



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 7618/1
Permit Holder:	Shire of Manjimup
Duration of Permit:	9 December 2017 to 9 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 widening and upgrades.

2. Land on which clearing is to be done

North Walpole Road reserve (PINs: 11436715 and 11561544), Walpole

3. Area of Clearing

The Permit Holder must not clear more than 1.9 hectares of native vegetation within the area cross-hatched yellow on attached Plan 7618/1.

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. Wetland management

This Permit does not authorise the Permit Holder to clear native vegetation between 1 May and 30 September of any given year.

7. 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:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

8. Dieback and weed control

When undertaking any clearing 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*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *dieback* or *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.

9. Fauna management

- (a) Prior to undertaking any clearing authorised under this Permit, the area(s) shall be inspected by a *fauna specialist* who shall identify *habitat tree(s)* suitable to be utilised for nesting by Carnaby's cockatoo (*Calyptorhynchus latirostris*), forest red-tailed black cockatoo (*Calyptorhynchus banksii subsp. naso*) or Baudin's cockatoo (*Calyptorhynchus baudinii*).
- (b) Prior to clearing, any *habitat tree(s)* identified under condition 9(a) shall be inspected by a *fauna specialist* for the presence of fauna listed in condition 9(a).
- (c) Where fauna are identified under condition 9(b) of this Permit, the Permit Holder shall ensure that no clearing of, or within 10 metres of, the identified *habitat tree(s)* occurs, unless approved by the CEO.

PART III – RECORD KEEPING AND REPORTING

10. Records to be kept

The Permit Holder must maintain the following records for activities done pursuant to the clearing of native vegetation authorised under this Permit:

- (a) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
- (b) the date that the area was cleared; and
- (c) the size of the area cleared (in hectares).

11. Reporting

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
 - (i) of records required under condition 10 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.
- (c) Prior to 9 September 2022, the Permit Holder must provide to the CEO a written report of records required under condition 10 of this Permit where these records have not already been provided under condition 11(a) of this Permit.

DEFINITIONS

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

CEO means the Chief Executive Officer of the Department of Environment Regulation;

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

fauna specialist means a person with training and specific work experience in fauna identification or faunal assemblage surveys of Western Australian fauna;

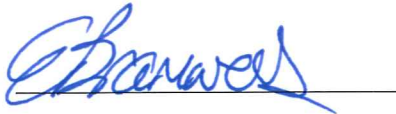
fill means material used to increase the ground level, or fill a hollow;

habitat tree(s) means trees that have a diameter, measured at 1.5m above the ground, of 50cm or greater, that contain one or more hollows;

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*

8 November 2017

Plan 7618/1



Legend

-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority



1:16,428

(Approximate when reproduced at A4)
GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

Channah
E BRAMWELL Date *08/11/17*

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



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1. Application details

1.1. Permit application details

Permit application No.: 7618/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Shire of Manjimup

1.3. Property details

Property: ROAD RESERVE - 11436715, WALPOLE
ROAD RESERVE - 11561544, WALPOLE
Colloquial name: North Walpole Road reserve
Local Government Authority: MANJIMUP, SHIRE OF
DWER Region: South Coast
DBCA District: FRANKLAND
Localities: WALPOLE

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 8 November 2017

Reasons for Decision: The clearing permit application was received on 26 May 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 principle (f), may be at variance to principles (a), (b), (g), (h) and (i), and is not likely to be at variance to the remaining principles.

The Delegated Officer determined that the proposed clearing may cause degradation of adjacent wetlands. To minimise this impact, a condition has been placed on the permit limiting activities to drier months of the year by not allowing clearing to take place between 1 May and 30 September each year.

The Delegated Officer determined that the application area may contain significant habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*), forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*) and Baudin's cockatoo (*Calyptorhynchus baudinii*). To minimise this impact, a condition has been placed on the permit requiring the identification of black cockatoo nesting trees prior to clearing and CEO approval to clear within 10 metres of black cockatoo nesting trees.

The Delegated Officer determined that the proposed clearing may impact the environmental values of Walpole-Nornalup National Park through the possible introduction or spread of weeds and dieback. To minimise this impact, a condition has been placed on the permit requiring the implementation of weed and dieback management measures.

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

- Vegetation Description Three vegetation complexes have been mapped within the application area:
- Keystone complex: Mosaic of tall open forest of *Eucalyptus guilfoylei*-*Eucalyptus jacksonii*-*Eucalyptus diversicolor* on slopes of major hills rising above coastal plain with *Allocasuarina decussata*-*Banksia grandis*-*Agonis flexuosa* on slopes in hyperhumid and perhumid zones and tall open forest of *Eucalyptus brevistylis*-*Eucalyptus marginata* subsp. *marginata*-*Corymbia calophylla* and the occasional *Eucalyptus megacarpa* near rock outcrops in hyperhumid and perhumid zones;
 - Kordabup complex: Mosaic of low forest of *Agonis juniperina*, closed heath of *Myrtaceae*-*Proteaceae*-*Papilionaceae* spp. with occasional emergent *Melaleuca preissiana* and *Banksia littoralis* on broad swampy plains in hyperhumid and perhumid zones; and
 - Collis complex: Tall open forest of *Eucalyptus diversicolor*-*Corymbia calophylla* on crests of hills arising above the southern coastal plain in the hyperhumid zone (Mattiske and Havel, 1998).

Clearing Description	The applicant proposes to clear up to 1.9 hectares of native vegetation within North Walpole Road reserve (PINs 11436715 and 11561544), Walpole, for the purpose of road widening and upgrades.
Vegetation Condition	Excellent; Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994). To Degraded; Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).
Comment	Vegetation condition was determined during a site inspection conducted by officers from the Department of Water and Environmental Regulation (DWER) on 10 July 2017 (DWER site inspection) (DWER, 2017). The site inspection found the majority of vegetation within the application area to be in very good (Keighery, 1994) condition.

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 may be at variance to this Principle**

The applicant proposes to clear up to 1.9 hectares of native vegetation within North Walpole Road reserve (PINs 11436715 and 11561544), Walpole, for the purpose of road widening and upgrades. The local area for the purpose of this assessment is defined as a 10 kilometre radius measured from the perimeter of the application area.

Five rare flora species and twenty priority flora species have been recorded within the local area. The Department of Biodiversity, Conservation and Attractions (DBCA) advised that the application area is not likely to support significant habitat for conservation flora taxa (DBCA, 2017a). Rare flora is discussed in Principle (c).

Two priority ecological communities (PEC) have been recorded within the local area, being; Reedia Swamps and Coastal Saltmarsh. The DWER site inspection did not identify any *Reedia* or coastal saltmarsh species therefore the vegetation within the application area is not likely to be representative of either of these PECs.

As discussed in Principle (b), nine terrestrial fauna species listed as specially protected under the *Wildlife Conservation Act 1950* (WC Act) have been recorded within the local area, of which the application area may contain significant habitat for forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*), Baudin's cockatoo (*Calyptorhynchus baudinii*) and Carnaby's cockatoo (*Calyptorhynchus latirostris*).

As discussed in Principle (f), the application area is located within an area identified in the *Geomorphic Wetlands Augusta to Walpole* dataset as paluslope and palusplain.

As discussed in Principle (h), the application area is adjacent to the Walpole-Nornalup National Park. The proposed clearing may increase the risk of weeds and dieback being spread into this area.

The application area contains vegetation predominately in a very good (Keighery, 1994) condition, intersects two wetlands, is adjacent to a national park, and may contain significant habitat for indigenous fauna.

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

Methodology References:
DBCA (2017a)
Keighery (1994)

GIS Datasets:
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.

Comments **Proposed clearing may be at variance to this Principle**

Nine terrestrial fauna species listed as specially protected under the WC Act have been recorded within the local area (10 kilometre radius), being the woylie (*Bettongia penicillata* subsp. *ogilbyi*), forest red-tailed black cockatoo, Baudin's cockatoo, Carnaby's cockatoo, WA pill millipede (*Cynotelopus notabilis*), chuditch (*Dasyurus geoffroii*), western ground parrot (*Pezoporus flaviventris*), western ringtail possum (*Pseudocheirus occidentalis*) and quokka (*Setonix brachyurus*) (DBCA, 2007-).

Carnaby's cockatoo is listed as endangered and Baudin's cockatoo and forest red-tailed cockatoo are listed as vulnerable under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). 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 karri, marri, wandoo, tuart, salmon gum, jarrah, flooded gum, York gum, powder bark, bullich and blackbutt (Commonwealth of Australia, 2012).

The DWER site inspection identified four large karri trees in the southern portion of the application area that appeared to contain hollows suitable for use by black cockatoos (DWER, 2017).

The application area is adjacent to Walpole-Nornalup National Park which contains vegetation in similar or better condition compared to that within the application area. Given this, and noting the linear shape of the application area and its location adjacent to an existing road, the application area is not likely to contain significant habitat for the remaining fauna species, and is not likely to be significant as a wildlife corridor.

The application area may contain suitable breeding trees for black cockatoos and therefore the proposed clearing may be at variance to this Principle. The identification of suitable habitat trees prior to clearing will assist in minimising impacts to black cockatoos.

Methodology References:
Commonwealth of Australia (2012)
DBCA (2007-)
DWER (2017)

GIS Datasets:
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.

Comments **Proposed clearing is not likely to be at variance to this Principle**
Five rare flora species have been recorded within the local area (10 kilometre radius). Three of species grow in association with peaty soils and swamps. As discussed in Principle (f), the application area is located within paluslope and palusplain wetland areas

The DWER site inspection identified that the predominant soils within the application area were dark brown clay/loam and loamy soils (DWER, 2017). On this basis the three rare flora species are not likely to occur within the application area. DBCA advised that regional staff have recently visited and are familiar with the application area and do not believe the application area is likely to support significant habitat for conservation flora taxa (DBCA, 2017a).

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

Methodology References:
DBCA (2017a)
DWER (2017)

GIS Datasets:
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.

Comments **Proposed clearing is not likely to be at variance to this Principle**
No threatened ecological communities (TEC) have been recorded within the local area (10 kilometre radius). Therefore, the proposed clearing is not likely to be part of, or necessary for the maintenance of a TEC.

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

Methodology GIS Datasets:
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.

Comments **Proposed clearing is not likely to be at variance to this Principle**
Aerial imagery and available GIS datasets indicate that the local area retains approximately 67 per cent (approximately 20,000 hectares) of vegetation cover. The proposed clearing will reduce this extent by approximately 0.0095 per cent.

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). As indicated in Table 1 below, the mapped IBRA bioregion, Shire of Manjimup, and Mattiske vegetation complexes retain greater than the recommended 30 per cent representation threshold.

The application area may contain significant habitat of indigenous fauna and therefore may be significant remnant. However, the application area is not located within an area that has been extensively cleared and therefore the proposed clearing is not likely to be at variance to this Principle.

Table 1: Vegetation extent statistics

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	% Current extent in DBCA managed land (proportion of current extent)	% Pre-European extent remaining within DBCA managed land*
IBRA Bioregion*					
Warren	833,986	660,310	79	85	-
Local Government Authority*					
Shire of Manjimup	697,368	586,852	84	94	-
Mattiske Vegetation Complex ***					
Kb: Keystone	29,634	23,213	78	-	62
KO: Kordabup	2,972	1,272	43	-	17
COB: Collis	22,136	19,341	87	-	80

Methodology References:
Commonwealth of Australia (2001)
Government of Western Australia (2016)

GIS Databases
Pre-European vegetation
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.

Comments Proposed clearing is at variance to this Principle

One watercourse intersects the application area and water was observed within this watercourse during the site inspection (DWER, 2017).

The application area is located within an area identified in the *Geomorphic Wetlands Augusta to Walpole* dataset as paluslope (seasonally waterlogged slope) and palusplain (seasonally waterlogged flat). The paluslope and palusplain wetland areas within the application area are part of a larger wetland system that extends to the east and west of North Walpole Road, within the Walpole-Nornalup National Park (DBCA, 2017b).

The topography of the paluslope system is highest in the east and the elevation decreases to the west. Moving from east to west, the paluslope wetland abuts the palusplain wetland which is directly adjacent to an area of peripheral estuary that then flows downstream into the Walpole and Nornalup Inlets Marine Park, and it is likely that the wetland areas within and adjacent to the application area are hydrologically connected (DBCA, 2017b).

The wetland vegetation within the application area is predominately in a very good (Keighery, 1994) condition (DWER, 2017). The wetland areas within the application area are therefore likely to retain high conservation values (DBCA, 2017b).

Paluslope wetlands are not widely occurring across Western Australia, requiring specific elements of slope and hydrology to be expressed. Paluslope wetlands are more common on the south coast of Western Australia in response to the combination of rainfall and evaporation conditions, soils and landforms, often supporting distinct vegetation communities (DBCA, 2017b). These wetland types signify important climatic and geological differences between the Swan Coastal Plain and the southern coastal plain between Augusta and Walpole (DBCA, 2017b). Paluslope wetlands in this region often comprise areas of peat (Water and Rivers Commission, 1997). Many paluslope wetlands have been cleared for rural and agricultural purposes (Water and Rivers Commission, 1997).

Paluslope wetlands are known to form part of linked geomorphological and hydrological systems between uplands (Precambrian) and flats (Tertiary), that is between valley slopes, channels, palusplain and floodplain (DBCA, 2017b). The paluslope wetland within the application area is located in the Walpole River consanguineous suite (natural wetland group) (DBCA, 2017b). Paluslope wetlands within the Walpole River suite are often associated with microscale creeks, and wetlands within the suite have been identified as important for supporting endemic and new invertebrate species (Water and Rivers Commission, 1997). The significant values of wetlands within the Walpole River suite include; wetland condition, representativeness, fauna and linkages (Water and Rivers Commission, 1997).

Given the above, the proposed clearing is at variance to this Principle. The requirement to undertake the proposed clearing in the dryer months of the year will minimise the risk of degradation to the wetlands.

Methodology References:
DBCA (2017b)
DWER (2017)
Keighery (1994)
Waters and Rivers Commission (1997)

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

Comments

Proposed clearing may be at variance to this Principle

The Department of Primary Industries and Regional Development maps the soils in the application area as Broad drainage floors in lower reaches of streams, Humus podzols; teatree scrub and kangaroo grass sedgeland (Department of Primary Industries and Regional Development, 2017).

Table 2: Degradation risk summary

Category	Level of risk associated with map unit
Salinity:	0% of map unit is presently saline. 0% of map unit has a high risk. 0% of map unit has a moderate risk. 100% of map unit is nil or partial risk or not rated.
Waterlogging:	0% of map unit has an extreme risk. 40% of map unit has a very high risk. 0% of map unit has a high risk. 60% of map unit is nil to moderate risk or not rated.
Water erosion:	0% of map unit has an extreme risk. 14% of map unit has a very high risk. 1% of map unit has a high risk. 85% of map unit is a very low to moderate risk or not rated.
Wind erosion:	0% of map unit has an extreme risk. 16% of map unit has a very high risk. 44% of map unit has a high risk. 40% of map unit is a low to moderate risk or is not rated.

(Department of Primary Industries and Regional Development, 2017).

Based on the mapped land degradation risk outlined above, the proposed clearing has a relatively low likelihood of causing land degradation in the forms of salinity and water erosion (Department of Primary Industries and Regional Development, 2017).

Sixty per cent of the mapped land unit has a high to very high risk of wind erosion (Department of Primary Industries and Regional Development, 2017). Noting the linear shape of the application area and its location adjacent to an existing road, the proposed clearing is unlikely to cause appreciable land degradation in the form wind erosion.

Forty per cent of the mapped land unit has a very high risk of waterlogging.

Given the above, the proposed clearing may be at variance to this Principle. The requirement to undertake the proposed clearing in the dryer months of the year will minimise the risk of water waterlogging.

Methodology

References:

Department of Primary Industries and Regional Development (2017)

(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 majority of the application area is adjacent to the Walpole-Nornalup National Park.

The application area is located within an area identified in the *Geomorphic Wetlands Augusta to Walpole* dataset as paluslope (seasonally waterlogged slope) and palusplain (seasonally waterlogged flat). The paluslope and palusplain wetland areas within the application area are part of a larger wetland system that extends to the east and west of North Walpole Road, within the Walpole-Nornalup National Park (DBCA, 2017b).

The topography of the paluslope system is highest in the east and the elevation decreases to the west. Moving from east to west, the paluslope wetland abuts the palusplain wetland which is directly adjacent to an area of peripheral estuary that then flows downstream into the Walpole and Nornalup Inlets Marine Park. It is likely that the wetland areas within and adjacent to the application area are hydrologically connected (DBCA, 2017b). The requirement to undertake the proposed clearing in the dryer months of the year will minimise the risk of the proposed clearing causing degradation to the wetlands located within the Walpole-Nornalup National Park.

The disturbance caused by the proposed clearing will increase the risk of weeds and dieback being spread into this conservation area.

Given the above, the proposed clearing may be at variance to this Principle. Hygiene management practices will assist in minimising the risk of spread of weeds and dieback.

Methodology References:
DBCA (2017b)

GIS Databases
DBCA Estate

(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 may be at variance to this Principle

As discussed in Principles (f) and (h), the application area is located within an area identified in the *Geomorphic Wetlands Augusta to Walpole* dataset as paluslope and palusplain, and is likely to be hydrologically linked to larger wetland systems (DBCA, 2017b).

Groundwater salinity within the application area is mapped at less than 500-1,000 total dissolved solids, milligrams per litre. This level of groundwater salinity is classified as 'marginal'. Given this level, the proposed clearing is not likely to increase groundwater salinity.

Given the above, the proposed clearing may be at variance to this Principle. The requirement to undertake the proposed clearing in the dryer months of the year will minimise the risk of degradation to the surface water associated with the wetlands.

Methodology References:
DBCA (2017b)

GIS Databases
Hydrography, linear
Geomorphic Wetlands, Augusta to Walpole
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.

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

Noting the linear shape of the application area and its location adjacent to an existing road, the proposed clearing is not likely to increase the incidence or intensity of flooding.

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

Planning instruments and other relevant matters.

Comments DBCA advised that if the roadworks proceed, it is important that stormwater is managed appropriately through road design and construction to maintain the existing hydrological regime of the wetlands and reduce the potential for contaminants and sediments to enter the downstream aquatic ecosystems (DBCA, 2017b). Stormwater management should be in accordance with DWER's *Decision Process for Stormwater Management in WA* (draft released for consultation August 2016) (DBCA, 2017b).

The application was advertised on DWER's website on 19 June 2017 for a 21 day submission period. Three public submissions were received during this period. The submissions advised that the application area contains iconic karri trees, diverse understory and may contain orchids and priority flora (Submission, 2017a; Submission, 2017b). Numerous alternative safety measures were proposed along with recommendations for the clearing process (Submission, 2017c). The concerns relating to the proposed clearing (high biodiversity and priority flora) have been addressed in Principle (a).

No Aboriginal Sites of Significance have been mapped within the application area.

Methodology References:
DBCA (2017b)
Submission (2017a)
Submission (2017b)
Submission (2017c)

GIS Databases
Aboriginal Sites of Significance

4. 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 Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed June 2017

Department of Biodiversity, Conservation and Attractions (DBCA) (2017a) Species and Communities Branch flora advice for Clearing Permit Application CPS 7618/1 (DWER Ref: A1540358).

Department of Biodiversity, Conservation and Attractions (DBCA) (2017b) Wetlands Section advice for Clearing Permit Application CPS 7618/1 (DWER Ref: A1540321).

Department of Primary Industries and Regional Development (2017) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. URL: <https://maps.agric.wa.gov.au/nrm-info/> (accessed 3 November 2017).

Department of Water and Environmental Regulation (DWER) (2017) Site Inspection Report for Clearing Permit Application CPS 7618/1. Site inspection undertaken 10 July 2017 (DWER Ref: A1483790).

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.

Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.

Submission (2017a) Submission received in response to Clearing Permit Application CPS 7618. Received on 10 July 2017 (DWER Ref: A1471079).

Submission (2017b) Submission received in response to Clearing Permit Application CPS 7618. Received on 9 July 2017 (DWER Ref: A1469890).

Submission (2017c) Submission received in response to Clearing Permit Application CPS 7618. Received on 6 July 2017 (DWER Ref: A1469223).

Water and Rivers Commission 1997, *Mapping and Classification of Wetlands from Augusta to Walpole in the South West of Western Australia*. Water Resource Technical Series Report No WRT 12.