



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 7678/1
Permit Holder:	Shire of Cuballing
Duration of Permit:	16 December 2017 – 16 December 2022

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

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of road upgrades and road safety.

2. Land on which clearing is to be done

Popanyinning Road reserve (PIN 11374624), West Popanyinning

3. Area of Clearing

The Permit Holder must not clear more than 0.8 hectares of native vegetation within the area shaded yellow on attached Plan 7678/1a.

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

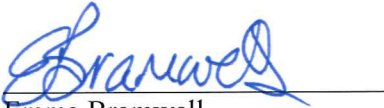
This Permit authorises the Permit Holder to clear native vegetation for the activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those activities under the *Local Government Act 1995* or any other written law.

PART II – MANAGEMENT CONDITIONS

6. Offset – Lot 434 on Deposited Plan 84296 (being Crown Reserve 2556)

- (a) By 16 June 2018, the Permit Holder shall provide to the CEO a copy of the executed change in purpose of the area cross-hatched red on attached Plan 7678/1b within Lot 434 on Deposited Plan 84296 (being Crown Reserve 2556) from 'Gravel' to 'Conservation'.
- (b) In the event that the change in purpose of Lot 434 on Deposited Plan 84296 (being Crown Reserve 2556) is not achieved in accordance with condition 6(a):
 - (i) submit a new offset proposal for the CEO's approval by 16 September 2018; and

- (ii) in preparing an offset proposal in accordance with condition 6(b)(i), the Permit Holder must comply with the principles in the Government of Western Australia's *WA Environmental Offsets Policy* (September 2011) and have regard to the *WA Environmental Offsets Guidelines* (August 2014).



Emma Bramwell
A/ MANAGER
CLEARING REGULATION

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

15 November 2017

Plan 7678/1a



Legend

-  Clearing Instruments Proposal
-  LGA
-  Cadastre
-  Roads
- Virtual Mosaic (LGATE-V001)



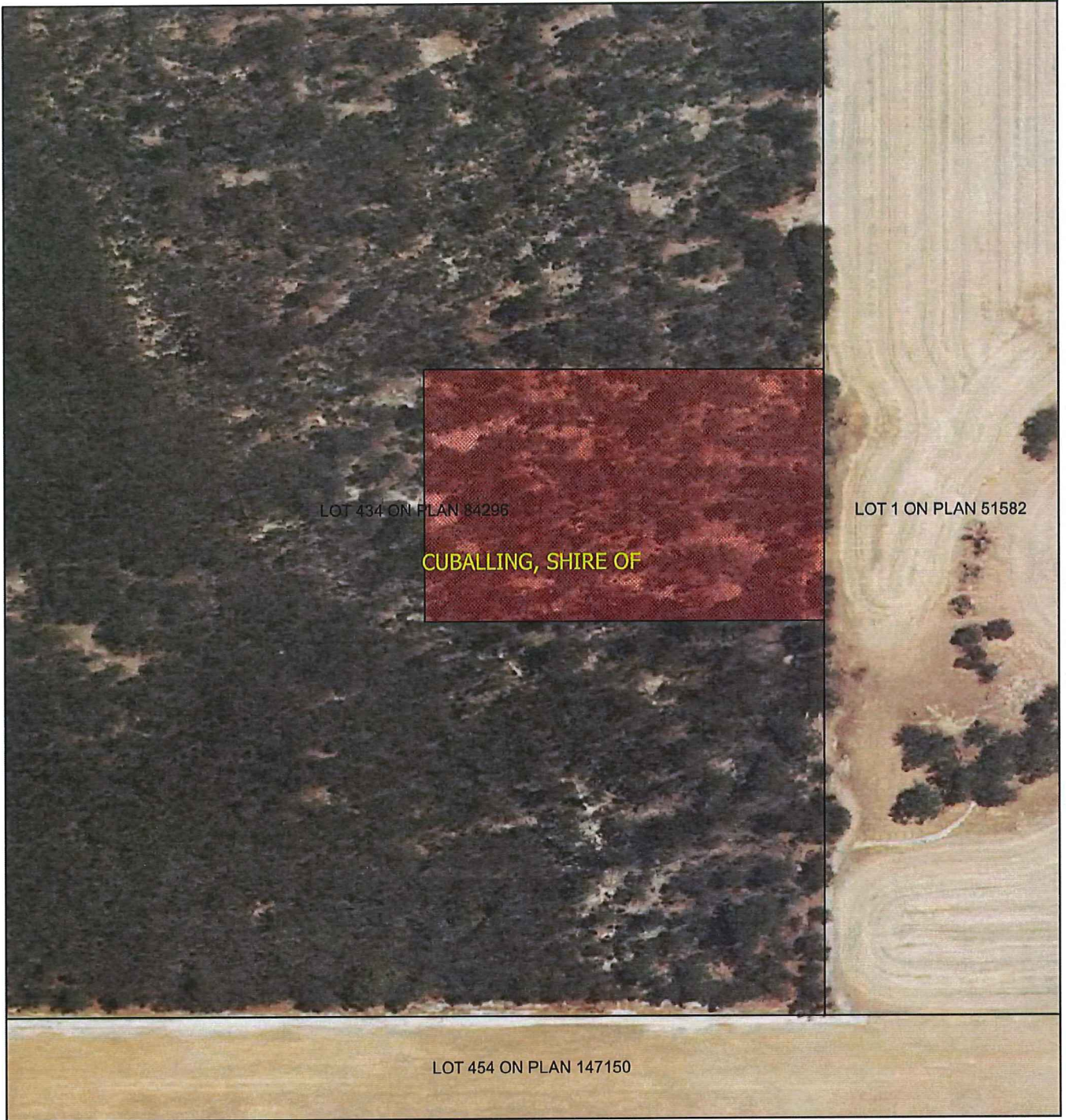
MGA 94
Geocentric Datum of Australia 1994
1:11,972

E. Bramwell Date *15/11/17*
E. BRAMWELL




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



Plan 7678/1b



Legend

-  Clearing Instruments Conditions
 -  LGA
 -  Cadastre
- Virtual Mosaic (LGATE-V001)



MGA 94
Geocentric Datum of Australia 1994
1:1,400

BRONNIE ESKIMWEE Date 15/11/17

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



GOVERNMENT OF
WESTERN AUSTRALIA



1. Application details

1.1. Permit application details

Permit application No.: 7678/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Shire of Cuballing

1.3. Property details

Property: ROAD RESERVE - 11374624, WEST POPANYINNING
Colloquial name: Popanyinning Road
Local Government Authority: CUBALLING, SHIRE OF
DWER Region: Greater Swan
DBCA District: GREAT SOUTHERN
Localities: WEST POPANYINNING

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 15 November 2017
Reasons for Decision: The clearing permit application was received on 3 July 2017 and has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*. It has been concluded that the proposed clearing is at variance to clearing principle (e), may be at variance to clearing principles (b) and (f), and is not likely to be at variance to the remaining clearing principles.

The Delegated Officer determined that the application area is a significant remnant within an extensively cleared area as it contributes to landscape connectivity and fauna dispersal between bushland remnants in the local area, and that the proposed clearing will impact on a mapped vegetation association that retains approximately 11 per cent of its pre-European extent within the Avon Wheatbelt bioregion, and may impact on vegetation growing in association with mapped watercourses. The Delegated Officer had regard for the purpose of the proposed clearing in the decision to grant a clearing permit subject to offsets.

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The application area is mapped as: Beard vegetation association 1023, described as Medium woodland; York gum (*Eucalyptus loxophleba*), wandoo (*Eucalyptus wandoo*) and salmon gum (*Eucalyptus salmonophloia*) (Shepherd et al., 2001).

Clearing Description The application is for the clearing of 0.8 hectares of native vegetation within Popanyinning Road reserve (PIN 11374624), West Popanyinning, for the purpose of road upgrades and road safety.

Vegetation Condition Very Good: vegetation structure altered; obvious signs of disturbance (Keighery, 1994).
To
Completely Degraded: no longer intact, completely/almost completely without native species (Keighery, 1994).

Comment The condition and description of the vegetation within the application area was determined by a site inspection undertaken by officers of the former Department of Environment Regulation (DER site inspection) on 17 May 2017 (DER, 2017).

3. Avoidance and minimisation measures

The applicant advised that in developing this project the following avoidance and minimisation measures were applied:

- widening the Popanyinning West Road in a northerly direction by moving the centre of the road by approximately 2 metres to the north, the north side of the existing road having substantially less remnant vegetation than the south side; and
- reducing the impact of future maintenance activities on the existing remnant vegetation on the south side of the existing road.

4. Assessment of application against clearing principles

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

Proposed clearing is not likely to be at variance to this Principle

The application is for the proposed clearing of 0.8 hectares of native vegetation within the Popanyinning Road reserve, West Popanyinning, for the purpose of road upgrades and road safety. The applicant proposes to clear the majority of the remaining vegetation within the road reserve on the north side of the existing road (approximately four metres wide), and a small number of mature trees to the top of the backslope on the south site of the existing road, to facilitate widening of the sealed surface and improved drainage.

The local area considered in the assessment of this application is a 10 kilometre radius surrounding the application area. The local area retains approximately 23 per cent (8,508 hectares) vegetation cover.

The DER site inspection determined that the vegetation within the application area ranged from very good to completely degraded (Keighery, 1994) condition, with the majority of the application area in a degraded (Keighery, 1994) condition (DER, 2017). The vegetation within the application area consists of mainly wandoo, some of which have hollows, with scattered *Banksia*, *Eucalyptus*, *Xanthorrhoea* and *Allocasuarina* species; most of the understorey was in a degraded (Keighery, 1994) condition (DER, 2017).

As discussed under Principle (b), six threatened and two other specially protected fauna species have been recorded in the local area (DBCA, 2007-). DBCA advised that given the narrow width of the road verge and scattered distribution of the vegetation, the proposed clearing is unlikely to impact on native fauna (DBCA, 2017). Notwithstanding, the application area is likely to function as an ecological linkage and fauna refuge.

According to available databases, two rare and eight Priority flora species have been recorded in the local area (DBCA, 2007-). The Department of Biodiversity Conservation and Attractions (DBCA) advised that local knowledge confirms that no protected flora is known from the area (DBCA, 2017). Noting the condition of the understorey vegetation within the application area, the application area is unlikely to contain suitable habitat for conservation significant flora. Rare flora are discussed further under Principle (c).

As discussed under Principle (d), an occurrence of the Commonwealth-listed 'Eucalypt Woodlands of the Western Australian Wheatbelt' (Wheatbelt Woodlands) threatened ecological community (TEC) overlaps a portion of the eastern half of the application area. The findings of the DER site inspection indicate that the vegetation within the application area is not consistent with this TEC (DER, 2017).

Given the above, the proposed clearing is not likely to be at variance to this Principle.

References:

DBCA (2017)
DBCA (2007-)
DER (2017)
Keighery (1994)

GIS Databases:

SAC Bio Datasets (Accessed July 2017)

(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.

Proposed clearing may be at variance to this Principle

According to available databases, six threatened and two other specially protected fauna species have been recorded in the local area (10 kilometre radius) (DBCA, 2007-). These include the threatened fauna numbat (*Myrmecobius fasciatus*), chuditch (*Dasyurus geoffroii*), and Carnaby's cockatoo (*Calyptorhynchus latirostris*), and the other specially protected fauna red-tailed phascogale (*Phascogale calura*) and rainbow bee-eater (*Merops ornatus*) (DBCA, 2007-).

Carnaby's cockatoo listed as endangered under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. Black cockatoos breed in large hollow-bearing trees, generally within woodlands or forests or in isolated trees (Commonwealth of Australia, 2012). These species nest in hollows in live or dead trees of wandoo, York gum, salmon gum, *Eucalyptus accedens* (powder bark), *Corymbia calophylla* (marri), *Eucalyptus marginata* (jarrah), *Eucalyptus rudis* (flooded gum), *Eucalyptus megacarpa* (bullich), *Eucalyptus gomphocephala* (tuart), *Eucalyptus diversicolor* (karri) and *Eucalyptus* sp. (blackbutt) (Commonwealth of Australia, 2012). The application area includes wandoo trees with hollows (DER, 2017). Noting this, the application area may contain suitable breeding habitat for Carnaby's cockatoo.

The preferred habitat of the red-tailed phascogale is *Allocasuarina* woodlands with hollow-bearing eucalypts. The application area includes *Allocasuarina* species (DER, 2017). Noting this, the application area may contain suitable habitat for the red-tailed phascogale.

The majority of the understorey vegetation within the application area is in a degraded (Keighery, 1994) condition (DER, 2017). Noting this, it is unlikely that the application area comprises significant habitat for other fauna including conservation significant species. DBCA advised that given the narrow road verge width and scattered vegetation distribution, the proposed clearing is unlikely to impact on native fauna (DBCA, 2017).

The application area is likely to function as an ecological linkage between areas of remnant vegetation in the local area, and portions of the application area containing native vegetation in good (Keighery, 1994) or better condition may provide refuges for fauna moving through the landscape. On this basis, the application area may comprise a significant habitat for indigenous fauna.

Given the above, the proposed clearing may be at variance to this Principle.

References:

Commonwealth of Australia (2012)

DBCA (2007-)

DBCA (2017)

Keighery (1994)

GIS Databases:

SAC Bio Datasets (Accessed July 2017)

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

Proposed clearing is not likely to be at variance to this Principle

According to available databases, two threatened flora species have been recorded within the local area (10 kilometre radius) (DBCA, 2007-). DBCA advised that local knowledge confirms that no protected flora is known from the area (DBCA, 2017). Noting the condition of the understorey vegetation within the application area, the application area is unlikely to include, or be necessary for the continued existence of, rare flora.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

References:

DBCA (2007-)

DBCA (2017)

GIS Databases:

SAC Bio Datasets (Accessed July 2017)

(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.

Proposed clearing is not likely to be at variance to this Principle

According to available databases, an occurrence of the Wheatbelt Woodlands TEC intersects the application area. This occurrence is mapped as an approximately 163 metre length of the road reserve and overlaps a portion of the eastern half of the application area. The proposed clearing will impact approximately 0.0652 hectares of the occurrence.

As discussed under Principle (a), the DER site inspection determined that the vegetation proposed for clearing ranged from very good to completely degraded (Keighery, 1994) condition, with the majority of the application area in a degraded (Keighery, 1994) condition. The vegetation consisted of mainly wandoo, some of which have hollows, with scattered *Banksia*, *Eucalyptus*, *Xanthorrhoea* and *Allocasuarina* species; most of the understorey was in a degraded (Keighery, 1994) condition (DER, 2017).

The 'Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) Approved Conservation Advice (including listing advice) for the Eucalypt Woodlands of the Western Australian Wheatbelt' for this TEC states that these woodlands are dominated by a complex mosaic of eucalypt species with a tree or mallet form over an understorey that is highly variable in structure and composition (Threatened Species Scientific Community, 2015).

Noting the vegetation type and condition outlined above, it is considered that the vegetation within the application area does not meet the criteria outlined in the Approved Conservation Advice for this TEC, and is therefore not considered to be representative of this TEC.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

References:

DER (2017)

Keighery (1994)

Threatened Species Scientific Community (2015)

GIS Databases:

SAC Bio Datasets (Accessed July 2017)

(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.

Proposed clearing is at variance to this Principle

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

In assessing the risk of further loss and subsequent cumulative effects, consideration has been given to the extent of native vegetation remaining and what is currently managed as conservation estate:

- as indicated in Table 1, the current vegetation extents for the bioregion, Shire of Cuballing and mapped Beard vegetation association within the bioregion are all below the 30 per cent representation threshold;
- as indicated in Table 1, less than two per cent of the pre-European extent of the mapped Beard vegetation association within the bioregion is contained in conservation estate; and
- the local area (10 kilometre radius) retains approximately 23 per cent (8,508 hectares) vegetation cover, and the proposed clearing will reduce this to approximately 22.9 per cent.

Noting the above, the application area is considered to be within an extensively cleared area.

As discussed under Principle (b), the application area may contain suitable habitat for Carnaby's cockatoo and red-tailed phascogale, is likely to function as an ecological linkage between areas of remnant vegetation in the local area, and portions of the application area containing native vegetation in good (Keighery, 1994) or better condition may provide refuges for fauna moving through the landscape. On this basis, and noting the extent of vegetation cover in the local area, the application area is considered to be significant as a remnant in an extensively cleared area.

Given the above, the proposed clearing is at variance to this Principle.

Table 1: Vegetation representation statistics

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Current Extent in DBCA Managed Lands	
				(ha)	(%)
IBRA Bioregion*					
Avon Wheatbelt	9,517,110	1,763,071	18.5	173,880	9.8
Local government*					
Shire of Cuballing	119,533	26,512	22.2	9,461	35.7
Beard vegetation association in Bioregion*					
1023	1,522,676	165,822	10.9	17,236	10.4

References:

- Commonwealth of Australia (2001)
- *Government of Western Australia (2016)
- Keighery (1994)

GIS Databases:

NLWRA, Current Extent of Native Vegetation

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

Proposed clearing may be at variance to this Principle

According to available databases, the application area is intersected by four mapped minor non-perennial watercourses. The DER site inspection did not record the presence of riparian vegetation within the application area (DER, 2017). Notwithstanding, the proposed clearing may impact on vegetation growing in association with these watercourses.

Noting the extent of the proposed clearing, the linear shape of the application area and the condition of the vegetation within the application area, the proposed clearing is not likely to significantly impact on riparian vegetation.

Given the above, the proposed clearing may be at variance to this Principle.

References:

- DER (2017)

GIS Databases:

Hydrography linear
Hydrography, hierarchy

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

Proposed clearing is not likely to be at variance to this Principle

The soils within the application area have been mapped by the former Department of Agriculture and Food Western Australia as the Noombling Subsystem (Dryandra) land unit subsystem, described as long gentle and undulating hillslopes and divides; colluvium/weathered granite, gneiss and some dolerite; yellow/brown and grey deep sandy duplexes, brown deep loamy duplexes, sandy gravels and shallow duplexes; marri-wandoo/jam-sheoak (Schoknecht et al., 2004).

Noting the extent of the proposed clearing, the linear shape of the application area and its location within the existing maintenance zone of a road, and the porous nature of the soils within the application area, the proposed clearing is not likely to result in appreciable land degradation.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

References:

Schoknecht et al. (2004)

GIS Databases:

Soils, Statewide

Groundwater salinity

Land Degradation datasets

(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.

Proposed clearing is not likely to be at variance to this Principle

According to available databases, the Napping Nature Reserve and Lol Grey State Forest occur approximately five kilometres from of the application area. The application area also provides connectivity to an area of remnant vegetation managed for conservation purposes under the *Land for Wildlife* scheme located approximately two kilometres away.

Noting the extent of the proposed clearing, the linear shape of the application area and its location within the existing maintenance zone of a road, that the proposed clearing is primarily on the northern side of the road, and the distance to these conservation areas, the proposed clearing is not likely to have an impact on the environmental values of these conservation areas.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

GIS Databases:

Department of Biodiversity Conservation and Attractions, 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.

Proposed clearing is not likely to be at variance to this Principle

As discussed under Principle (f), the application area is intersected by four mapped minor non-perennial water courses.

The proposed clearing may cause increased runoff and sedimentation into these watercourses. However, noting the extent of the proposed clearing, the linear shape of the application area, and the porous nature of the soils within the application area, and that existing culverts are likely to be in place to manage water flow, any impacts to surface water quality as a result of the proposed clearing are likely to be short term and minimal.

Groundwater salinity mapped within the application area is between 7,000-14,000 milligrams per litre total dissolved solids (saline). Noting the extent of the proposed clearing and the linear shape of the application area, the proposed clearing is not likely to impact on the quality of underground water.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

GIS Databases:

Hydrography, linear

Groundwater salinity

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

Proposed clearing is not likely to be at variance to this Principle

Noting the absence of watercourses or wetlands within the application area, the extent of the proposed clearing and the linear shape of the application area, the proposed clearing is not likely to cause or exacerbate flooding.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

GIS Databases:
Hydrography, linear
Hydrography, hierarchy
Topographic contours

Planning instruments and other relevant matters.

The application is for the proposed clearing of 0.8 hectares of native vegetation within Popanyinning Road reserve for the purpose of road upgrades and road safety. The applicant proposes to clear the majority of the remaining vegetation within the road reserve on the north side of the existing road (approximately four metres wide), and a small number of mature trees to the top of the backslope on the south site of the existing road, to facilitate widening of the sealed surface and improved drainage.

The cumulative impacts to the extensively cleared Beard vegetation association mapped within the application area have been considered during the assessment of this application.

The application was advertised on 1 August 2017 for a 21-day public comment period. No public submissions have been received in relation to this application.

There is one Native Title registered claim and one Native Title claim mapped within the application area.

GIS Databases:
Aboriginal Sites of Significance

5. Applicant's submission

On 17 October 2017, Department of Water and Environmental Regulation (DWER) officers met with the applicant on-site to discuss the proposed clearing and possible requirement for an offset. During the meeting, the applicant advised that the proposed clearing would impact on the majority of the remaining vegetation, including a number of mature trees, within the road reserve on the north side of the existing road, and a small number of mature trees within the maintenance zone and up to the top of the backslope on the south site of the existing road.

On 23 October 2017, a DWER Delegated Officer wrote to the applicant, outlining the environmental impacts identified during the assessment of the application, and inviting the applicant to provide advice on how the impacts would be avoided or minimised, and how any unavoidable impacts would be offset (DWER ref. A1555292).

In response to the Delegated Officer's letter, the applicant provided advice of measures undertaken to avoid and minimise impacts (DWER ref. A1555294). The avoidance and minimisation measures are discussed in Section 3 of this report.

The applicant also confirmed the combined extent of a broader offset proposal for this and two other applications (CPS 7523/1 and CPS 7524/1), indicating that 1.48 hectares of the proposed offset site would be attributed as an offset for this application (DWER ref. A1555477). The offset proposal is discussed in Section 6 of this report.

In support of the offset proposal, the applicant provided a copy of correspondence from the Department of Planning, Lands and Heritage advising in-principle support for the proposed change in purpose of Crown Reserve 2556 to 'Conservation' subject to the necessary statutory referrals to relevant agencies (DWER ref. A1550485).

6. Suitability of proposed offset

The assessment against the clearing principles has identified that the proposed clearing is at variance to clearing principle (e). After consideration of the applicant's proposed avoidance and mitigation measures, it is considered that the significant residual impact of the proposed clearing is the loss of 0.8 hectares of an extensively cleared vegetation association.

To counterbalance the significant residual impact associated with this application, the applicant submitted an offset proposal to change the purpose of Crown Reserve 2556 (being Lot 434 on Plan 84296), currently vested for the purpose of 'Gravel', to the purpose of 'Conservation'. Crown Reserve 2556 is approximately 40 hectares in area, and is mapped as Beard vegetation association 1023, consistent with the extensively cleared vegetation association the subject of this application, and as the Wheatbelt Woodlands TEC.

In assessing whether the proposed offset is adequately proportionate to the significance of the environmental values being impacted, DWER undertook a calculation using the Commonwealth *Offsets Assessment Guide*. The calculation indicated that an area of approximately 1.48 hectares is required to counterbalance the loss of 0.8 hectares of an extensively cleared vegetation association. The applicant agreed with DWER's offset calculation.

Given the above, it is considered that a 1.48 hectare portion of Crown Reserve 2556 with the proposed purpose of 'Conservation' is adequate to counterbalance the significant residual impact of the proposed clearing consistent with the *Western Australian Environmental Offsets Policy* (September 2011).

7. References

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
Commonwealth of Australia (2012) EPBC Act referral guidelines for three threatened black cockatoo species. Department of Sustainability, Environment, Water, Populations and Communities, Canberra.
Department of Biodiversity, Conservation and Attractions (DBCA) (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Biodiversity, Conservation and Attractions. URL: <http://naturemap.dec.wa.gov.au/>. Accessed 13/07/2017

Department of Biodiversity, Conservation and Attractions (DBCA) (2017) Regional advice received in relation to clearing permit application CPS 77678/1, received 28 July 2017. Department of Biodiversity, Conservation and Attractions, Western Australia (DWER Ref: A1542830).

Department of Environment Regulation (DER) (2017) Site Inspection Report for CPS 7678/1. Department of Environment Regulation. Western Australia (DWER Ref: A1542906).

Government of Western Australia (2016). 2016 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2016. WA Department of Parks and Wildlife, Perth.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia – Overview of Methodology and outputs' Resource Management Technical Report No. 280. Department of Agriculture.

Threatened Species Scientific Committee (TSSC) (2015). Approved Conservation Advice (including listing advice) for the Eucalypt Woodlands of the Western Australian Wheatbelt. Department of the Environment, Canberra. Available from: <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/128-conservation-advice.pdf>.