



Native Vegetation Clearing Referral

Gibson-Dalyup Road

Site Inspection Report

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Introduction

The Shire of Esperance (SOE) has proposed to clear 0.121ha of native vegetation located within the Gibson-Dalyup Road Reserve between SLK 17.32 and 17.02 (Main Roads, 2025). for the purposes of road upgrades during a road reconstruction. Refer to Figure 1 for a map of the proposed area.

Map



Figure 1. Location and vegetation to be cleared of proposed Gibson-Dalyup Road site. (A point within the site is 387743m E, 6274559m N, GDA2020, Zone 51)

Desktop Summary

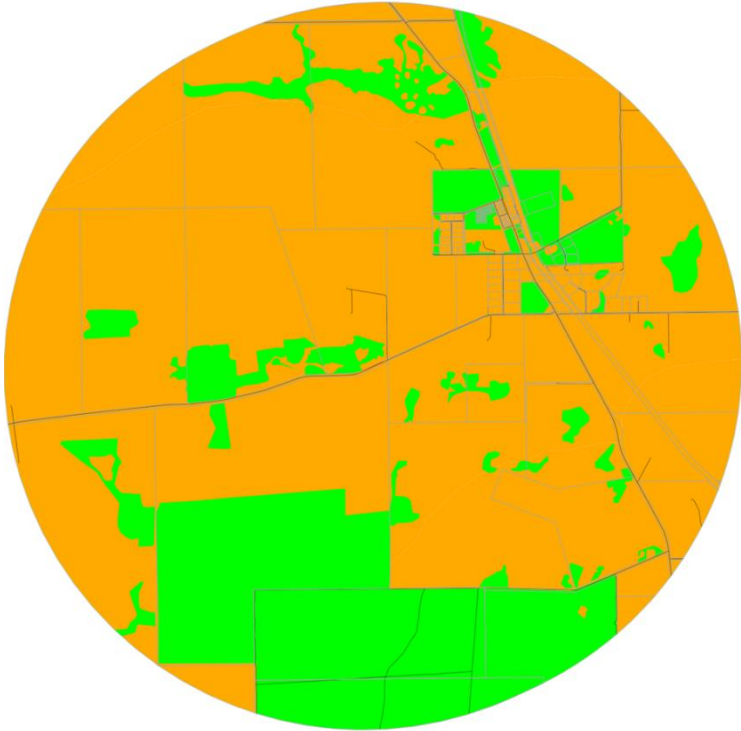
Prior to the site inspection, the Shire of Esperance's Desktop Environmental Impacts Spatial Interrogation Program (DEISIP) was utilised to conduct a comprehensive desktop search for an area encompassing a 20km radius of the proposed Gibson-Dalyup Road site. This program consults numerous Local, State and Federal government spatial data sets to provide valuable environmental, heritage and other relevant information required in the assessment of the project against the ten clearing principles for native vegetation, regulated under Schedule 5 of the *Environmental Protection Act 1986* (EP Act 1986).

Gibson-Dalyup Road is mapped as forming a component of Beard Vegetation Association Esperance_6048. This is highly cleared and poorly represented in conservation estate with only 14% of its pre-European extent remaining.

Table 1. Beard Vegetation association within Gibson-Dalyup Road by percentage of pre-European extent remaining.

Vegetation association	ESPERANCE_6048:
Description	Shrublands; banksia scrub-heath on sandplain in the Esperance Plains Region
Pre-European extent remaining within the Shire of Esperance	14.21%
Pre-European extent remaining within Recherche IBRA sub-region	14.16%
Pre- European extent in land protected for conservation	0.97%

Table 2. Desktop search results

Landform	<ul style="list-style-type: none"> Gently undulating plain, 1-3% slope Open depressions and ephemeral water courses
Soils	<ul style="list-style-type: none"> Grey deep sandy duplex (gravelly) soils with associated duplex sandy gravels and minor pale deep sands and shallow gravels Salt affected soils with surface salt crusting
Geology / regolith	<ul style="list-style-type: none"> Tertiary marine sediments of the Pallinup formation Tertiary marine sediments of the Pallinup formation over granite and gneiss bedrock
Vegetation remaining within 5km (%)	<p>25.65% of vegetation remains within 5km of the project.</p>  <p>Map of remnant vegetation within a 5km buffer produced by DEISIP. Project is highlighted in red (in centre of circle), remnant vegetation is in green and cleared vegetation is in orange, road centrelines are in black and cadastre boundaries are in grey.</p>
Threatened and priority flora (Appendix 3)	45 PF and 5 TF were recorded within 20km of the project area.

Threatened Ecological Communities	The site is 15m from known records of the <i>Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)</i> listed Proteaceae Dominated Kwongan Shrublands of the Southeast Coastal Floristic Province of Western Australia TEC.
Threatened and Priority Fauna (Appendix 4)	28 conservation listed species were recorded within 20km of the project area.
Closest Conservation Reserve	The closest conservation reserve was Reserve 31197 'Shark Lake Nature Reserve' which was 12.98km from the project area.
Aboriginal Heritage	No listed heritage sites were within the project area.

Site Inspection

A site inspection was conducted by Julie Waters (Environmental Coordinator) and Katherine Walkerden (Environmental Officer) of the Shire of Esperance on the 19 June 2025.

Approximately 0.121ha of native vegetation was present within the project site, which was classified during the site inspection into two distinct vegetation types, namely:

- A. *Acacia cyclops* dominated mixed shrubland over grass weeds.
- B. Scattered *Eucalyptus occidentalis* over *Melaleuca* shrubland over *Gahnia trifida*.

Refer to Figure 2 for the map of vegetation types within the Gibson-Dalyup Road site.

Neither vegetation type was consistent with the highly cleared Beard Vegetation Association Esperance_6048, which is described as: 'Shrublands; banksia scrub-heath on sandplain in the Esperance Plains Region'. The vegetation within the site was lacking any Banksia or Proteaceous species. It did contain some species which would typically make up this community such as *Melaleuca striata*, *Eucalyptus pleurocarpa*, *Allocasurina humilis* and *Xanthorea platyphylla* suggesting that prior to the current levels of surrounding land clearing and general degradation at the site, that it may have once contained this community.

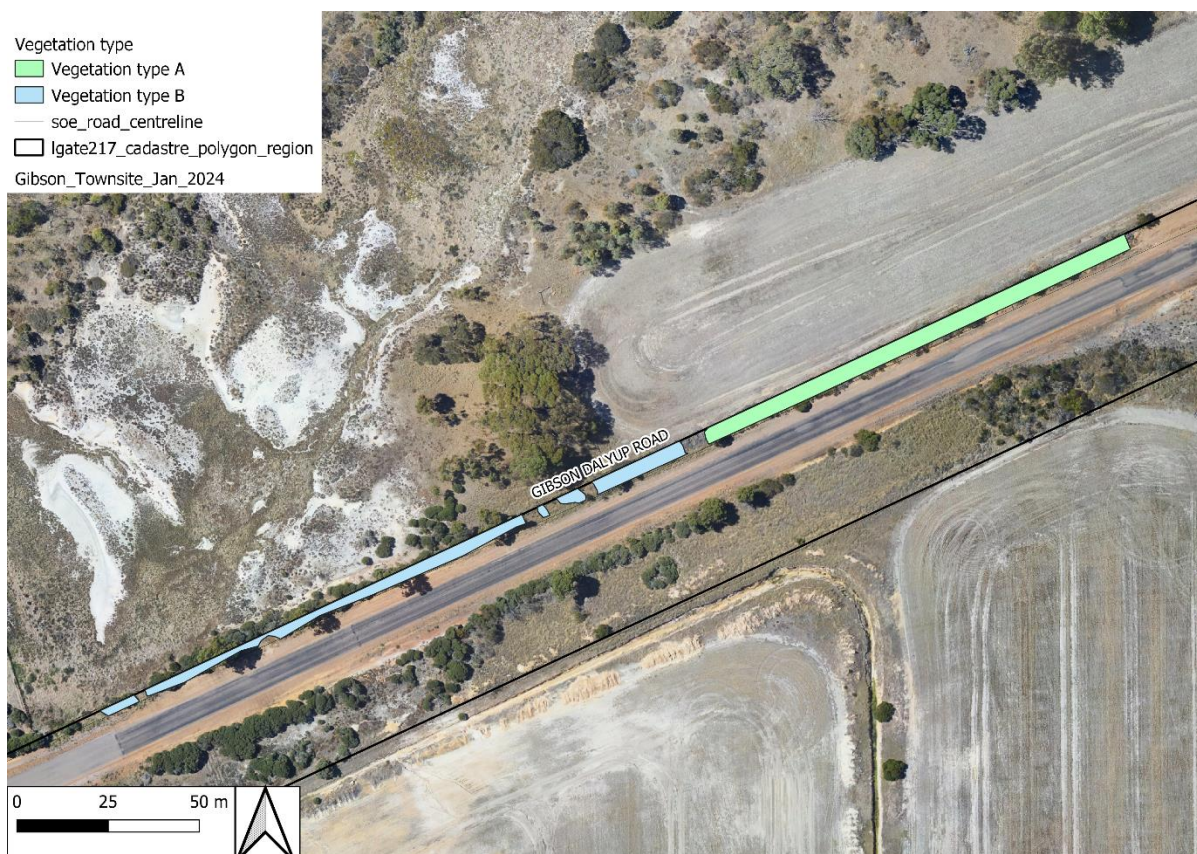


Figure 2. Vegetation types present within proposed Gibson-Dalyup Road site.

Vegetation condition varied between a Degraded and a Very good condition (Keighery, 1994), with the majority (0.077ha) in a Degraded condition. Areas of highest-quality vegetation (in a Very good condition) were in the southwest of the site. Refer to Figure 3 for the map of vegetation condition across the project site, and Table 2 below for the quantitative distribution of vegetation condition across the vegetation types.

Table 2: Quantitative distribution of vegetation condition (ha) by vegetation type within the proposed Gibson-Dalyup Road site.

Vegetation type	Completely degraded	Degraded	Good	Very good	Excellent	Total
A	-	0.055	0.014	-	-	0.068
B	-	0.022	-	0.031	-	0.053
Total	-	0.077	0.014	0.031	-	0.121



Figure 3. Vegetation condition within proposed Gibson-Dalyup Road site.

The desktop survey mapped the EPBC Act listed 'Proteaceae dominated Kwongkan shrublands of the southeast coastal floristic province of Western Australia (Kwongkan)' TEC 15m from the site. Observed vegetation types lacked any Proteaceae species and could not be considered as the Kwongkan TEC. Vegetation within vegetation type A would likely have been considered as Kwongkan TEC prior to degradation due to the presence of other common Kwongkan TEC species.

The BC Act listed Swamp Yate (*Eucalyptus occidentalis*) woodlands in seasonally inundated clay basins (South Coast) PEC was potentially relevant to the site due to the presence of *Eucalyptus occidentalis* over Melaleuca shrubs, however the abiotic factors required for this PEC were not present, with the area lacking a clay basin. Soil at the site was sandy.

No other TECs or PECs were relevant to the site.

A total of 22 native flora species were identified during the field survey, an additional 9 exotic species were identified. Problematic environmental weeds observed within the proposed Gibson-Dalyup Road site area included *Eragrostis curvula*, *Ehrharta calycina* and *Asparagus asparagoides* (WONS, Declared Pest). A full species list is presented in Appendix 3. No TF or PF identified in the desktop assessment were detected.

Table 1. Incidental list of flora species present within proposed Gibson-Dalyup Road.

Family	Taxon	Invasive	Veg A	Veg B
Asparagaceae	<i>Lomandra micrantha</i> subsp. <i>teretifolia</i>			X
Asparagaceae	<i>Lomandra mucronata</i>			X
Asparagoides	<i>Asparagus asparagoides</i>	X	X	X

Asteraceae	<i>Dittrichia graveolens</i>	X	X	
Casuarinaceae	<i>Allocasuarina humilis</i>		X	
Casuarinaceae	<i>Allocasuarina lehmanniana</i> subsp. <i>ecarinata</i>		X	X
Chenopodiaceae	<i>Tecticornia</i> sp.			X
Cyperaceae	<i>Gahnia trifida</i>			X
Cyperaceae	<i>Lepidosperma squamata</i>			X
Dilleniaceae	<i>Hibbertia callida</i>			X
Dilleniaceae	<i>Hibbertia racemosa</i>			X
Fabaceae	<i>Acacia cyclops</i>		X	
Frankeniaceae	<i>Frankenia tetrapetala</i>			X
Geraniaceae	<i>Erodium botrys</i>	X	X	
Iridaceae	<i>Romulea rosea</i>	X	X	
Myrtaceae	<i>Cyathostemon ambiguus</i>		X	
Myrtaceae	<i>Darwinia diosmoides</i>		X	X
Myrtaceae	<i>Eucalyptus occidentalis</i>			X
Myrtaceae	<i>Eucalyptus pleurocarpa</i>		X	
Myrtaceae	<i>Eucalyptus uncinata</i>		X	
Myrtaceae	<i>Melaleuca brevifolia</i>		X	X
Myrtaceae	<i>Melaleuca cuticularis</i>			X
Myrtaceae	<i>Melaleuca pulchella</i>			X
Myrtaceae	<i>Melaleuca scabra</i>		X	
Myrtaceae	<i>Melaleuca striata</i>		X	
Onagraceae	<i>Oenothera stricta</i>	X		X
Poaceae	<i>Briza maxima</i>	X	X	X
Poaceae	<i>Ehrharta calycina</i>	X	X	
Poaceae	<i>Eragrostis curvula</i>	X	X	X
Primulaceae	<i>Lysimachia arvensis</i>	X		X
Xanthorrhoeaceae	<i>Xanthorrhoea platyphylla</i>		X	

There may be some suitable habitat for most of the 29 faunal species listed in the Desktop search including Carnaby's black-cockatoo and many of the water bird species. Due to the amount of clearing and condition of vegetation cleared this is unlikely to be significant.

Photos



Figure 4. Photo of Vegetation type A within Gibson-Dalyup Road. Photo taken by Katherine Walkerden on 18/06/2025.



Figure 5. Photo of Vegetation type A within Gibson-Dalyup Road. Photo taken by Katherine Walkerden on 18/06/2025.



Figure 6. Photo of Vegetation type B within Gibson-Dalyup Road. Photo taken by Katherine Walkerden on 18/06/2025.



Figure 7. Photo of Vegetation type B within Gibson-Dalyup Road. Photo taken by Katherine Walkerden on 18/06/2025.

References

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Appendix 1: Threatened and priority flora species identified within 20km

Data provided by Department of Biodiversity, Conservation and Attractions (DBCA) and Western Australian Herbarium in June 2024 was used to assess threatened flora (TF), priority flora (PF), and threatened (TEC) and priority (PEC) ecological communities within 20 km radius of the site. Specifically, spatial data included;

- WAHerb extract (DBCA 2024).
- Threatened and Priority Reporting (TPFL; DBCA 2024).
- Esperance District Threatened Flora (DBCA 2024).

Species	Status	Distance
<i>Beyeria physaphylla</i>	P1	17.60
<i>Eucalyptus misella</i>	P1	17.97
<i>Goodenia turleyae</i>	P1	12.38
<i>Hibbertia carinata</i>	P1	17.23
<i>Myriophyllum muelleri</i>	P1	17.44
<i>Schoenus</i> sp. Grey Rhizome (K.L. Wilson 2922)	P1	7.12
<i>Aotus</i> sp. Dundas (M.A. Burgman 2835)	P2	14.86
<i>Astroloma</i> sp. Grass Patch (AJG Wilson 110)	P2	8.27
<i>Comesperma griffinii</i>	P2	8.63
<i>Fabronia hampeana</i>	P2	9.41
<i>Goodenia exigua</i>	P2	5.90
<i>Hibbertia turleyana</i>	P2	2.71
<i>Leucopogon corymbiformis</i>	P2	3.33
<i>Paracaleana parvula</i>	P2	3.12
<i>Patersonia inaequalis</i>	P2	2.71
<i>Spyridium mucronatum</i> subsp. <i>multiflorum</i>	P2	10.87
<i>Stenanthra lacsalaria</i>	P2	8.28
<i>Velleia exigua</i>	P2	6.13
<i>Adelphacme minima</i>	P3	15.52
<i>Astartea reticulata</i>	P3	14.58
<i>Austrobaecka uncinella</i>	P3	6.99
<i>Brachyloma mogin</i>	P3	4.43
<i>Comesperma calcicola</i>	P3	3.65
<i>Commersonia rotundifolia</i>	P3	2.71
<i>Conostephium marchantiorum</i>	P3	9.84
<i>Dampiera sericantha</i>	P3	4.81
<i>Dampiera triloba</i>	P3	6.26
<i>Darwinia</i> sp. Gibson (R.D. Royce 3569)	P3	2.77
<i>Daviesia pauciflora</i>	P3	6.58
<i>Eucalyptus famelica</i>	P3	7.18
<i>Eucalyptus foliosa</i>	P3	2.77
<i>Eucalyptus semiglobosa</i>	P3	7.91
<i>Gonocarpus pycnostachyus</i>	P3	5.93
<i>Isopogon alpicornis</i>	P3	10.24

<i>Kunzea salina</i>	P3	6.87
<i>Melaleuca dempta</i>	P3	9.21
<i>Persoonia cymbifolia</i>	P3	9.76
<i>Persoonia scabra</i>	P3	8.62
<i>Pterostylis faceta</i>	P3	3.34
<i>Styphelia rotundifolia</i>	P3	10.68
<i>Caladenia arrecta</i>	P4	2.77
<i>Eucalyptus dolichorhyncha</i>	P4	2.77
<i>Eucalyptus preissiana</i> subsp. <i>lobata</i>	P4	7.42
<i>Grevillea baxteri</i>	P4	10.30
<i>Anigozanthos bicolor</i> subsp. <i>minor</i>	T	19.48
<i>Conostylis lepidospermoides</i>	T	17.65
<i>Eremophila glabra</i> subsp. <i>Scaddan</i>	T	10.58
<i>Eucalyptus merrickiae</i>	T	15.50
<i>Lambertia echinata</i> subsp. <i>echinata</i>	T	19.96

Appendix 2: Threatened fauna species identified within 20km

Assessment of Threatened and Priority fauna potentially occurring within 20km of the site was conducted utilising the following sources:

- DBCA Threatened Fauna database (DBCA 2024);

Taxon	Common name	WA Status	EPBC status	Distance (km)
<i>Zanda latirostris</i>	Carnaby's black-cockatoo	EN	EN	2.45
<i>Charadrius cucullatus</i>	Hooded plover	P4		5.82
<i>Tringa nebularia</i>	Common greenshank	MI	MI	5.88
<i>Calidris ruficollis</i>	Red-necked stint	MI	MI	5.88
<i>Calidris ferruginea</i>	Curlew sandpiper	CR	CR & MI	6.17
<i>Cereopsis novaehollandiae grisea</i>	Recherche cape barren goose	VU	VU	10.03
<i>Tringa glareola</i>	Wood sandpiper	MI	MI	11.10
<i>Calidris acuminata</i>	Sharp-tailed sandpiper	MI	MI	11.39
<i>Leipoa ocellata</i>	Malleefowl	VU	VU	11.91
<i>Falco peregrinus</i>	Peregrine falcon	OS		14.82
<i>Oxyura australis</i>	Blue-billed duck	P4		15.20
<i>Actitis hypoleucos</i>	Common sandpiper	MI	MI	15.20
<i>Calidris alba</i>	Sanderling	MI	MI	15.20
<i>Elanus scriptus</i>	Letter-winged kite	P4		15.20
<i>Limosa lapponica</i>	Bar-tailed godwit	MI	MI	15.20
<i>Ardenna carneipes</i>	Flesh-footed shearwater	VU	MI	15.20
<i>Thalasseus bergii</i>	Crested tern	MI	MI	15.20
<i>Hydroprogne caspia</i>	Caspian tern	MI	MI	15.20
<i>Isoodon fusciventer</i>	Quenda	P4		15.50
<i>Plegadis falcinellus</i>	Glossy ibis	MI	MI	17.70
<i>Tringa stagnatilis</i>	Marsh sandpiper	MI	MI	18.34
<i>Arenaria interpres</i>	Ruddy turnstone	MI	MI	18.88
<i>Calidris tenuirostris</i>	Great knot	CR	CR & MI	18.88
<i>Calidris canutus</i>	Red knot	EN	EN & MI	19.27
<i>Tringa brevipes</i>	Grey-tailed tattler	P4 & MI	MI	19.27
<i>Pezoporus flaviventris</i>	Western ground parrot	CR	CR	19.28
<i>Calidris falcinellus</i>	Broad-billed sandpiper	MI	MI	19.53
<i>Calidris melanotos</i>	Pectoral sandpiper	MI	MI	19.55