



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

<b>Purpose Permit number:</b>	CPS 7013/1
<b>Permit Holder:</b>	Shire of Goomalling
<b>Duration of Permit:</b>	23 July 2016 to 23 July 2021

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 widening.
- 2. Land on which clearing is to be done**  
Bejoording Road reserve, Nunile (PIN 11752886 and PIN 11535363).
- 3. Area of Clearing**  
The Permit Holder must not clear more than 0.56 hectares of native vegetation within the area cross hatched yellow on attached Plan 7013/1.
- 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.

### PART II – MANAGEMENT CONDITIONS

- 6. Avoid, minimise etc clearing**  
In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:
  - (a) avoid the clearing of native vegetation;
  - (b) minimise the amount of native vegetation to be cleared; and
  - (c) reduce the impact of clearing on any environmental value.

## 7. Weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

## DEFINITIONS

*fill* means material used to increase the ground level, or fill a hollow;

*mulch* means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation; and

*weed/s* means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

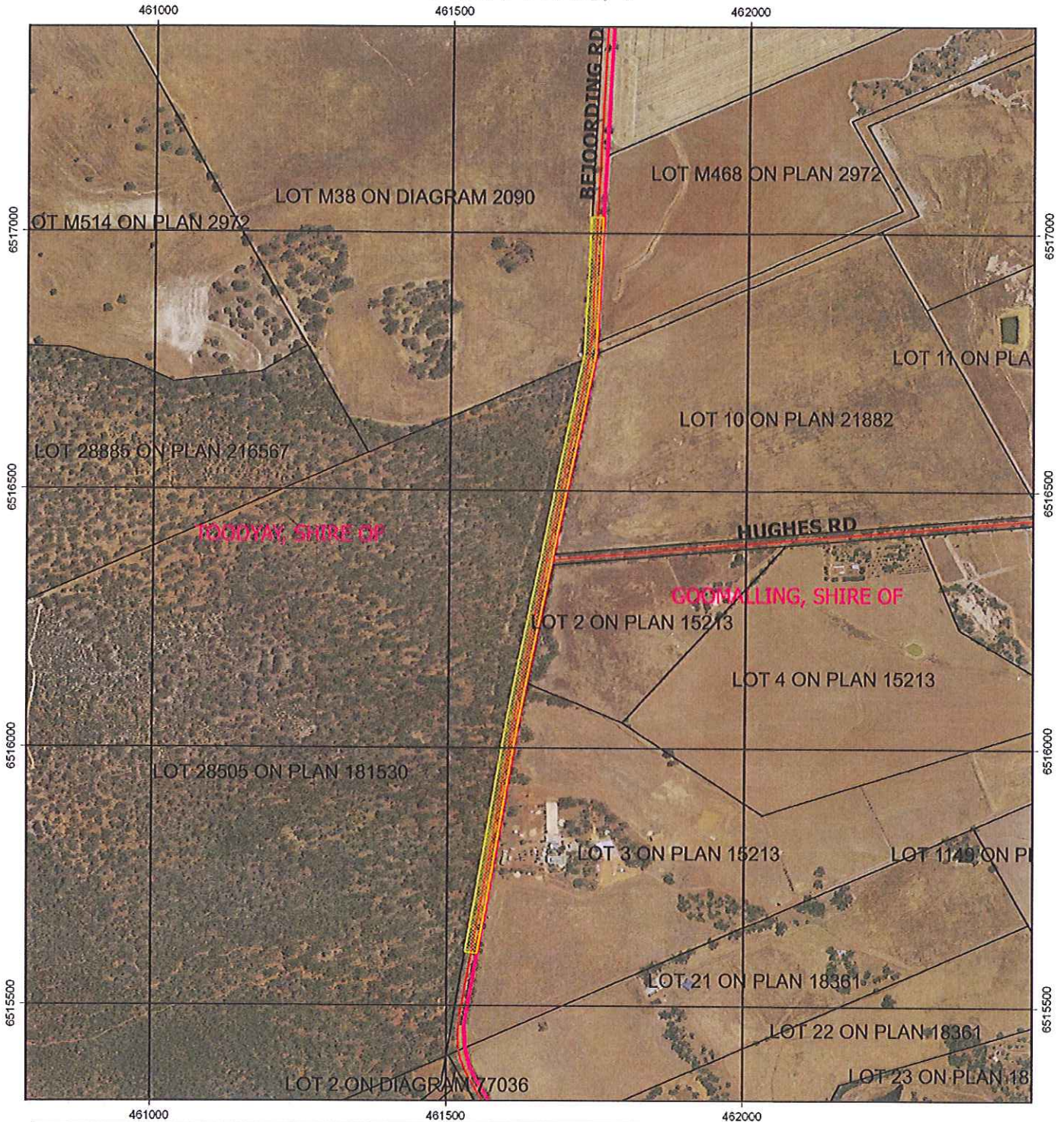


James Widenbar  
MANAGER  
CLEARING REGULATION

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

23 June 2016

# Plan 7013/1




## Legend

-  Areas approved to clear
  -  Roads
  -  LGA
  -  Cadastre
- Virtual Mosaic (LGATE-V001)



1:7,000

MGA 94  
Geocentric Datum of Australia 1994

 Date 23/6/16  
James Widenbar

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





## 1. Application details

### 1.1. Permit application details

Permit application No.: 7013/1  
Permit type: Purpose Permit

### 1.2. Applicant details

Applicant's name: Shire of Goomalling

### 1.3. Property details

Property: ROAD RESERVE - 11752886, NUNILE  
ROAD RESERVE - 11535363, NUNILE  
Colloquial name:  
Local Government Authority: GOOMALLING, SHIRE OF and TOODYAY, SHIRE OF  
DER Region: Greater Swan  
DPaW District: CENTRAL WHEATBELT and PERTH HILLS  
LCDC:  
Localities: NUNILE

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Granted  
Decision Date: 23 June 2016  
Reasons for Decision: The clearing application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the *Environmental Protection Act 1986*, and it has been concluded that the proposed clearing is at variance to Principle (f) and is not likely to be at variance to any of the remaining clearing principles.

A minor watercourse intersects the areas under application. The purpose of the proposed clearing is for road widening and therefore there is likely to be road side infrastructure, such as drains and culverts, already in place to minimise impacts to this watercourse.

Through assessment it has been determined that the clearing is unlikely to have any significant environmental impacts. State policies and other relevant policies have been taken into consideration in the decision to grant a clearing permit.

## 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
Mapped beard vegetation association 352 is described as medium woodland; York gum (Shepherd et al., 2001).	The application is for the clearing of 0.56 hectares of native vegetation within Bejoording Road reserve (PIN: 11752886 and PIN: 11535363) Nunile, for the purpose of road widening.	Degraded; Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).	The condition and description of the vegetation under application was determined via photographs provided by the applicant.
Mapped Beard vegetation association 946 is described as medium woodland; wandoo (Shepherd et al., 2001).		To  Good; Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).	

### 3. Assessment of application against clearing principles

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

##### Comments

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

The application is to clear 0.56 hectares of native vegetation within Bejoording Road reserve (PIN: 11752886 and PIN: 11535363) Nunile, for the purpose of road widening. The applicant proposes to widen the road reserve by approximately two metres, the majority of clearing will occur within the west side of the road reserve.

The vegetation under application is predominately in a degraded (Keighery 1994) condition consisting of *Eucalyptus salmonophloia* (Salmon Gum), *Eucalyptus loxophleba* (York Gum), *Acacia acuminata* (jam tree), wandoo and sheoak (Shire of Goomalling 2015).

Eight priority flora species have been recorded within the local area (10 kilometre radius). Of these, five are listed as Priority 4 flora species and one is listed as a Priority 3 flora species. Priority 3 species are known from several locations, and do not appear to be under imminent threat, and Priority 4 species are considered to have been adequately surveyed, and are considered not currently threatened or in need of special protection, but could be if present circumstances change.

One Priority 1 flora species has been recorded approximately 3.1 kilometres from the application area. This species is known from a variety of vegetation communities but is often found associated with sand or sandy loam soils (Parks and Wildlife 2015). A Priority 2 flora species has been recorded approximately 1.1 kilometres from the application area, this species preferred habitat is Wandoo woodlands (Parks and Wildlife 2015). Suitable habitat for this species may be present within the application area. However, given the degraded to good (Keighery 1994) condition and lack of understorey present within the application area, the proposed clearing is not likely to have a significant impact on the conservation status of priority flora species. Suitable habitat in a better condition is located within the adjacent Wongamine Nature Reserve.

Three fauna species listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 have been recorded within the local area (10 kilometre radius) being: Carnaby's cockatoo (*Calyptorhynchus latirostris*), chuditch (*Dasyurus geoffroii*) and shield-backed trapdoor spider (*Idiosoma nigrum*) (Parks and Wildlife, 2007-). The application area falls within Carnaby's cockatoo breeding range, and contains eucalyptus species of a size and age that may contain potential breeding hollows, however a habitat tree assessment undertaken by the Shire of Goomalling (2015) did not identify any breeding hollows suitable for Carnaby's cockatoo. Given the soil type present and the lack of native understorey it is unlikely the application area supports suitable habitat for the shield-backed trapdoor spider and chuditch.

The application area is narrow and linear in shape, is in a degraded (Keighery 1994) condition lacking understorey and is not likely to contain significant habitat for fauna, priority flora or rare flora. Therefore the application area is not likely to comprise a high biological diversity.

The proposed clearing is not likely to be at variance to this principle.

##### Methodology

##### References:

Keighery (1994)  
Parks and Wildlife (2007-)  
Parks and Wildlife (2015)  
Shire of Goomalling (2015)

##### GIS Databases:

Sac Bio Datasets - accessed May 2016

#### (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

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

Three fauna species listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 have been recorded within the local area (10 kilometre radius) being: Carnaby's cockatoo (*Calyptorhynchus latirostris*), chuditch (*Dasyurus geoffroii*) and shield-backed trapdoor spider (*Idiosoma nigrum*) (Parks and Wildlife, 2007-).

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) referral guidelines (SEWPaC 2012) defines breeding habitat for black cockatoos as trees of species known to support breeding within the range of the species which either have a suitable nest hollow or are of suitable diameter at breast height (DBH) to develop a nest hollow. For most trees, suitable DBH is 500 millimetres. For wandoo, suitable DBH is 300 millimetres.

Carnaby's cockatoo was once abundant in Western Australia. Since the late 1940s the species has suffered a 30 per cent contraction in range, a 50 per cent decline in population, and between 1968 and 1990 disappeared from more than a third of its breeding range (Saunders and Ingram, 1998, Garnett et al., 2011).

The Carnaby's cockatoo recovery plan states "In 1998, Saunders and Ingram considered that there were sufficient hollow-bearing eucalypts for Carnaby's cockatoos in the Wheatbelt, however the senescence and loss of ageing hollows, and competition for hollows is likely to be an issue for the conservation of the species. One of the indirect effects of broad-scale clearing for agriculture in the south-west of Western Australia is that there is a lack of recruitment of nesting trees. As a consequence there may be a shortage of suitable nesting hollows in some areas in the future, regardless of whether there is sufficient suitable foraging habitat present within close proximity to those breeding sites" (Parks and Wildlife, 2013).

A habitat tree assessment undertaken by the Shire of Goomalling (2015) identified 10 habitat trees proposed to be cleared, of these one tree contained a hollow. The hollow identified did not appear to be suitable for breeding by the Carnaby's cockatoo.

A fauna survey undertaken within Bejoording Road reserve adjacent to the application area noted that there appeared to be very little foraging resources available other than some Hakea and the Eucalyptus fruits. In addition, no evidence of black cockatoos including sighting, calls, feathers, chewed nuts, bark, branches or other objects were identified. It was concluded that the Carnaby's cockatoo did not utilise the area surrounding the application area and had not been historically seen passing through. It was noted that the absence of adequate foraging species and possibly the high number of competitor avian species resulted in the absence of Carnaby's cockatoo from the locality (Nexus ENV 2016).

Shield-backed trapdoor spider (*Idiosoma nigrum*) is listed as vulnerable under the EPBC Act and rare or likely to become extinct under the WC Act. The shield-backed trapdoor spider Conservation Plan 2008 - 2013 (Avon Catchment Council 2007) defines critical habitat for this species as open York gum (*Eucalyptus loxophleba*), Salmon gum (*E. salmonophloia*) and wheatbelt wandoo (*E. capillosa*) woodland, where jam (*Acacia acuminata*) trees forms a sparse understorey in heavy clay soils. The soil type within the application area consists of gneissic rock outcrops and chief soils are hard neutral red (Northcote et al, 1960-68), and not heavy clay soils. The proposed clearing is unlikely to impact on the shield-backed trapdoor spider.

The application area is in a degraded to good (Keighery 1994) condition and lacks native understorey. Given this and the narrow, linear shape of the application area it is unlikely to contain significant habitat for chuditch.

The application area contains vegetation that may provide potential breeding habitat for the Carnaby's cockatoo in future, however no suitable breeding habitat is currently proposed to be cleared. Suitable vegetation in better condition is likely to be located within the adjacent Wongamine Nature Reserve.

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

**Methodology** References:  
Avon Catchment Council (2007)  
Garnett et al., (2011)  
Keighery (1994)  
Nexus (ENV 2016)  
Parks and Wildlife (2007-)  
Parks and Wildlife (2013)  
Saunders and Ingram (1998)  
SEWPaC (2012)  
Shire of Goomalling (2015)

GIS Databases:  
Sac Bio Datasets - accessed May 2016

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

**Comments** **Proposed clearing is not likely to be at variance to this Principle**  
There are no records of rare flora recorded within 10 kilometres of the application area.

Given the above the clearing as proposed is not likely to be at variance to this principle.

**Methodology** GIS Datasets:  
Sac Bio Datasets - accessed May 2016

**(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** **Proposed clearing is not likely to be at variance to this Principle**  
No threatened ecological communities (TECs) have been recorded within the application area.

The Western Australian Wheatbelt Woodlands listed as critically endangered TEC under the EPBC Act is known within the Wheatbelt region and the Shire of Goomalling. The Western Australian Wheatbelt Woodlands are found on the flatter landscapes and lower rises of the Wheatbelt. This TEC consists of eucalypts with a single trunk, a tree canopy of at least 10 per cent canopy cover and a native understorey. WA Wheatbelt Woodlands do not include vegetation within a sparse tree cover, under 10 per cent, paddock trees, small or

narrow tree lines and shelterbelts or other low condition patches (TSSC 2015).

The area under application are narrow and linear, in a degraded to good (Keighery 1994) condition, with little native understorey present. Therefore the vegetation under application is not likely to comprise or be necessary for the maintenance of the abovementioned TEC.

The clearing as proposed is not likely to be at variance to this principle.

**Methodology** References:  
Keighery (1994)  
TSSC (2015)

GIS Databases  
SAC Bio Datasets – accessed December 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 Proposed clearing is not likely to be at variance to this Principle**

Aerial imagery indicates the local area (10 kilometre radius) is approximately 10 per cent vegetated. The Interim Biogeographic Regionalisation for Australia's Bioregion (Avon Wheatbelt) and the local government authority area (Shire of Toodyay) retains approximately 18 per cent and 50 per cent of their respective pre-European vegetation extents (Government of Western Australia 2014).

The application area is mapped as Beard vegetation associations 352 and 946 which retain approximately 17 per cent and 19 per cent of their pre-European vegetation extent within the Avon Wheatbelt IBRA Bioregion respectively.

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).

The application falls within a highly cleared landscape with approximately 10 per cent of vegetation remaining within 10 kilometres of the applied area. However, the application area is not likely to comprise a high biological diversity, impact on significant fauna habitat, ecological linkages or rare or priority flora. Therefore the application is not likely to represent a significant remnant of vegetation.

The proposed clearing is not likely to be at variance to this principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed Lands (%)
<b>IBRA Bioregion*</b>				
Avon Wheatbelt	9,517,110	1,765,881	18	10
<b>Shire*</b>				
Shire of Toodyay	169,176	85,381	50	46
<b>Beard Vegetation Association in Bioregion*</b>				
946	43,309	8,426	19	9
352	630,582	109,441	17	9

**Methodology** References:  
Commonwealth of Australia (2001)  
\*Government of Western Australia (2014)

GIS Datasets:  
Pre-European 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.**

**Comments**      **Proposed clearing is at variance to this Principle**  
One minor, non-perennial watercourse intersects the application area. Several other minor, non-perennial watercourses have been mapped within close proximity to the application area. These watercourses are likely to be seasonally inundated with water during the winter months. The proposed clearing is likely to impact on vegetation within the mapped watercourse, however any impacts to the watercourse are likely to be minor and managed during road construction.

Given the above, the proposed is at variance to this 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**      **Proposed clearing is not likely to be at variance to this Principle**  
The application is mapped as soil type Qb29 which is described as rolling to hilly with some steep slopes; gneissic rock outcrops common. Chief soils are hard neutral red soils (Northcote et al., 1960-68).

Increased water erosion due to the proposed clearing is likely to be minimal given that the one watercourse intersected is minor and non-perennial, annual local rainfall is low (500 millimetres), the landscape is gently undulating and the vegetation proposed to be cleared is in a degraded to good (Keighery, 1994) condition.

The proposed clearing is unlikely to cause wind erosion given the linear nature of the application area.

Groundwater is highly saline, mapped at 14000-35000 total dissolved solids (milligrams per litres). Considering the relatively small amount of clearing over a linear distance of 1.4 kilometres it is not likely to contribute to the rise of groundwater causing land degradation due to increased salinity at the surface.

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

**Methodology**    References:  
Keighery (1994)  
Northcote, et al. (1960-68)

GIS Datasets:  
Groundwater Salinity Statewide

**(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**      **Proposed clearing may be at variance to this Principle**  
The application area is located adjacent to Wongamine Nature Reserve. The proposed clearing may indirectly impact this adjacent conservation area through the spread of weeds. Weed management practices will help mitigate this risk.

Given the linear, narrow nature of the application area and that the majority of the proposed clearing is to occur within the west side of the road reserve, no ecological linkages or fauna corridors are expected to be impacted.

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

**Methodology**    References:  
Keighery (1994)

GIS Datasets:  
Parks and Wildlife 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**      **Proposed clearing is not likely to be at variance to this Principle**  
Groundwater salinity within the application area has been mapped as highly saline at 14000-35000 total dissolved solids (milligrams per litres). The proposed clearing is not expected to significantly change salinity levels given its relatively small size and the degraded to good (Keighery 1994) condition of the vegetation.

The proposed clearing may cause increased runoff and sedimentation into the watercourse that intersects the application area. However, impacts are likely to be short term and minimal, and given the purpose of clearing is for road widening there are likely to be culverts already in place to manage surface water flow.



The proposed clearing is not likely to be at variance to this principle.

**Methodology**   References:  
Keighery (1994)

GIS Datasets:  
Groundwater Salinity Statewide  
Hydrography linear  
Topographic contours

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

**Comments**    **Proposed clearing to this Principle**  
The proposed clearing is not expected to cause flooding given the gentle undulation of the application area and the surrounding area as well as the relatively small size and linear nature of the application area.

Therefore the proposed clearing is not likely to be at variance to this principle.

**Methodology**   GIS Datasets:  
Hydrography linear  
Topographic contours

**Planning instruments and other relevant matters.**

**Comments**    The application area is located within the Avon River Surface Water Area, proclaimed under the Rights in Water and Irrigation Act 1914, where there may be a requirement to obtain a permit to interfere with the bed and banks of a watercourse. The proponent is advised to liaise with the Department of Water to determine if approvals are required.

No registered Aboriginal Sites of Significance occur within the application area.

No public submissions have been received.

**Methodology**   GIS Databases:  
Aboriginal Sites Register  
RIWI Surface Water Areas

**4. References**

- Avon Catchment Council (2007) Shield - backed Trapdoor Spider (*Idiosoma nigrum*) Conservation Plan. Avon Catchment Council, Western Australia.
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) (2012) EPBC Act Referral guidelines for three threatened black cockatoo species: Carnaby's cockatoo (endangered) *Calyptorhynchus latirostris*, Baudin's cockatoo (vulnerable) *Calyptorhynchus baudinii*, Forest red-tailed black cockatoo (vulnerable) *Calyptorhynchus banksii naso*.
- Garnett, S., Szabo, J. and Dutton, G. (2011) The Action Plan for Australian Birds 2010. CSIRO Publishing, Melbourne, Victoria.
- Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. 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
- Nexus ENV (2016) Bejoording Road Fauna Report Goomalling – Carnaby's cockatoo assessment. Western Australia. DER Ref: A1044924
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Parks and Wildlife (2007- ) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>.
- Parks and Wildlife (2013) Carnaby's cockatoo (*Calyptorhynchus latirostris*) Recovery Plan. Department of Parks and Wildlife, Perth, Western Australia.
- Parks and Wildlife (2015) Regional advice received Perth Hills in relation to Clearing Permit Application CPS 6717/1 (DER Ref:A1015649).
- 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.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.
- Shire of Goomalling (2015) Bejoording Road – Record Photos of Verge Vegetation Assessment for Clearing Permit – SLK 1.25 to 2.85. Western Australia. DER Ref: A1072053
- TSSC (2015) Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) Approved Conservation Advice (including listing advice) for the Eucalypt Woodlands of the Western Australian Wheatbelt. Threatened Species Scientific Committee. 2015

