Solanum nigrum, Rivinia humilis, Phytolacca octandra, Passiflora suberosa*, *Opuntia tomentosa, Chloris virgata, Ambrosia artemisiifolia*		100 %

Five 1x1m plots	*attributes are essential to assess as used in scoring, however assessment of all attributes improves your ability to more accurately visualise proportions of each of the attributes					
Ground Cover type	**1**	**2**	**3**	**4**	**5**	**Ave.**
Native perennial ('decreaser') grass cover*						
Native other grass (if relevant)*						
Native forbs and other species (non-grass)						
Native shrubs (<1m in height)						
Non-native grass						
Non-native forbs and shrubs	100	100	100	100	100	100
Litter						
Rock						

Bare ground						
Other (e.g. timber, inorganic refuse)						
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

20x50m Area:	*from benchmark doc				
Eucalypt large tree DBH:	420	No. of large eucalypt trees in plot:	1	Total Large Trees (ha):	**10**
Non-eucalypt large tree DBH:		No. of large non-eucalypt trees in plot:			

Plot based tree data	Record all eucalypt trees over **300mm dbh** and non-eucalypts **>200mm dbh** within the 100 x 50 plot – record multiple stems in parentheses this way (230, 250, 190)
Species	**DBH**
Eucalyptus crebra	1
Note: Base of trees were inaccessible due to Lantana camara infestation, above indicates a count of trees estimated to be above the threshold.	

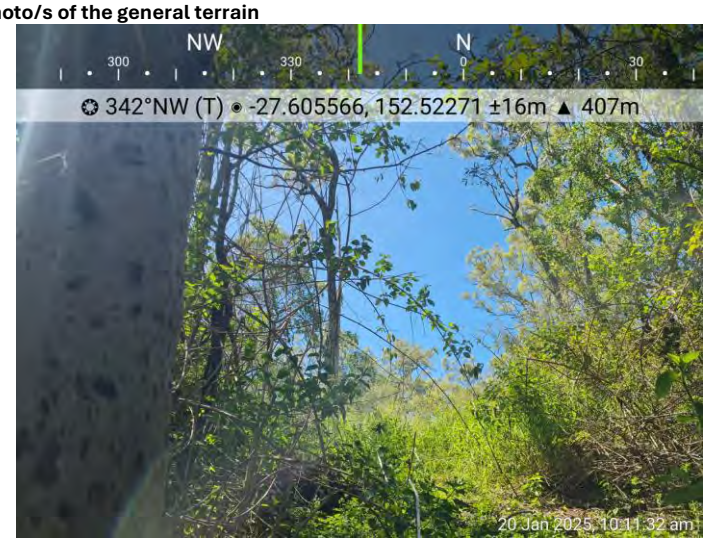
100m Transect **Tree Canopy Cover Intercept**	(Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. *If trees are in the same layer and continuous along the transect group them). Canopy layer includes T1 and T2 layers, but not T3.					
Species	Strata (C or S or E) T1 = 13 – 20 m T2 = 5 – 10 m	Height (m)	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Eucalyptus crebra	T1	14	4.5	9.6	5.1	9.4
Eucalyptus crebra	T1	14	5.6	13.9	8.3	
Eucalyptus crebra	T1	15	14.0	18.0	4.0	4.0
Eucalyptus crebra	T1	18	14.3	18.0	3.7	
Eucalyptus crebra	T1	13	19.3	25.4	6.1	6.1
Eucalyptus crebra	T1	18	28.3	37.0	8.7	8.7
Eucalyptus crebra	T1	16	37.2	39.3	2.1	2.1
Eucalyptus crebra	T1	13	40.1	44.7	4.6	4.6
Corymbia citriodora subsp. *variegata*	T1	16	45.0	50.0	5.0	5.0
Eucalyptus melanophloia	T2	5	0	0.3	0.3	0.3
Acacia sp.	T2	7	17.0	19.3	2.3	7.2
Eucalyptus melanophloia	T2	8	19.2	24.2	5.0	
Acacia sp.	T2	6	25.8	29.2	3.4	3.4
Acacia sp.	T2	10	31.3	34.1	2.8	2.8
Total Canopy (T1) Cover					39.9 m (79.8 %) Med ht: 16 m	
Total Sub-canopy (T2) Cover					13.7 m (27.4 %) Med ht: 7 m	

100m Transect **Shrub canopy cover**	* denote as native or exotic. Only native shrub cover is used in the scoring. **Shrub** - Woody plant that is multi-stemmed from the base (or within 200 mm from ground level) **<8 m tall**, or if single stemmed, **less than 2 m tall**					
Species	Strata: Shrub	Height (m)	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Lantana camara	S	1.5	0.0	50.0	50	50
Total Non-native Shrub Cover					50 (100 %) Med ht: 1.5 m	

Site Photos

Landscape (panorama) photo/s of the general terrain

Start of Transcect



End of Transect

28ºS ENVIRONMENTAL

Appendix 14.2: *Thagoona Biocondition Data Sheets*

HABITAT QUALITY ASSESSMENT

Date:	21 January 2026	**Collector:**	Armstrong J, Kinchin, E.				**Thagoona North BC_05**	
Time:	nil	**Job No.**	2019e – Sutgold – EPBC Woodbury Precinct					
Mapped RE:	Regrowth 12.3.3 (Cat C)	**Description:**	Eucalyptus tereticornis woodland on Quaternary alluvium					
Field RE:	Regrowth 12.3.3 (Cat C)	**Description:**	Eucalyptus tereticornis open forest 15-22m Sparse shrub layer. Dense groundcover dominated by native sedges and grasses					
Pre-clear RE:	12.3.3	**Description:**	Eucalyptus tereticornis woodland on Quaternary alluvium					
Plot size:	100m x 50m	**Photos**	N	E	S	W	Pano	

Slope:	**Aspect:**	**Landform (local):**	**Landform (broad):**
Flat	Flat	Low level alluvium	Floodplains
Slope Shape:	Flat		

Coarse Woody Debris **(50x20m Area)**	All logs >10cm, >0.5m with 50 x 20m plot boundary	
	Site Total:	0
	Per ha Total: (*10)	0

100x50m Area			
Strata and Height (record the height of up to 5 individual trees, where available). Take height measurements outside of plot where suitable e.g. emergent layer		(NB: *Ecologically Dominant Layer. Tree defined as single stemmed over 2m. All tree species in the 100 x 50m (not just EDL species) – Specify species **(* indicates a recruiting species)**	
Emergent		Dominant / Codominant: *Eucalyptus tereticornis*	Associated / Suppressed:
T1	Eucalyptus tereticornis 22, 20, 23, 19, 22, 19	**Proportion of EDL species with evidence of recruitment** *(Recruitment is expressed as the proportion of dominant species present at a site that are regenerating)* *Eucalyptus tereticornis*	*100%*
T2	Eucalyptus tereticornis		
T3		Total Native **Tree** Spp. Richness	1

50x10m area		
Native plant species richness - (NB: List species if known or count if unknown. Shrub is defined as single stemmed below 2m or multi-stemmed from base or below 20cm)		**Total**
Shrub	*Acacia salicina, Eucalyptus tereticornis, Blakella tessellaris,*	3
Grass	*Panicum sp., Sacciolepis indica, Leersia hexandra, Panicum decompositum,*	4
Forb	*Cyperus sp., Eclipta platyglossa, Dianella brevipedunculata, Centella asiatica, Juncus usitatus, Lobelia concolor, Commelina diffusa, Haloragis heterophylla, Eryngium sp., Murdannia graminea, Marsilea drummondii, Hypericum gramineum, Sida spicata, Fimbristylis sp., Oxalis perennans, Vigna vexillata, Jasminum suavissima, Carex inversa, Cyperus gracilis, Glycine sp, Mimulus gracilis,*	19
Non-native plant cover (List all species)	*Sida rhombifolia, Dichanthium aristatum, Bidens pilosa, Celtis sinensis, Mimosa pudica, Astaer subulatus, Lespedeza juncea, Cynodon dactylon*	50%

100x50m Area:	*from benchmark doc				
Eucalypt large tree DBH:	540	No. of large eucalypt trees in plot:	0	Total Large Trees (ha):	**0**
Non-eucalypt large tree DBH:	0	No. of large non-eucalypt trees in plot:	0		

Plot based tree data	Record DBH and all species within the **100 x 50m plot**; non-eucalypts **>200mm dbh** and all eucalypts > **300mm dbh** – record multiple stems in parentheses this way (230, 250, 190)
Species	**DBH in mm**
Eucalyptus tereticornis	*(340, 360), 490, 470, 330, 390, 310, 510, 390, 300, 340, 480, 510, 350, 460, 370, 350, 440, 330, 390, 390, 330, 350, 450, 350, 380, 320, 320, 390, 420*

HABITAT QUALITY ASSESSMENT

canopy species regeneration and number of stems	Record species and count all seedlings, saplings and young trees within the **50 x 20 m** (1,000m^2)				
Species:	**<10 mm DBH**	**10-<50mm DBH**	**50-<100mm DBH**	**100-<300 mm DBH**	**Total**
Eucalyptus tereticornis	*15*	*10*	*3*	*8*	36
Acacia sp.	5	1	1	0	7
Blakella tessellaris	0	2	1	0	3
****Blakella citriodora outside plot*	0	0	0	0	0

Five 1x1m plots	*attributes are essential to assess as used in scoring, however assessment of all attributes improves your ability to more accurately visualise proportions of each of the attributes					
Ground Cover type	**1**	**2**	**3**	**4**	**5**	**Ave.**
Native perennial ('decreaser') grass cover*	0	43	20	30	45	27.6
Native other grass (if relevant)*	0	0	0	0	0	0
Native forbs and other species (non-grass)	68	40	75	35	15	46.6
Native shrubs (<1m in height)	0	0	0	15	0	3
Non-native grass	20	5	0	0	0	5
Non-native forbs and shrubs	2	2	0	10	8	4.4
Litter	10	10	5	10	32	13.4
Rock	0	0	0	0	0	0
Bare ground	0	0	0	0	0	0
Other (e.g. timber, inorganic refuse)	0	0	0	0	0	0
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

100m Transect **Tree Canopy Cover Intercept**	(Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. *If trees are in the same layer and continuous along the transect group them). Canopy layer includes T1 and T2 layers, but not T3. **Record height of each tree**.					
Species	Strata (C or S or E)	**Height (m)**	Intercept Range (m)		Cover (m)	Corrected Cover (m)
Eucalyptus tereticornis	C (T1)	20	4.6	8.9	4.3	4.3
Eucalyptus tereticornis	C (T1)	18	25.1	33.8	8.7	8.7
Eucalyptus tereticornis	C (T1)	22	95.6	100	4.4	4.4
Eucalyptus tereticornis	C (T2)	16	32	35	3	3
Eucalyptus tereticornis	C (T2)	15	53.2	55	1.8	1.8
Eucalyptus tereticornis	C (T2)	15	69.2	71.9	2.7	2.7
Eucalyptus tereticornis	C (T2)	14	76	84	8	8
Total Canopy (T1) Cover					17.4m (17.4%) Med ht:20 m	
Total Sub-canopy (T2) Cover					15.5m (15.5%) Med ht:16 m	
Average Canopy (T1) and Canopy (T2) Cover					16.45m (16.45%) Med ht:18 m	

100m Transect **Shrub canopy cover**	* denote as native or exotic. Only native shrub cover is used in the scoring. **Shrub** - Woody plant that is multi-stemmed from the base (or within 200 mm from ground level) **<8 m tall**, or if single stemmed, **less than 2 m tall**					
Species	Strata: Shrub	**Height (m)**	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Eucalyptus tereticornis	Native	1.5	18.3	19	0.7	0.7
Eucalyptus tereticornis	Native	2	27.8	28.2	0.4	0.4
Acacia salicina	Native	3	30	31.9	1.9	1.2
Acacia salicina	Native	0.5	30.3	31.2	0.9	
Eucalyptus tereticornis	Native	1.5	88.8	89.8	1	1
Total Native Shrub Cover					3.3m (3.3%) Med ht:1.5m	

HABITAT QUALITY ASSESSMENT

100m Transect **Shrub canopy cover**	* denote as native or exotic. Only native shrub cover is used in the scoring. **Shrub** - Woody plant that is multi-stemmed from the base (or within 200 mm from ground level) **<8 m tall**, or if single stemmed, **less than 2 m tall**					
Species	Strata: Shrub	**Height (m)**	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Total Non-native Shrub Cover					0m (0%) Med ht: 0m	

Site Photos

Landscape (panorama) photo/s of the general terrain

Start of Transect

End of Transect

Northern View from Centre of Transect

Eastern View from Centre of Transect

HABITAT QUALITY ASSESSMENT

Southern View from Centre of Transect

Western View from Centre of Transect

HABITAT QUALITY ASSESSMENT

Date:	21 January 2026	**Collector:**	Armstrong, J. Kinchin, E.				**Thagoona North BC_06**	
Time:	16:22	**Job No.**	2019e – Sutgold – EPBC Woodbury Precinct					
Mapped RE:	Non-remnant (Cat X)	**Description:**	Areas cleared of native vegetation (grassland)					
Field RE:	Non-remnant (Cat X)	**Description:**	Open area dominated by Cyperus spp., and Aster subulatus. Patchy Eucalyptus tereticornis regrowth to 2m					
Pre-clear RE:	12.3.3	**Description:**	Eucalyptus tereticornis woodland on Quaternary alluvium					
Plot size:	100m x 50m	**Photos**	N	E	S	W	Pano	

Slope:	**Aspect:**	**Landform (local):**	**Landform (broad):**
Flat	Flat	Low level alluvium	Flood plains
Slope Shape:	Flat		

Coarse Woody Debris **(50x20m Area)**	All logs >10cm, >0.5m with 50 x 20m plot boundary	
	Site Total:	0
	Per ha Total: (*10)	0

100x50m Area			
Strata and Height (record the height of up to 5 individual trees, where available). Take height measurements outside of plot where suitable e.g. emergent layer		(NB: *Ecologically Dominant Layer. Tree defined as single stemmed over 2m. All tree species in the 100 x 50m (not just EDL species) – Specify species **(* indicates a recruiting species)**	
Emergent		Dominant / Codominant: *Eucalyptus tereticornis*	Associated / Suppressed:
T1	N/A	**Proportion of EDL species with evidence of recruitment** *(Recruitment is expressed as the proportion of dominant species present at a site that are regenerating)*	*100%*
T2			
T3		Total Native **Tree** Spp. Richness	1

50x10m area		
Native plant species richness - (NB: List species if known or count if unknown. Shrub is defined as single stemmed below 2m or multi-stemmed from base or below 20cm)		**Total**
Shrub	*Eucalyptus tereticornis*	1
Grass	*Leersia hexandra, Eragrostis brownii*	2
Forb	*Lobelia concolor, Centella asiatica, Eclipta platyglossa, Haloragis heterophylla, Hypericum gramineum, Brachyscome dentata, Phyllanthus virgatus, Fimbristylis sp.*	8
Non-native plant cover (List all species)	*Verbena sp., Aster subulatus, Macroptilium lathyroides, Sida rhombifolia, Baccharis halimifolia, Mimosa pudica, Erigeron bonariensis, Bidens pilosa*	70%

100x50m Area:	*from benchmark doc				
Eucalypt large tree DBH:	540	No. of large eucalypt trees in plot:	1	Total Large Trees (ha):	**2**
Non-eucalypt large tree DBH:	na	No. of large non-eucalypt trees in plot:	0		

Plot based tree data	Record DBH and all species within the **100 x 50m plot**; non-eucalypts **>200mm dbh** and all eucalypts > **300mm dbh** – record multiple stems in parentheses this way (230, 250, 190)
Species	**DBH in mm**
Eucalyptus tereticornis	*410, 410, 470, 310, (220, 440 = 491.9), 380, 530, **570**, 460*

canopy species regeneration and number of stems	Record species and count all seedlings, saplings and young trees within the **50 x 20 m** (1,000m^2)				
Species:	**<10 mm DBH**	**10-<50mm DBH**	**50-<100mm DBH**	**100-<300 mm DBH**	**Total**
Eucalyptus tereticornis	*23*	*13*	*2*	*0*	*15*

HABITAT QUALITY ASSESSMENT

Five 1x1m plots	*attributes are essential to assess as used in scoring, however assessment of all attributes improves your ability to more accurately visualise proportions of each of the attributes					
Ground Cover type	**1**	**2**	**3**	**4**	**5**	**Ave.**
Native perennial ('decreaser') grass cover*	0	0	0	0	5	1
Native other grass (if relevant)*	0	0	0	0	0	0
Native forbs and other species (non-grass)	80	60	55	10	77	56.4
Native shrubs (<1m in height)	0	0	0	0	0	0
Non-native grass	0	5	0	0	0	1
Non-native forbs and shrubs	15	25	30	75	8	30.6
Litter	5	10	15	15	10	11
Rock	0	0	0	0	0	0
Bare ground	0	0	0	0	0	0
Other (e.g. timber, inorganic refuse)	0	0	0	0	0	0
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

100m Transect **Tree Canopy Cover Intercept**	(Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. *If trees are in the same layer and continuous along the transect group them). Canopy layer includes T1 and T2 layers, but not T3. **Record height of each tree**.					
Species	Strata (C or S or E)	**Height (m)**	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Eucalyptus tereticornis	C(T1)	15	91.5	100	8.5	8.5
Eucalyptus tereticornis	S (T2)	6	81.5	82.8	1.3	1.3
Eucalyptus tereticornis	S (T2)	6	86.6	87	0.4	0.4
Total Canopy (T1) Cover					8.5m (8.5%) Med ht:15m	
Total Sub-canopy (T2) Cover					1.7m (1.7%) Med ht:6m	
Average Canopy (T1) and Canopy (T2) Cover					5.1m (5.1%) Med ht:10.5m	

100m Transect **Shrub canopy cover**	* denote as native or exotic. Only native shrub cover is used in the scoring. **Shrub** - Woody plant that is multi-stemmed from the base (or within 200 mm from ground level) **<8 m tall**, or if single stemmed, **less than 2 m tall**					
Species	Strata: Shrub	**Height (m)**	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Eucalyptus tereticornis	Native	1.5	3.2	3.8	0.6	0.6
Eucalyptus tereticornis	Native	1.5	7.8	8.2	0.4	0.4
Eucalyptus tereticornis	Native	1	84	85	1	1
Total Native Shrub Cover					2m (2%) Med ht: 1.5m	
Total Non-native Shrub Cover					0m (0%) Med ht:0m	

HABITAT QUALITY ASSESSMENT
Site Photos

Landscape (panorama) photo/s of the general terrain

Start of Transect

End of Transect

Northern View from Centre of Transect

Eastern View from Centre of Transect

Southern View from Centre of Transect

Western View from Centre of Transect

HABITAT QUALITY ASSESSMENT

Date:	28 January 2026	**Collector:**	Armstrong, J.	**Thagoona North BC_07**
Time:	na	**Job No.**	2019e – Sutgold – EPBC Woodbury Precinct	
Mapped RE:	Regrowth 12.3.3 (Cat C)	**Description:**	Eucalyptus tereticornis woodland on Quaternary alluvium	
Field RE:	Regrowth 12.3.3 (Cat C)	**Description:**	Eucalyptus tereticornis open forest to woodland to 22m	
Pre-clear RE:	12.3.3	**Description:**	Eucalyptus tereticornis woodland on Quaternary alluvium	
Plot size:	100x50m			

Slope:	**Aspect:**	**Landform (local):**	**Landform (broad):**
Flat	Flat	Alluvial plain	Flood plain
Slope Shape:	flat to concave		

Coarse Woody Debris **(50x20m Area)**	All logs >10cm, >0.5m with 50 x 20m plot boundary	
	Site Total:	12
	Per ha Total: (*10)	120

100x50m Area			
Strata and Height (record the height of up to 5 individual trees, where available). Take height measurements outside of plot where suitable e.g. emergent layer		(NB: *Ecologically Dominant Layer. Tree defined as single stemmed over 2m. All tree species in the 100 x 50m (not just EDL species) – Specify species **(* indicates a recruiting species)**	
Emergent		Dominant / Codominant: Eucalyptus tereticornis	Associated / Suppressed: *Blakella tessellaris*
T1	*Eucalyptus tereticornis*	**Proportion of EDL species with evidence of recruitment** *(Recruitment is expressed as the proportion of dominant species present at a site that are regenerating)*	*100%*
T2			
T3		Total Native **Tree** Spp. Richness	2

50x10m area		
Native plant species richness - (NB: List species if known or count if unknown. Shrub is defined as single stemmed below 2m or multi-stemmed from base or below 20cm)		**Total**
Shrub	*Eucalyptus tereticornis , Acacia salicina*	2
Grass	*Panicum sp., Chloris sp., Eragrostis brownii, Setaria parviflora, Themeda triandra, Paspalidium distans*	6
Forb	*Cyperus sp. 1, Commelina diffusa, Lobelia concolor, Eclipta platyglossa, Sida spicata, Fimbristylis sp., Mentha satureioides, Centella asiatica, Cyperus difformis, Jasminum suavissimum, Glycine sp., Dianella sp., Cyperus gracilis, Alternanthera denticulata, Aeschynomene indica, Haloragis heterophylla, Murdannia graminea*	17
Non-native plant cover (List all species)	*Lantana camara, Aster subulatus, Verbena officinalis, Verbena littoralis, Cyperus sesquiflorus, Dichanthium aristatum, Paspalum urvillei, Blakella torelliana, Cynodon dactylon, Gomphrena celosioides, Mimosa pudica, Ageratum houstonianum, Cyperus rotundus*	50%

Five 1x1m plots	*attributes are essential to assess as used in scoring, however assessment of all attributes improves your ability to more accurately visualise proportions of each of the attributes					
Ground Cover type	**1**	**2**	**3**	**4**	**5**	**Ave.**
Native perennial ('decreaser') grass cover*	0	0	0	0	0	0
Native other grass (if relevant)*	0	0	0	0	0	0
Native forbs and other species (non-grass)	70	8	10	70	45	40.6
Native shrubs (<1m in height)	0	0	0	0	10	2
Non-native grass	20	75	80	15	2	38.4
Non-native forbs and shrubs	0	5	0	0	15	4
Litter	10	12	10	15	28	15
Rock	0	0	0	0	0	0
Bare ground	0	0	0	0	0	0
Other (e.g. timber, inorganic refuse)	0	0	0	0	0	0
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

100x50m Area:	*from benchmark doc				
Eucalypt large tree DBH:	540	No. of large eucalypt trees in plot:	2	Total Large Trees (ha):	**4**
Non-eucalypt large tree DBH:	na	No. of large non-eucalypt trees in plot:	0		

***Derived Koala Spot Assessment Technique (SAT)**	Record species and all koala scats at the base of eucalypts **>100 mm DBH** and taller than 4 m height.	
Number of trees assessed (record number – target is 30)	**Record each tree; species and number of Scats recorded**	
No scats found		
Eucalyptus tereticornis - 0	*Eucalyptus tereticornis - 0*	*Eucalyptus tereticornis - 0*
Eucalyptus tereticornis - 0	*Eucalyptus tereticornis - 0*	*Eucalyptus tereticornis - 0*
Eucalyptus tereticornis - 0	*Eucalyptus tereticornis - 0*	*Eucalyptus tereticornis - 0*
Eucalyptus tereticornis - 0	*Eucalyptus tereticornis - 0*	*Eucalyptus tereticornis - 0*
Eucalyptus tereticornis - 0	*Eucalyptus tereticornis - 0*	*Eucalyptus tereticornis - 0*
Eucalyptus tereticornis - 0	*Eucalyptus tereticornis - 0*	*Eucalyptus tereticornis - 0*
Eucalyptus tereticornis - 0	*Eucalyptus tereticornis - 0*	*Eucalyptus tereticornis - 0*
Eucalyptus tereticornis - 0	*Eucalyptus tereticornis - 0*	*Eucalyptus tereticornis - 0*
Eucalyptus tereticornis - 0	*Eucalyptus tereticornis - 0*	*Eucalyptus tereticornis - 0*

Plot based tree data	Record DBH and all species within the **100 x 50m plot**; non-eucalypts **≥200mm dbh** and all eucalypts > **300mm dbh** – record multiple stems in parentheses this way (230, 250, 190)
Species	**DBH in mm**
Eucalyptus tereticornis	500, (360, 250, 250 = 504.6), 410, 400, 330, **1350**, 390, (370, 250 = 430.1), 360, 470, **830**, 450, (410, 220 = 465.3), 420, (480, 180 = 512.6)

canopy species regeneration and number of stems	Record species and count all seedlings, saplings and young trees within the **50 x 20 m** (1,000m^2)			
Species:	**<10 mm DBH**	**10-<50mm DBH**	**50-<100mm DBH**	**100-<300 mm DBH**
Eucalyptus tereticornis	72	10	2	0
Acacia salicina	4	9	0	0
Blakella tessellaris	0	1	0	1

100m Transect Tree Canopy Cover Intercept	(Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. *If trees are in the same layer and continuous along the transect group them). Canopy layer includes T1 and T2 layers, but not T3. **Record height of each tree**.					
Species	Strata (C or S or E)	**Height (m)**	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Eucalyptus tereticornis	C (T1)	21	66.1	70.9	4.8	4.8
Eucalyptus tereticornis	C (T1)	22	82	96	14	14
Eucalyptus tereticornis	C (T1)	15	34.5	40.8	6.3	6.3
Eucalyptus tereticornis	C (T1)	16	76	78	2	2
Eucalyptus tereticornis	C (T1)	17	83.6	92.5	8.9	8.9
Total Canopy (T1) Cover					18.8m (18.8%) Med ht: 21.5m	
Total Sub-canopy (T2) Cover					17.2m (17.2%) Med ht: 16 m	
Average Canopy (T1) and Canopy (T2) Cover					18 m (18.0%) Med ht: 18.75 m	

100m Transect Shrub canopy cover	* denote as native or exotic. Only native shrub cover is used in the scoring. **Shrub** - Woody plant that is multi-stemmed from the base (or within 200 mm from ground level) **<8 m tall**, or if single stemmed, **less than 2 m tall**					
Species	Strata: Shrub	**Height (m)**	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Eucalyptus tereticornis	Native	3	17.7	20.3	2.6	2.6

100m Transect **Shrub canopy cover**	* denote as native or exotic. Only native shrub cover is used in the scoring. **Shrub** - Woody plant that is multi-stemmed from the base (or within 200 mm from ground level) **<8 m tall**, or if single stemmed, **less than 2 m tall**					
Species	Strata: Shrub	**Height (m)**	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Eucalyptus tereticornis	Native	1.5	29.4	30	0.6	0.6
Acacia salicina	Native	5	33.6	36.5	2.9	2.9
Eucalyptus tereticornis	Native	3	37.1	38.4	1.3	1.3
Eucalyptus tereticornis	Native	6	46	47.3	1.3	1.3
Eucalyptus tereticornis	Native	1.5	52	53	1	1.0
Eucalyptus tereticornis	Native	2.5	56.6	58	1.4	1.4
Eucalyptus tereticornis	Native	1.5	65.4	66.2	0.8	0.8
Eucalyptus tereticornis	Native	1.5	67.2	68	0.8	0.8
Eucalyptus tereticornis	Native	1.3	68.6	69.2	0.6	0.6
Acacia salicina	Native	2.2	83.4	84.2	0.8	0.8
Total Native Shrub Cover					11.5m (11.5%) Med ht: 2.2m	
Total Non-native Shrub Cover					0m (0 %) Med ht:0 m	

Site Photos

Landscape (panorama) photo/s of the general terrain

Start of Transect

End of Transect

Northern View from Centre of Transect

Eastern View from Centre of Transect

Southern View from Centre of Transect

Western View from Centre of Transect

HABITAT QUALITY ASSESSMENT

Date:	28 January 2026	**Collector:**	Armstrong, J.	**Thagoona North BC_08**
Time:	na	**Job No.**	2019e – Sutgold – EPBC Woodbury Precinct	
Mapped RE:	Non-remnant (Cat X)	**Description:**	Areas cleared of native vegetation (grassland)	
Field RE:	Non-remnant (Cat X)	**Description:**	Open paddock with native and exotic herbaceous/grass species. Occasional Eucalyptus tereticornis, some regeneration	
Pre-clear RE:	12.3.3	**Description:**	Eucalyptus tereticornis woodland. Eucalyptus crebra and E. moluccana are sometimes present and may be relatively abundant in places, especially on edges of plains and higher level alluvium.	
Plot size:	100x50			

Slope:	**Aspect:**	**Landform (local):**	**Landform (broad):**
Flat	Flat	Alluvial plain	Flood plain
Slope Shape:	flat to concave		

Coarse Woody Debris **(50x20m Area)**	All logs >10cm, >0.5m with 50 x 20m plot boundary	
	Site Total:	Nil
	Per ha Total: (*10)	0

100x50m Area			
Strata and Height (record the height of up to 5 individual trees, where available). Take height measurements outside of plot where suitable e.g. emergent layer		(NB: *Ecologically Dominant Layer. Tree defined as single stemmed over 2m. All tree species in the 100 x 50m (not just EDL species) – Specify species **(* indicates a recruiting species)**	
Emergent		Dominant / Codominant: *Eucalyptus tereticornis*	Associated / Suppressed: *Acacia maidenii*
T1	*Eucalyptus tereticornis* 18m	**Proportion of EDL species with evidence of recruitment** *(Recruitment is expressed as the proportion of dominant species present at a site that are regenerating)*	*100%*
T2			
T3		Total Native **Tree** Spp. Richness	2

50x10m area		
Native plant species richness - (NB: List species if known or count if unknown. Shrub is defined as single stemmed below 2m or multi-stemmed from base or below 20cm)		**Total**
Shrub	*Eucalyptus tereticornis, Acacia maidenii*	2
Grass	*Bothriochloa bladhii, Eriochloa sp.*	2
Forb	*Glycine sp., Fimbristylis sp., Sida spicata, Lobelia concolor, Haloragis heterophylla, Brachyscome dentata Eclipta platyglossa, Cyperus sp., Centella asiatica, Brunoniella australis, Dianella sp., Hypericum gramineum, Juncus usitatus*	13
Non-native plant cover (List all species)	*Dichanthium aristatum, Verbena officinalis, Aster subulatus, Gamochaeta coarctata, Macroptilium lathyroides, Cyperus rotundus, Erigeron bonariensis, Ambrosia artemisiifolia, Gomphrena celosioides, Gomphocarpus physocarpus, Euphorbia prostrata, Bidens pilosa, Digitaria violascens, Senecio madagascariensis, Ageratum houstonianum*	50%

Five 1x1m plots	*attributes are essential to assess as used in scoring, however assessment of all attributes improves your ability to more accurately visualise proportions of each of the attributes					
Ground Cover type	**1**	**2**	**3**	**4**	**5**	**Ave.**
Native perennial ('decreaser') grass cover*	0	0	0	0	0	0
Native other grass (if relevant)*	0	0	0	0	0	0
Native forbs and other species (non-grass)	80	20	45	45	40	46
Native shrubs (<1m in height)		0	0	0	0	0
Non-native grass	2	30	40	10	50	26.4
Non-native forbs and shrubs	1	5	0	0	5	2.2
Litter	17	45	15	45	5	25.4
Rock	0	0	0	0	0	0
Bare ground	0	0	0	0	0	0
Other (e.g. timber, inorganic refuse)	0	0	0	0	0	0
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

100x50m Area:	*from benchmark doc				
Eucalypt large tree DBH:	540	No. of large eucalypt trees in plot:	1	Total Large Trees (ha):	**2**
Non-eucalypt large tree DBH:	na	No. of large non-eucalypt trees in plot:	0		

***Derived Koala Spot Assessment Technique (SAT)**	Record species and all koala scats at the base of eucalypts **>100 mm DBH** and taller than 4 m height.	
Number of trees assessed (record number – target is 30)	**Record each tree; species and number of Scats recorded**	
Not completed		

Plot based tree data	Record DBH and all species within the **100 x 50m plot**; non-eucalypts **>200mm dbh** and all eucalypts > **300mm dbh** – record multiple stems in parentheses this way (230, 250, 190)
Species	**DBH in mm**
Eucalyptus tereticornis	520, 530, (410, 380, 250 = **612.4**)

canopy species regeneration and number of stems	Record species and count all seedlings, saplings and young trees within the **50 x 20 m** (1,000m^2)			
Species:	**<10 mm DBH**	**10-<50mm DBH**	**50-<100mm DBH**	**100-<300 mm DBH**
Eucalyptus tereticornis	8	4	1	*7*
Acacia maidenii	1	0	0	0

100m Transect Tree Canopy Cover Intercept	(Only assess Emergent (E) or Subcanopy (S) layers if the benchmark document stipulates that layers are present. *If trees are in the same layer and continuous along the transect group them). Canopy layer includes T1 and T2 layers, but not T3. **Record height of each tree**.					
Species	Strata (C or S or E)	**Height (m)**	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Eucalyptus tereticornis	C (T1)	16	83.4	90.9	7.5	7.5
Total Canopy (T1) Cover					7.5m (7.5%) Med ht: 16 m	
Average Canopy (T1) and Canopy (T2) Cover					7.5m (7.5%) Med ht: 16 m	

100m Transect **Shrub canopy cover**	* denote as native or exotic. Only native shrub cover is used in the scoring. **Shrub** - Woody plant that is multi-stemmed from the base (or within 200 mm from ground level) **<8 m tall**, or if single stemmed, **less than 2 m tall**					
Species	Strata: Shrub	**Height (m)**	Intercept Range (m)		Cover (m)	Corrected Cover (m)
			start:	end:		
Nil shrubs						
Total Native Shrub Cover					0 m (0%) Med ht:0 m	
Total Non-native Shrub Cover					0 m (0%) Med ht:0 m	

Site Photos

Landscape (panorama) photo/s of the general terrain

Start of Transect

End of Transect

Northern View from Centre of Transect

Eastern View from Centre of Transect

Southern View from Centre of Transect

Western View from Centre of Transect