



## CLEARING PERMIT

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

<b>Purpose Permit number:</b>	CPS 7760/1
<b>Permit Holder:</b>	City of Wanneroo
<b>Duration of Permit</b>	20 January 2018 to 20 January 2023

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 construction or upgrades.

**2. Land on which clearing is to be done**

Old Yanchep Road reserve (PIN 1262254), Carabooda; and  
Old Yanchep Road reserve (PIN 1262268), Yanchep.

**3. Area of Clearing**

The Permit Holder must not clear more than 0.22 hectares of native vegetation within the area cross-hatched yellow on attached Plan 7760/1.

**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. Dieback and weed control**

(a) 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* and *dieback*:

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

## DEFINITIONS

The following meanings are given to terms used in this Permit:

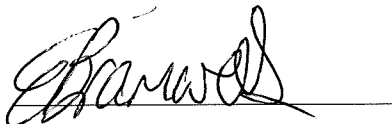
*dieback* means the effect of *Phytophthora* species on native vegetation;

*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;

*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 Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

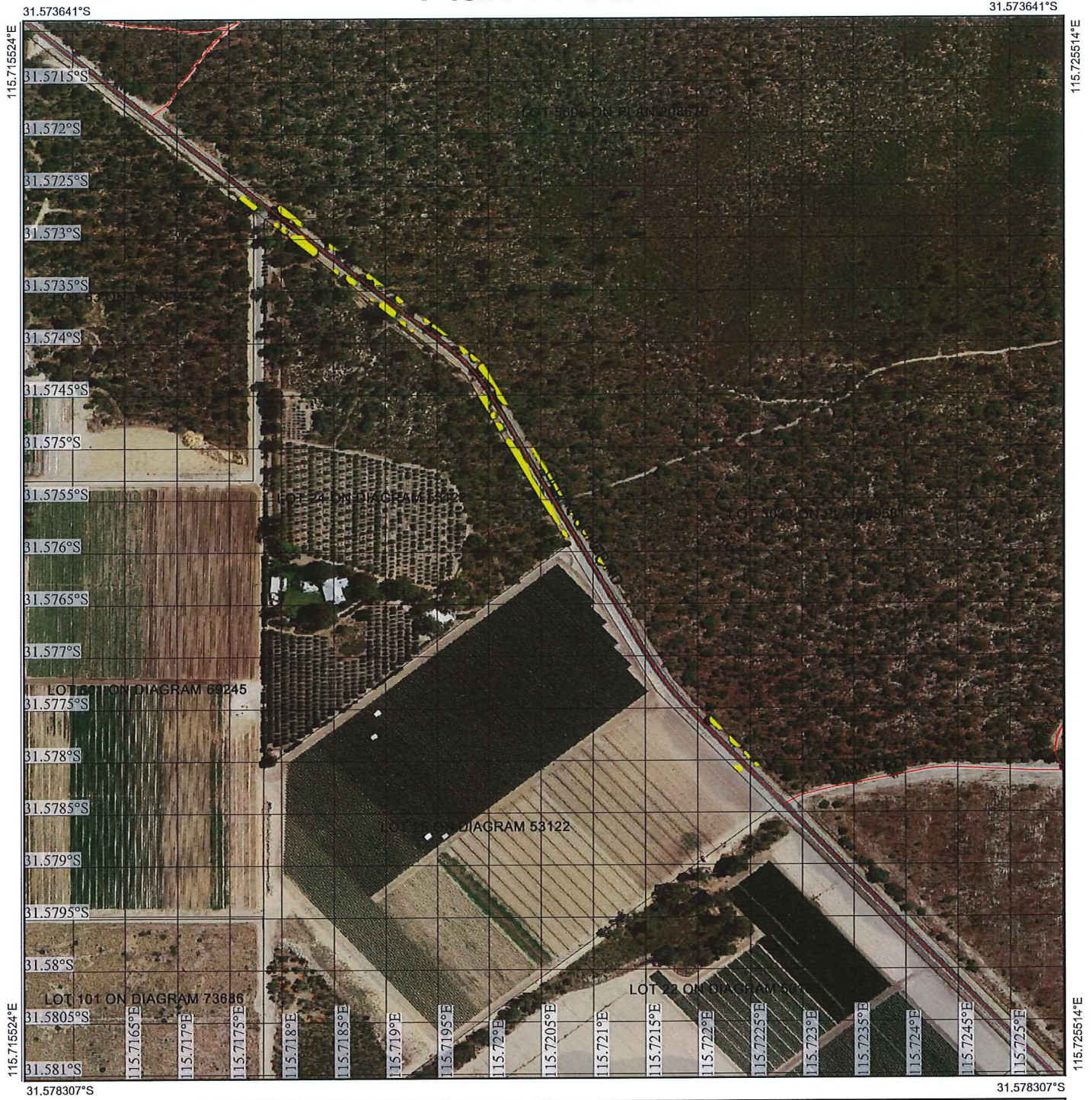


Emma Bramwell  
A/ MANAGER  
CLEARING REGULATION




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

19 December 2017

# Plan 7760/1



## Legend

-  Roads
-  Imagery
-  Clearing Instruments Activities



1:5,023  
 (Approximate when reproduced at A4)  
 GDA 94 (Lat/Long)  
 Geocentric Datum of Australia 1994

*E. Branwell* Date 19/12/17  
**E BRANWELL**

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



## 1. Application details

### 1.1. Permit application details

Permit application No.: 7760/1  
Permit type: Purpose Permit

### 1.2. Applicant details

Applicant's name: City of Wanneroo  
Application received date: 8 September 2017

### 1.3. Property details

Property: Road Reserve - 1262254, Carabooda  
Road Reserve - 1262268, Yanchep  
Local Government Authority: Wanneroo, City Of  
Localities: Carabooda

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
0.22		Mechanical Removal	Road construction or upgrades

### 1.5. Decision on application

Decision on Permit Application: Granted  
Decision Date: 19 December 2017

Reasons for Decision: The clearing permit application was received on 31 August 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* (EP Act). It has been concluded that the proposed clearing may be at variance to clearing principle (h) and is not likely to be at variance to the other clearing principles.

The Delegated Officer determined that the proposed clearing may impact on the environmental values of adjacent vegetation. The Delegated Officer had regard to the purpose of the proposed clearing in the decision to grant a clearing permit. The clearing permit contains a condition requiring the permit holder to implement weed and dieback management measures to assist in managing potential impacts to adjacent vegetation.

## 2. Site Information

**Clearing Description:** The application is for the clearing of 0.22 hectares of native vegetation within the Old Yanchep Road reserve (PINs 1262268 and -1262254), Yanchep, to facilitate road widening activities to ensure compliance with the Austroads Standards 'clear zone' of six metres from the existing road.

**Vegetation Description:** The application area is mapped as Heddle vegetation complex 'Cottesloe Complex – Central and South', described as mosaic of woodland of *Eucalyptus gomphocephala* (tuart) and open forest of tuart – *Eucalyptus marginata* (jarrah) – *Corymbia calophylla* (marri); closed heath on the limestone outcrops (Heddle et al 1980).

An environmental assessment undertaken by the applicant ( hereafter referred to as 'applicant's environmental assessment') found that the understorey vegetation in the application area is dominated by weed species, with a native tree and shrub layer comprised of the following dominant species:

- tuart;
- jarrah;
- *Acacia pulchella* (prickly Moses);
- *Acacia saligna* (orange wattle);
- *Allocasuarina fraseriana* (sheoak);
- *Banksia grandis* (bull banksia);
- *Banksia ilicifolia* (holly-leaved banksia);
- *Banksia menziesii* (firewood banksia);
- *Banksia sessilis* (parrot bush);
- *Hakea prostrata* (harsh hakea); and
- *Xanthorrhoea preissii* (grasstree) (City of Wanneroo 2017).

**Vegetation Condition:** 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 within the application area was determined from applicant's environmental assessment, which found that the vegetation within three metres of the existing road is in degraded (Keighery 1994) condition, and the vegetation three to six metres from the existing road is in good to degraded (Keighery 1994) condition (City of Wanneroo 2017).

- Soil/Landform Type:** The application area is mapped as three land systems by the Department of Primary Industry and Regional Development:
- 211Sp\_\_Sp Spearwood Sand Phase, described as Irregular banks of karst depressions; some limestone outcrop; shallow brown sands;
  - 211Sp\_\_Kls Karrakatta Sand Phase, described as low hills and ridges; bare limestone or shallow siliceous or calcareous sand over limestone; and
  - 211Sp\_\_Ky Karrakatta Yellow Sand Phase, described as low hilly to gently undulating terrain; yellow sand over limestone at 1-2 metres (Department of Primary Industry and Regional Development 2017).

**Comment:** The local area referred to in the below assessment is defined as the area within a 10 kilometre radius of the application area.

Figure 1: Map of application area.



### 3. 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

As indicated in Figure 1, the application area is comprised of disjoint pockets of native vegetation on either side of the existing Old Yanchep Road.

As discussed in Section 2, the vegetation within the application area is in good to degraded (Keighery 1994) condition and consists of native trees and shrubs over an understorey dominated by weed species (City of Wanneroo 2017). As discussed under Principle (e), the local area retains approximately 45 per cent (approximately 13,365 hectares) native vegetation cover.

As discussed under Principle (h), the application area is adjacent to Gngangara-Moore River State Forest (Bush Forever Site 381) on the northern side of Old Yanchep Road, and is in close proximity to Yanchep National Park. The application area is also adjacent to remnant bushland on privately-owned land on the southern side of Old Yanchep Road. Noting the extent of the proposed clearing and the condition of the vegetation within the application area, the application area is not likely to function as an ecological linkage between, or as a buffer to, remnants of native vegetation in the local area.

Four fauna species of conservation significance may utilise the habitat within the application area. Noting the vegetation type within the application area, the extent of the proposed clearing and the condition of the vegetation within the application area, the proposed clearing is not likely to significantly impact on these species. Habitat for indigenous fauna is discussed further under Principle (b).

No rare flora or priority flora species have been recorded within the application area. According to available datasets, 25 priority flora and two priority fungi species occur within the local area (10 kilometre radius) (Department of Biodiversity, Conservation and Attractions, 2007-). The majority of these species are associated with habitats that do not occur within the application area, including limestone ridges, breakaways and outcrops and sand dunes, coastal dunes and hillsides, and/or coastal environments. Some of these species were recorded from soil and vegetation types similar to those found within in the application area. Noting the extent of the proposed clearing and the condition of the vegetation within the application area, the application area is not likely to support these species and the proposed clearing is not likely to impact the conservation status of these species. Rare flora are discussed further under Principle (c).

No threatened ecological communities (TEC) or priority ecological communities (PEC) have been recorded within the application area. According to available datasets, two PECs occur within the local area (10 kilometre radius) (Department of Biodiversity, Conservation and Attractions, 2007-). These are the 'Banksia dominated woodlands of the Swan Coastal Plains IBRA region' priority 3 PEC mapped approximately 112 metres from the application area in the adjacent Bush Forever Site 381 / Gngangara-Moore River State Forest, and 'Northern Spearwood shrublands and woodlands (community type 24)' priority 3 PEC. Noting the mapped soil and vegetation types within the application area, the extent of the proposed clearing and the condition of the vegetation within the application area, the application area is not likely to be representative of these PECs. TECs are discussed further under Principle (d).

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

GIS Datasets:  
SAC Biodatasets (accessed November 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 is not likely to be at variance to this Principle

As discussed in Section 2, the application area is mapped as a mosaic of woodland of *Eucalyptus gomphocephala* (tuart) and open forest of tuart – *Eucalyptus marginata* (jarrah) – *Corymbia calophylla* (marri); closed heath on the limestone outcrops (Heddle et al 1980). The vegetation within the application area is in good to degraded (Keighery 1994) condition and consists of native trees and shrubs over an understorey dominated by weed species (City of Wanneroo 2017).

As discussed under Principle (a), the application area is not likely to function as an ecological linkage between, or as a buffer to, remnants of native vegetation in the local area.

According to available datasets, five threatened and five priority-listed terrestrial fauna species have been recorded within the local area (10 kilometre radius) (Department of Biodiversity, Conservation and Attractions, 2007-). Of these, the threatened species *Calyptorhynchus latirostris* (Carnaby's cockatoo), priority species *Neelaps calonotos* (black-striped borrowing snake, P3), *Tyto novaehollandiae* subsp. *novaehollandiae* (masked owl (southwest), P3), and *Isodon obesulus* subsp. *fusciventer* (quenda, southern brown bandicoot, P4), have been recorded from similar habitats as found within the application area.

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 various *Eucalyptus* and *Corymbia* species, including tuart and jarrah. The application area is within the mapped breeding range of Carnaby's cockatoos. The applicant's environmental assessment noted that an inspection of *Eucalyptus* species trees within the application area by an arborist (Paperbark Technologies) identified one tree that contained hollows of approximately 40 millimetres in diameter, seventeen mature trees in fair health or semi-mature and did not contain hollows suitable for nesting birds, and one dead tree was identified, with no suitable hollows evident from ground level (City of Wanneroo 2017). Noting this, the application area is unlikely to contain suitable breeding habitat for black cockatoos.

Black cockatoos have a preference for foraging habitat that includes jarrah and marri woodlands and forest heathland and woodland dominated by proteaceous plant species such as *Banksia* sp., *Hakea* sp. and *Grevillea* sp. (Commonwealth of Australia, 2012). Noting the presence of *Banksia* and *Hakea* species within the application area (City of Wanneroo 2017), the application area is likely to provide foraging habitat for black cockatoo species. Noting the presence of vegetation in similar or better condition adjacent to the application area (within Bush Forever Site 381/Gnangara-Moore River State Forest), it is considered that the application area is unlikely to comprise significant habitat for black cockatoos.

The black-striped burrowing snake is known to occur on coastal and inland sand plains, dunes, heath environments, alluvial areas and *Banksia* woodlands (Pearson 2013). The masked owl is a highly mobile species. The quenda has a preference for dense scrubby, often swampy, vegetation with dense cover of up to one metre high, and often forages in areas of pasture and croplands that lie close to dense cover (Parks and Wildlife, 2012). Noting that the application area includes vegetation in good (Keighery 1994) condition, the application area may contain suitable habitat for these species. Noting the presence of vegetation in similar or better condition adjacent to the application area (Gnangara-Moore River State Forest), it is considered that the application area is unlikely to comprise significant habitat for these species.

Noting the vegetation types within the application area, the extent of the proposed clearing and the condition of the vegetation within the application area, the application area is not likely to comprise significant habitat for indigenous fauna, including species of conservation significance.

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

GIS Datasets:  
SAC Biodatasets (accessed November 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 datasets, one rare flora species *Eucalyptus argutifolia* (Wabbling Hill mallee) occurs within the local area (10 kilometre radius) (Department of Biodiversity, Conservation and Attractions, 2007-).

The nearest record of this species is approximately 7.2 kilometres from the application area. This species is associated with shallow soils over limestone ridges and outcrops (Western Australian Herbarium, 1998-). Noting the mapped soil and vegetation types within the application area, the extent of the proposed clearing and the condition of the vegetation within the application area, suitable habitat for this species is not likely to be present in the application area, and the application area is not likely 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.

GIS Datasets:  
SAC Biodatasets (accessed November 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 datasets, two threatened ecological communities (TEC) occur within the local area (10 kilometre radius) (Department of Biodiversity, Conservation and Attractions, 2007-).

The application area is situated approximately 1.5 kilometres east of an occurrence of the 'Aquatic root mat Community Number 1 of Caves of the Swan Coastal Plain' critically endangered TEC, and 1.6 kilometres southwest of an occurrence of the '*Melaleuca huegellii* - *Melaleuca systena* shrublands on limestone ridges (Gibson et al. 1994 type 26a)' endangered TEC. According to aerial imagery, the TECs are separated from the application area by private land holdings and remnant bushland.

As discussed in Section 2, the vegetation within the application area is in good to degraded (Keighery 1994) condition and consists of native trees and shrubs over an understorey dominated by weed species. Noting the mapped soil and vegetation types within the application area, the extent of the proposed clearing and the condition of the vegetation within the application area, the application area is not likely to comprise the whole or part of, or be necessary for the maintenance of, a TEC.

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

GIS Datasets:  
SAC Biodatasets (accessed November 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 not likely to be at variance to this Principle**

The national objectives and targets for biodiversity conservation in Australia have 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).

As indicated in Table 1, the Swan Coastal Plain Interim Biogeographic Regionalisation of Australia (IBRA) bioregion, the City of Wanneroo and the mapped vegetation complex all retain greater than 30 per cent of their pre-European extents. The local area retains approximately 45 per cent (approximately 13,365 hectares) native vegetation cover. The application area represents less than 0.02 per cent of this current extent.

As discussed in Section 2, the vegetation within the application area is in good to degraded (Keighery 1994) condition and consists of native trees and shrubs over an understorey dominated by weed species. As discussed under Principles (a), (b), (c) and (d), the application area is not likely to comprise a high level of biodiversity or significant habitat for indigenous fauna, and is not likely to include or comprise or be necessary for the continued existence or maintenance of rare flora or TECs.

Given the above, the application area is not likely to be significant as a remnant of native vegetation in an area that has been extensively cleared. The proposed clearing is not likely to be at variance to this clearing principle.

**Table 1: Vegetation extents**

	Pre-European extent	Current extent remaining		Current extent remaining in DBCA managed lands	
	(ha)	(ha)	(%)	(ha)	Proportion of current extent (%)
<b>IBRA bioregion*</b>					
Swan Coastal Plain	1,501,221	578,432	38.5	218,946	37.8
<b>Local government authority*</b>					
City of Wanneroo	67,516	29,805	44.2	15,998	53.7
<b>Heddlie vegetation complex**</b>					
Cottesloe Complex – Central and South	45,299	14,664	32.4	6,197	13.7

GIS Datasets:  
GNLWRA, 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 is not likely to be at variance to this Principle**

According to available datasets, the closest wetland to the application area is a minor swamp situated approximately 1.5 kilometres west south-west of the application area. This wetland is separated from the application area by private land holdings and remnant bushland. No watercourses occur within the vicinity of the application area.

Noting the vegetation type present within the application area, the proposed clearing is not likely to impact on native vegetation growing in association with a wetland or watercourse.

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

GIS Datasets:  
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**

As discussed in Section 2, the application area is mapped as the Spearwood Sand Phase, Karrakatta Sand Phase and Karrakatta Yellow Sand Phase land systems (Department of Primary Industry and Regional Development 2017).

These land systems have a moderate to high risk of wind erosion, moderate risk of salinity, low to moderate risk of water erosion, water repellence, subsurface compaction and subsurface acidification, and low risk of waterlogging and flooding (Department of Primary Industry and Regional Development 2017).

Noting the extent of the proposed clearing and the location of the application area adjacent to an existing road, it is unlikely that the proposed clearing will cause appreciable land degradation.

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

GIS Datasets:  
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 may be at variance to this Principle**

The application area is adjacent to the Gngangara-Moore River State Forest (Bush Forever Site 381) on the northern side of Old Yanchep Road, and to an area of remnant bushland (subject to an instrument under the *Soil and Land Conservation Act 1945*) on privately-owned land on the southern side of Old Yanchep Road. The application area is approximately 1.25 kilometres south-east of the Yanchep National Park, which is contiguous with Gngangara-Moore River State Forest.

As discussed under Principle (a), the application area is not likely to function as an ecological linkage between, or as a buffer to, remnants of native vegetation in the local area.

The proposed clearing may impact on the environmental values of adjacent native vegetation within the Gngangara-Moore River State Forest and privately-owned land through increased edge effects, and the introduction and spread of weeds and dieback. Weed and dieback management practices will assist in managing these impacts.

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

GIS Datasets:  
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 nearest wetland is approximately 1.5 kilometres from the application area, and no watercourses occur within the vicinity of the application area.

As discussed under Principle (g), the application area is mapped as three land systems comprising sandy soils which have a moderate risk of salinity, low to moderate risk of water erosion, water repellence, subsurface compaction and subsurface acidification, and low risk of waterlogging.

It is considered that the proposed clearing is not likely to result in a substantial increase in the sediment load or turbidity of surface water flows during significant rainfall events. Noting the extent of the proposed clearing and the location of the application area adjacent to an existing road, it is unlikely that the proposed clearing will cause deterioration in the quality of surface or 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**

As discussed under Principle (g), the application area is mapped as three land systems comprising sandy soils which have a low risk of flooding.

It is considered that the proposed clearing is not likely to result in a substantial increase in local surface water flows during rainfall events. Noting the extent of the proposed clearing and the location of the application area adjacent to an existing road, it is unlikely that the proposed clearing will cause or exacerbate the incidence or intensity of 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 applicant advised that 'Blackspot' funding has been received from the Australian Federal Government to undertake the proposed works. Blackspot funding targets road locations to reduce the risk of vehicle accidents in the public interest.

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

The clearing permit application was advertised on the Department of Water and Environmental Regulation website on 11 October 2017 with a 14 day submission period. No public submissions have been received in relation to this application.

GIS Databases:  
Aboriginal Sites of Significance  
CPS 7760/1, 19 December 2017

#### 4. References

- City of Wanneroo (2017) Environmental Assessment for Native Vegetation Clearing – Purpose Permit. Proposed Road Widening Old Yanchep Road – Cutler Road to Yanchep National Park, Nowergup. City of Wanneroo
- 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 (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed 20-24/11/2017.
- Department of Parks and Wildlife (2012) Quenda *Isoodon obesulus* (Shaw, 1797). Department of Environment and Conservation, Perth, Western Australia.
- Department of Primary Industry and Regional Development (2017). NRInfo Digital Mapping. Department of Primary Industry and Regional Development. Government of Western Australia. URL: <https://maps.agric.wa.gov.au/nrm-info/> (accessed November 2017).
- \*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.
- \*\*Government of Western Australia. (2017). 2016 South West Vegetation Complex Statistics. Current as of December 2016. WA Department of Parks and Wildlife, Perth
- Hedde, E.M., Loneragan, O.W., and Havel, J.J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- Keighery, B.J. (1994). Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Pearson, D. (2013) Snakes of Western Australia; What Snake is That? Published by the Department of Parks and Wildlife Western Australia.
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Biodiversity Conservation and Attractions. <http://florabase.dpaw.wa.gov.au/> (Accessed 22 - 27/11/2017).