



Native Vegetation Clearing Referral

Springdale and Doyle Intersection Site Inspection Report

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Introduction

The Shire of Esperance (SOE) has proposed to clear 0.062ha of native vegetation located within the Doyle Road Reserve and Springdale Road Reserve for the purposes of intersection upgrades. Refer to Figure 1 for a map of the proposed area.

Map



Figure 1. Location and vegetation to be cleared of proposed Springdale and Doyle Intersection. (A point within the site is 302118m E, 6255612m N, GDA94, 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 Springdale and Doyle Intersection 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* (EPA 1986).

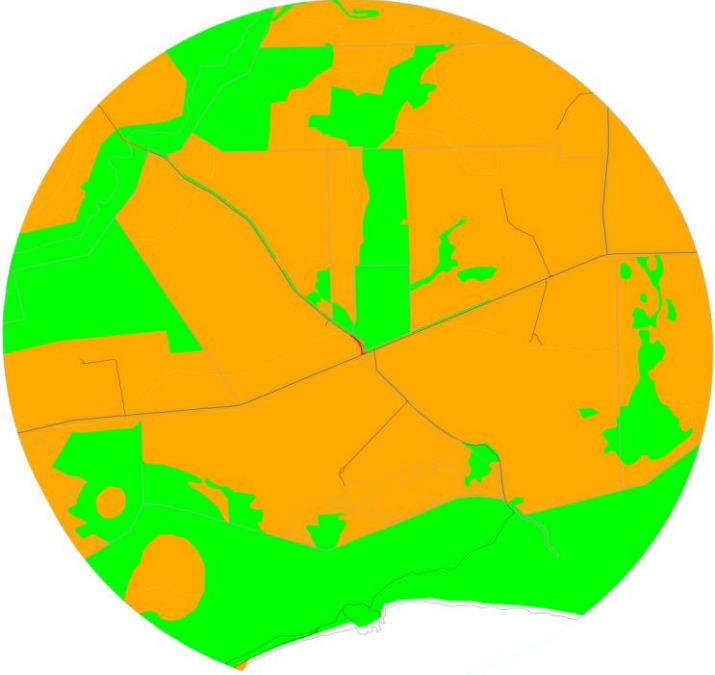
Springdale and Doyle Intersection is mapped as forming a component of Beard Vegetation Association Fanny Cove 4048. This vegetation association is moderately cleared with only 57% of its pre-European extent remaining within the Shire of Esperance. Fanny Cove 4048 is well represented in conservation estate with 47.62% of its Pre-European extent within conservation estate.

Table 1. Vegetation association within the Springdale and Doyle Intersection project area by percentage of pre-European extent remaining.

Vegetation Association	Fanny Cove 4048
Description	Shrublands; scrub-heath in the Esperance Plains including Mt Ragged scrub-heath
Pre-European extent remaining within the Shire of Esperance	57.61%
Pre-European extent remaining within Recherche IBRA Sub-region	49.85%
Pre-European extent in land protected for conservation	47.62%

Table 2. Desktop search results

Landform	Gently inclined hillslopes of a low scarp (40m), externally well drained with short ephemeral streams
Soils	Grey deep and shallow sandy duplex (gravelly) soils with minor pale deep sands, duplex sandy gravels and Alkaline grey deep sandy duplex soil
Geology/Regolith	Pallinup formation sediments with extensive areas of shallow Proterozoic gneiss
Vegetation remaining within 5km (%)	34.62% of vegetation remains within 5km of the project.

	 Map of remnant vegetation within a 5km buffer produced by DEISIP. Project is highlighted in red, remnant vegetation is in green and cleared vegetation is in orange, road centrelines are in black and cadastre boundaries are in grey.
Threatened and Priority flora (Appendix 3)	24 PF and 3 TF were recorded within 20km of the Springdale and Doyle Intersection project.
Threatened Ecological Communities	EPBC listed "Proteaceae Dominated Kwongan Shrublands of the Southeast Coastal Floristic Province of Western Australia".
Threatened and Priority fauna (Appendix 4)	27 conservation listed species were recorded within 20km of the Reserve.
Closest conservation reserve	2.49km from Lake Shaster Nature Reserve (Reserve 32339)
Aboriginal heritage	No heritage sites were within the project area.

Site Inspection

A site inspection was conducted by Katherine Walkerden of the Shire of Esperance on the 30 May 2025.

Approximately 0.062ha of native vegetation was present within the project site, which was classified during the site inspection into two distinct vegetation types, namely:

- A. Degraded *Acacia cyclops* shrubland with dense *Eragrostis curvula*.
- B. Scattered *Eucalyptus occidentalis* seedlings over *Eragrostis curvula*, *Juncus* spp.

Refer to Figure 2 for the map of vegetation types within the Springdale and Doyle Road site.

Vegetation type A was present in the northern section of the clearing area and vegetation type B was present in the southern section of the clearing area.

Vegetation condition varied between Completely Degraded and a Degraded condition (Keighery 1994). Primary causes of degradation observed to be afflicting the site were historical clearing and subsequent weed invasion. The project area was dominated by exotic grasses.

Areas of highest-quality vegetation occurred on the eastern side 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 by vegetation type (ha) within the proposed Springdale and Doyle Intersection.

Vegetation Type	Completely Degraded	Degraded	Good	Very Good	Excellent	Total
A	<0.001	0.049	-	-	-	0.049
B	0.007	0.006	-	-	-	0.013
Total	0.007	0.055	-	-	-	0.062



Figure 2. Vegetation condition within proposed Springdale and Doyle Intersection site.

The desktop survey mapped the EPBC Act-listed TEC, 'Proteaceae dominated Kwongan shrublands of the southeast coastal floristic province of Western Australia (Kwongan)' Threatened Ecological Community, which is currently listed as Endangered. Vegetation type A only had two proteaceous species present (*Lambertia inermis* and *Adenanthos cuneatus*), the vegetation was in a highly degraded state, being dominated by invasive grasses (>70% cover). Vegetation type A likely would have constituted Kwongan TEC prior to its degradation, however it no longer meets the condition criterion in the Approved Conservation Advice for this community. Vegetation type B lacked any proteaceous species.

A total of 16 native flora species were identified during the field survey, in addition 12 were exotic species were recorded. Problematic environmental weeds observed within the proposed project area included *Eragrostis curvula* (African lovegrass). A full species list is presented in Appendix 3. No TF or PF identified in the desktop assessment were detected.

There may be some suitable habitat for most of the 29 faunal species listed in the Desktop search particularly of the water bird species. Due to the minimal of clearing and degraded condition of vegetation clearing is unlikely to be significant.

Photos



Figure 3. Photo of vegetation within Springdale and Doyle Intersection. Taken by Katherine Walkerden on 30 May 2025.



Figure 4. Photo of vegetation within Springdale and Doyle Intersection. Taken by Katherine Walkerden on 30 May 2025.



Figure 5. Photo of vegetation within Springdale and Doyle Intersection. Taken by Katherine Walkerden on 30 May 2025.



Figure 6. Photo of vegetation within Springdale and Doyle Intersection. Taken by Katherine Walkerden on 30 May 2025.



Figure 7. Photo of vegetation within Springdale and Doyle Intersection. Taken by Katherine Walkerden on 30 May 2025.

References

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Appendix 1: Incidental Flora Species List

Family	Genus	Species	Introduced	Vegetation Type	
				A	B
Apiaceae	<i>Foeniculum</i>	<i>vulgare</i>	X		X
Asparagaceae	<i>Asparagus</i>	<i>asparagoides</i>	X	X	X
Asteraceae	<i>Arctotheca</i>	<i>calendula</i>	X		X
Asteraceae	<i>Dittrichia</i>	<i>graveolens</i>	X		X
Brassicaceae	<i>Raphanus</i>	<i>raphanistrum</i>	X	X	X
Centrolepidaceae	<i>Centrolepis</i>	<i>aristata</i>		X	X
Cyperaceae	<i>Baumea</i>	<i>juncea</i>			X
Cyperaceae	<i>Machaerina</i>	<i>articulata</i>			X
Cyperaceae	<i>Ficinia</i>	<i>nodosa</i>			X
Ericaceae	<i>Leucopogon</i>	<i>obovatus</i>		X	
Fabaceae	<i>Acacia</i>	<i>aemula</i>			X
Fabaceae	<i>Acacia</i>	<i>cyclops</i>		X	X
Hemerocallidaceae	<i>Tricoryne</i>	<i>elator</i>			X
Juncaceae	<i>Juncus</i>	<i>pallidus</i>			X
Myrtaceae	<i>Eucalyptus</i>	<i>occidentalis</i>			X
Pittosporaceae	<i>Billardiera</i>	<i>fusiformis</i>			X
Poaceae	<i>Briza</i>	<i>maxima</i>	X		X
Poaceae	<i>Ehrharta</i>	<i>calycina</i>	X	X	X
Poaceae	<i>Eragrostis</i>	<i>curvula</i>	X	X	X
Poaceae	<i>Paspalum</i>	<i>dilatatum</i>	X		X
Poaceae	<i>Phalaris</i>	<i>aquatica</i>	X		X
Polygonaceae	<i>Polygonum</i>	<i>aviculare</i>		X	X
Polygonaceae	<i>Rumex</i>	<i>crispus</i>	X	X	X
Polygonaceae	<i>Muehlenbeckia</i>	<i>adpressa</i>			X
Proteaceae	<i>Adenanthos</i>	<i>cuneatus</i>		X	
Proteaceae	<i>Lambertia</i>	<i>inermis</i>		X	
Rutaceae	<i>Cyanothamnus</i>	<i>ramosus</i>			X
Solanaceae	<i>Solanum</i>	<i>nigrum</i>	X	X	

Appendix 2: Threatened and Priority flora species identified within 20km

Data provided by Department of Biodiversity, Conservation and Attractions (DBCA) and Western Australian Herbarium in May 2022 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	Conservation Code	Record Distance (km)
<i>Cyanicula</i> sp. Esperance (G. Brockman 735)	P1	15.44
<i>Lepidosperma</i> sp. Mt Chester (S. Kern et al. LCH 16596)	P1	18.93
<i>Leucopogon</i> sp. Cascades (M. Hislop 3693)	P1	15.67
<i>Synaphea</i> sp. Jilakin Flat Rocks Rd (R. Butcher et. al RB200)	P1	19.73
<i>Thysanotus brachiatus</i>	P2	13.64
<i>Astartea reticulata</i>	P3	6.37
<i>Commersonia rotundifolia</i>	P3	16.48
<i>Dampiera sericantha</i>	P3	11.42
<i>Dampiera</i> sp. Ravensthorpe (G.F. Craig 8277)	P3	17.03
<i>Daviesia pauciflora</i>	P3	13.32
<i>Eucalyptus famelica</i>	P3	11.15
<i>Hopkinsia adscendens</i>	P3	16.27
<i>Leucopogon blepharolepis</i>	P3	15.65
<i>Persoonia brevirhachis</i>	P3	17.94
<i>Allocasuarina hystricosa</i>	P4	18.74
<i>Caladenia arrecta</i>	P4	16.15
<i>Caladenia x triangularis</i>	P4	12.86
<i>Corysanthes limpida</i>	P4	8.82
<i>Eucalyptus missilis</i> x	P4	14.24
<i>Eucalyptus preissiana</i> subsp. <i>lobata</i>	P4	7.15
<i>Euchilus calycinus</i> subsp. <i>proxenus</i>	P4	18.43
<i>Grevillea fastigiata</i>	P4	14.73
<i>Stachystemon vinosus</i>	P4	13.38
<i>Styphelia blepharolepis</i>	P4	15.65
<i>Anigozanthos bicolor</i> subsp. <i>minor</i>	T	18.80
<i>Conostylis lepidospermoides</i>	T	11.68
<i>Rhizanthella johnstonii</i>	T	12.81

Appendix 3: Desktop Threatened & Priority Fauna within 20km

Scientific Name	Common Name	WA Status	EPBC status	Record Distance (km)
<i>Dasyurus geoffroii</i>	Chuditch	VU	VU	2.72
<i>Charadrius cucullatus</i>	Hooded plover	P4		4.33
<i>Notamacropus irma</i>	Western brush wallaby	P4		4.95
<i>Calidris ruficollis</i>	Red-necked stint	MI	MI	5.08
<i>Zanda latirostris</i>	Carnaby's cockatoo	EN	EN	5.10
<i>Apus pacificus</i>	Fork-tailed swift	MI	MI	5.14
<i>Numenius phaeopus</i>	Whimbrel	MI	MI	5.50
<i>Oxyura australis</i>	Blue-billed duck	P4		6.18
<i>Pluvialis fulva</i>	Pacific golden plover	MI	MI	7.44
<i>Hydroprogne caspia</i>	Caspian tern	MI	MI	7.44
<i>Thalasseus bergii</i>	Crested tern	MI	MI	7.44
<i>Actitis hypoleucos</i>	Common sandpiper	MI	MI	7.44
<i>Tringa nebularia</i>	Common greenshank	MI	MI	7.78
<i>Notamacropus eugenii derbianus</i>	Tammar wallaby	P4		8.35
<i>Pandion haliaetus</i>	Osprey	MI	MI	8.89
<i>Daphnia jollyi</i>	Water flea	P1		9.40
<i>Falco peregrinus</i>	Peregrine falcon	OS		10.20
<i>Calidris acuminata</i>	Sharp-tailed sandpiper	MI	MI	10.40
<i>Leipoa ocellata</i>	Malleefowl	VU	VU	12.02
<i>Zanda baudinii</i>	Baudin's cockatoo	EN	EN	12.99
<i>Calidris ferruginea</i>	Curlew sandpiper	CR	CR & MI	14.10
<i>Neophoca cinerea</i>	Australian sea-lion	EN	EN	15.03
<i>Isodon fusciventer</i>	Quenda	P4		15.86
<i>Thalassarche melanophris</i>	Black-browed albatross	EN	VU & MI	16.85
<i>Ardenna tenuirostris</i>	Short-tailed shearwater	MI	MI	16.85
<i>Tringa stagnatilis</i>	Marsh sandpiper	MI	MI	17.81
<i>Limosa limosa</i>	Black-tailed godwit	MI	MI	17.81