



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 6375/1
Permit Holder:	Shire of Goomalling
Duration of Permit:	21 March 2015 – 21 March 2017

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

1. Purpose for which clearing may be done

Clearing for the purpose of road construction.

2. Land on which clearing is to be done

Berring Road reserve, Ucarty West (PIN 11741427 and PIN 11731743)
Berring East Road reserve, Ucarty West (PIN 11741426)

3. Area of Clearing

The Permit Holder must not clear more than 0.129 hectares of native vegetation within the area hatched yellow on attached Plan 6375/1.

4. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

5. Type of clearing authorised

This Permit authorises the Permit Holder to clear native vegetation for the activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those activities under the *Local Government Act 1995* or any other written law.

A handwritten signature in cursive script, appearing to read "M Warnock", written over a horizontal line.

M Warnock
SENIOR MANAGER
CLEARING REGULATION

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

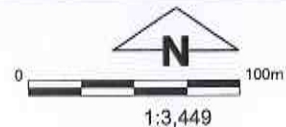
19 February 2015

Plan 6375/1



Legend

-  Cadastre
-  Cadastre (Search)
-  Railways
-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority



(Approximate when reproduced at A4)
GDA 94 (Lat/Long)
Geocentric Datum of Australia 1994

M Warnock Date *19/2/15*
M Warnock

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the





1. Application details

1.1. Permit application details

Permit application No.: 6375/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Goomalling

1.3. Property details

Property: ROAD RESERVE, UCARTY WEST
Local Government Authority: GOOMALLING, SHIRE OF
DER Region: Greater Swan
DPaW District: CENTRAL WHEATBELT
LCDC: GOOMALLING
Localities: UCARTY WEST
Coordinates: Latitude: -31.263 Longitude: 116.9094; Latitude: -31.2644 Longitude: 116.9207; Latitude: -31.2728 Longitude: 116.9149

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.129		Mechanical Removal	Road construction or upgrades

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 19 February 2015

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
The vegetation under application is mapped as Beard vegetation associations (Shepherd et al, 2001): 694 - which is described as shrublands; scrub-heath on yellow sandplain banksia-xylomelum alliance in the Geraldton Sandplain and Avon-Wheatbelt Regions. 1049 - which is described as a medium woodland; wandoo, York gum, salmon gum, morrel and gimlet.	To clear 0.129 hectares of native vegetation within Berring Road and Berring East Road reserves, Ucarty West, for the purpose of road construction.	Good; Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994). To Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The condition of the vegetation under application was ascertained via a flora survey submitted by the applicant (NexusENV, 2015).

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments **Proposal is not likely to be at variance to this Principle**
The application is to clear 0.129 hectares of native vegetation within Berring Road and Berring East Road reserves, Ucarty West, for the purpose of road construction.

Two vegetation associations have been described within the application area (NexusENV, 2015). Tall woodland of Eucalyptus wandoo over low herbaceous shrubs of recruitment species and Maireana tomentosa. Open scrubland of Allocasaurina campestris/Santalum spicatum, with acacia and herbland.

A flora survey of the application area did not reveal the presence of conservation significant flora, a priority ecological community or a threatened ecological community (NexusENV, 2015).

Given the limited size of the application area, the adjoining land uses and its position within the landscape, the application area is not likely to be significant in the movement of fauna through the landscape.

Of the six conservation significant fauna species recorded within the local area (DEC, 2007-) one, Carnaby's cockatoo, has the potential to utilise the application area. Carnaby's cockatoo nests in large hollows of eucalyptus trees and forages on the seeds, nuts and flowers of a large variety of plants including Proteaceous species (Banksia, Hakea, Grevillea), Eucalyptus species, Corymbia species and a range of introduced species (Shah, 2006; Valentine and Stock, 2008). Hollow bearing Eucalyptus wandoo trees, suitable for Carnaby's cockatoo breeding, do not appear to be present within the application area (Shire of Goomalling, 2014).

Although the application area may contain habitat for Carnaby's cockatoo, given the limited number of species present and lack of conservation significant flora, it is not likely to be at variance to this clearing principle.

Methodology

References:

DEC (2007-)
Shah (2006)
Shire of Goomalling (2014)
NexusENV (2015)
Valentine and Stock (2008)

GIS Datasets:

- SacBiodataSets - accessed February 2015

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

Comments

Proposal is not likely to be at variance to this Principle

The application is to clear 0.129 hectares of vegetation along a linear road reserve. The road reserve is surrounded by land that has been predominantly cleared for agriculture.

Two vegetation associations have been described within the application area (NexusENV, 2015). Tall woodland of Eucalyptus wandoo over low herbaceous shrubs of recruitment species and Maireana tomentosa. Open scrubland of Allocasaurina campestris/Santalum spicatum, with acacia and herbland. Hollow bearing eucalyptus wandoo trees are present within the application area (Shire of Goomalling, 2014).

Six fauna species of conservation significance have been recorded within the local area (10 kilometre radius) (DEC, 2007-). Given the size of the application area and its position within the landscape, the application area may form habitat for one of these, Carnaby's cockatoo (*Calyptorhynchus latirostris*). This species is listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 and endangered under the Environment Protection and Biodiversity Conservation Act 1999.

Carnaby's cockatoo nests in large hollows of eucalyptus trees and forages on the seeds, nuts and flowers of a large variety of plants including Proteaceous species (Banksia, Hakea, Grevillea), Eucalyptus species, Corymbia species and a range of introduced species, especially seeds from cones of Pinus species (Shah, 2006; Valentine and Stock, 2008).

Carnaby's cockatoo was once abundant in Western Australia. Since the late 1940s the species has suffered a 30 percent contraction in range, a 50 percent decline in population, and between 1968 and 1990 disappeared from more than a third of its breeding range (Saunders 1990; Johnstone and Storr 1998; Saunders and Ingram 1998; Garnett et al. 2011). Confirmed Carnaby's cockatoo roost sites have been mapped approximately two kilometres north and north west of the application area and approximately three kilometres west.

The Carnaby's cockatoo recovery plan (DEC, 2012) summarises habitat critical to the survival for Carnaby's cockatoos as:

- The eucalypt woodlands that provides nest hollows used for breeding, together with nearby vegetation that provides feeding, roosting and watering habitat that supports successful breeding;
- Woodland sites known to have supported breeding in the past and which could be used in the future, provided adequate nearby food and/or water resources are available or are re-established; and
- In the non-breeding season the vegetation that provides food resources as well as the sites for nearby watering and night roosting that enable the cockatoos to effectively utilise the available food resources.

Although the application area falls within the breeding range of Carnaby's cockatoo, it does not contain vegetation with large hollows suitable for breeding. Given the limited amount of vegetation to be cleared the application does not contain significant feeding habitat.

Given the location of the application area within the local area it is not likely to be significant in the movement of indigenous fauna through the landscape.

Given the above, the application is not likely to be at variance to this principle.

Methodology

References:

DEC (2007-)
DEC (2012)
Garnett et al. (2011)

Johnstone and Storr (1998)
NexusENV (2015)
Saunders (1990)
Saunders and Ingram (1998)
Shah (2006)
Shire of Goomalling (2014)
Valentine and Stock (2008)

GIS Datasets:
- Carnaby Cockatoo breeding sites
- Hydrography linear

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments **Proposal is not likely to be at variance to this Principle**
Five rare flora species have been recorded within the local area. The Department of Parks and Wildlife (2015) has advised that the application area contains suitable habitat for two of these.

A subsequent flora survey of the application area did not reveal the presence of these species (NexusENV, 2015). Given this and the limited size of the application area, the clearing is not likely to be at variance to this principle.

Methodology Reference:
Department of Parks and Wildlife (2015)
NexusENV (2015)

GIS Databases:
- SAC Biodatasets - accessed February 2015

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Comments **Proposal is not at variance to this Principle**
No threatened ecological communities (TEC) have been recorded within the local area. The closest falls approximately 90 kilometres from the application area and is associated with the Swan Coastal Plain.

A flora survey of the application area did not record vegetation consistent with a TEC (NexusENV, 2015).

Given the above, the application is not at variance to this principle.

Methodology Reference:
NexusENV (2015)

GIS Databases:
- SAC Biodatasets - accessed February 2015

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments **Proposal is not likely to be at variance to this Principle**
The area under application is located within the Avon Wheatbelt Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 18 percent of its pre-European vegetation extent remaining (Government of Western Australia, 2013).

The vegetation under application is mapped as Beard vegetation association's 694 and 1049 of which there is approximately 7 percent and 6 percent pre-European extent remaining within the Avon Wheatbelt bioregion respectively (Government of Western Australia, 2013).

The area under application is located within the Shire of Goomalling, within which there is approximately 16 percent pre-European extent remaining (Government of Western Australia, 2013).

The local area (10 kilometre radius) retains approximately 10 percent native vegetation.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 percent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

Although the application area falls within a highly cleared landscape, given the degraded condition of large portions of the application area, limited amount of clearing to be undertaken (0.129 hectares) and as the application area does not form a significant remnant for flora, fauna or biodiversity, it is not likely to be at variance to this principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DPaW Managed Lands (%)
IBRA Bioregion*				
Avon wheatbelt	9,517,109.90	1,778,407.08	18.69	10
Shire*				
Shire of Goomalling	183,541.83	29,680.05	16.17	1.3
Beard Vegetation Association within Bioregion*				
694	173,921.55	12,192.19	7.01	13
1049	833,384.77	56,843.20	6.82	6

Methodology References:
Commonwealth of Australia (2001)
*Government of Western Australia (2013)

GIS Databases:
- SacBiodataSets - accessed February 2015

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments **Proposal is not at variance to this Principle**
No watercourses or wetlands are mapped within the application area. The closest (Mortlock River East) falls approximately 500 metres east of the application area.

Given this, the proposed clearing is not at variance to this clearing principle.

Methodology GIS Datasets:
- Hydrography linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments **Proposal is not likely to be at variance to this Principle**
Groundwater salinity within the application area is mapped as 14000 - 35000 milligrams per litre. Given the limited size of the application area the proposed clearing is not likely to lead to land degradation through salinity.

As no watercourses are present within the application area, the risk of water erosion is low. Given the limited size and linear nature of the clearing the application is not likely to cause wind erosion.

Given the above, the application is not likely to be at variance to this principle.

Methodology GIS Datasets:
- Groundwater Salinity
- Hydrography linear
- Topographic contours

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments **Proposal is not likely to be at variance to this Principle**
The closest nature reserve falls approximately five kilometres from the application area. Given this and the land use in-between, the application is not likely to impact on the environmental values of a nature reserve and is not likely to be at variance to this clearing principle.

Methodology GIS Datasets:
- DPaW Tenure

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Comments **Proposal is not likely to be at variance to this Principle**
Groundwater salinity within the application area is mapped as 14000 - 35000 milligrams per litre.

As no watercourses are present within the application area and given the limited size of the clearing, the application is not likely to deteriorate the quality of surface or ground water.

Given the above, the application is not likely to be at variance to this principle.

Methodology GIS Databases:
- Groundwater Salinity Statewide
- Hydrography linear

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments **Proposal is not at variance to this Principle**
No watercourses or wetlands have been identified within the application area. Given this and the position of the application area within Western Australia, the application is not at variance to this clearing principle.

Methodology GIS Datasets:
- Hydrography linear

Planning instruments and other relevant matters.

Comments No aboriginal sites of significance have been mapped within the application area.

The road construction program forms part of the State Black Spot Program (Shire of Goomalling 2014).

Methodology References:
Shire of Goomalling (2014)

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of Parks and Wildlife (2015) Advice received in relation to clearing permit application CPS 6375. Received 9 January 2015. (DER ref: A)
- Garnett, S., Szabo, J. and Dutton, G. (2011). The Action Plan for Australian Birds 2010. CSIRO Publishing, Melbourne, Victoria.
- Valentine L. E. and Stock W. (2008) Food Resources of Carnaby's Black-Cockatoo (*Calyptorhynchus latirostris*) in the Gnamptara Sustainability Strategy study area. Unpublished report to the Forests Products Commission. Available online: <http://ro.ecu.edu.au/ecuworks/6147>
- Shah, B. (2006) Conservation of Carnaby's Black-Cockatoo on the Swan Coastal Plain, Western Australia. December 2006. Carnaby's Black-Cockatoo Recovery Project. Birds Australia, Western Australia.
- Saunders, D.A. and Ingram, J.A. (1998). Twenty-eight years of monitoring a breeding population of Carnaby's cockatoo. *Pacific Conservation Biology*. 4: 261-270.
- Saunders, D.A. (1990). Problems of survival in an extensively cultivated landscape: the case of Carnaby's cockatoo *Calyptorhynchus funereus latirostris*. *Biological Conservation*. 54: 277-290.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.
- DEC (2012). Carnaby's cockatoo (*Calyptorhynchus latirostris*) Recovery Plan. Department of Environment and Conservation, Perth, Western Australia.
- NexusENV (2015) Berring Road Flora Report, 30 January 2015. Prepared for the Shire of Goomalling (DER ref: A).
- Shire of Goomalling (2014) Information submitted in support of clearing permit application CPS 6375/1. Received 24 November 2014 (DER ref: A834731).
- DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed February 2015