



## CLEARING PERMIT

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

<b>Purpose Permit number:</b>	CPS 8568/1
<b>Permit Holder:</b>	Shire of Esperance
<b>Duration of Permit:</b>	19 December 2019 to 19 December 2024

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 extractive industry.

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

Lot 87 on Plan 2260, Sinclair  
Lot 86 on Plan 2260, Sinclair  
Lot 85 on Plan 2260, Sinclair  
Lot 84 on Plan 2260, Sinclair  
Lot 83 on Plan 2260, Sinclair  
Lot 82 on Plan 2260, Sinclair  
Lot 81 on Plan 2260, Sinclair  
Lot 80 on Plan 2260, Sinclair  
Lot 79 on Plan 2260, Sinclair  
Lot 78 on Plan 2260, Sinclair  
Lot 77 on Plan 2260, Sinclair  
Lot 76 on Plan 2260, Sinclair  
Lot 75 on Plan 2260, Sinclair  
Lot 74 on Plan 2260, Sinclair  
Lot 73 on Plan 2260, Sinclair  
Lot 70 on Plan 2260, Sinclair  
Lot 69 on Plan 2260, Sinclair  
Lot 68 on Plan 2260, Sinclair  
Lot 67 on Plan 2260, Sinclair  
Lot 66 on Plan 2260, Sinclair  
Lot 65 on Plan 2260, Sinclair  
Lot 64 on Plan 2260, Sinclair  
Lot 63 on Plan 2260, Sinclair  
Lot 62 on Plan 2260, Sinclair  
Lot 61 on Plan 2260, Sinclair  
Lot 166 on Plan 2260, Sinclair  
Johns Street road reserve (PINs 11420008 and 1384147), Sinclair  
Moir Street road reserve (PIN 11420007), Sinclair  
Parsons Street road reserve (PIN 1384143), Sinclair  
Ocean street road reserve (PIN 1384144), Sinclair

### 3. Area of Clearing

The Permit Holder must not clear more than 2.2429 hectares of native vegetation within the area cross-hatched yellow on attached Plan 8568/1.

### 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.

## **PART II – MANAGEMENT CONDITIONS**

### 5. Avoid, minimise and reduce the impacts and extent of 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.

### 6. Erosion control

Extraction activities must occur within two months of cessation of clearing.

## **PART III – RECORD KEEPING AND REPORTING**

### 7. Record keeping

The Permit Holder must maintain the following records in relation 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(s) that the area was cleared;
- (c) the size of the area cleared (in hectares);
- (d) the date clearing activities ceased;
- (e) the date that sand extraction began;
- (f) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 5 of this Permit;

### 8. Reporting

The Permit Holder must produce the records required under condition 7 of this Permit when required by the *CEO*.

## **DEFINITIONS**

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

*CEO* means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;



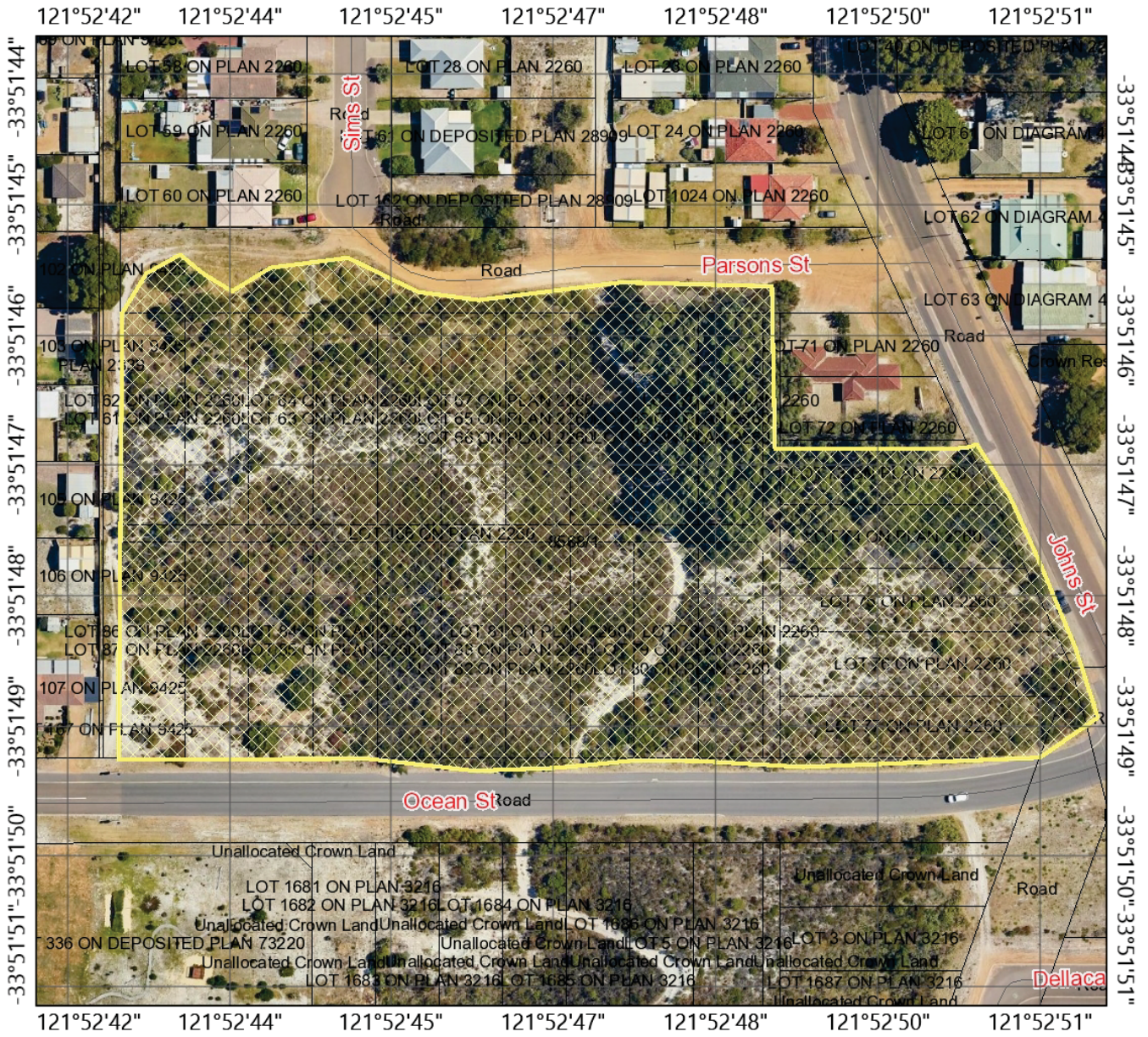
Mathew Gannaway  
MANAGER  
NATIVE VEGETATION REGULATION

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

19 November 2019



# Plan 8568/1



## Legend

- CPS areas approved to clear
- Roads - Minor Roads
- Cadastre (LGATE\_218) - SLIP

0.0      0.02      0.0 Kilometers



WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere

Mathew  
Gannaway  
2019.11.19  
08:44:36  
+08'00'

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

Disclaimer: This map is used as a generic static output for reference purposes. Information on this map may or may not be accurate, current, or otherwise reliable. While the Department of Water and Environmental Regulation, has made all reasonable efforts to ensure the accuracy of this data, the department accepts no responsibility for any inaccuracies and persons relying on this data do so at their own risk.

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## Locality Map



Government of Western Australia  
Department of Water and Environmental Regulation



## 1. Application details

### 1.1. Permit application details

Permit application No.: 8568/1  
Permit type: Purpose Permit

### 1.2. Applicant details

Applicant's name: Shire of Esperance  
Application received date: 25 June 2019

### 1.3. Property details

Property:  
Lot 87 on Plan 2260, Sinclair  
Lot 86 on Plan 2260, Sinclair  
Lot 85 on Plan 2260, Sinclair  
Lot 84 on Plan 2260, Sinclair  
Lot 83 on Plan 2260, Sinclair  
Lot 82 on Plan 2260, Sinclair  
Lot 81 on Plan 2260, Sinclair  
Lot 80 on Plan 2260, Sinclair  
Lot 79 on Plan 2260, Sinclair  
Lot 78 on Plan 2260, Sinclair  
Lot 77 on Plan 2260, Sinclair  
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Lot 73 on Plan 2260, Sinclair  
Lot 70 on Plan 2260, Sinclair  
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Lot 65 on Plan 2260, Sinclair  
Lot 64 on Plan 2260, Sinclair  
Lot 63 on Plan 2260, Sinclair  
Lot 62 on Plan 2260, Sinclair  
Lot 61 on Plan 2260, Sinclair  
Lot 166 on Plan 2260, Sinclair  
Johns Street Road reserve (PINs 11420008 and 1384147), Sinclair  
Moir Street Road reserve (PIN 11420007), Sinclair  
Parsons Street road reserve - 1384143, Sinclair  
Ocean Street road reserve - 1384144, Sinclair  
Shire of Esperance  
Sinclair

Local Government Authority:  
Localities:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
2.2429		Mechanical Removal	Extractive industry

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 19 November 2019  
Reasons for Decision: The clearing permit application 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 with principles (g) and (i), is not at variance with principle (f), and is not likely to be at variance with the remaining clearing principles.

It has been determined that the proposed clearing may result in wind erosion due to exposure of sandy soils. To mitigate this impact, extraction of the sand must occur within two months of the cessation of clearing.

Given the above, the Delegated Officer decided to grant a clearing permit subject to erosion management conditions.



## 2. Site Information

### Clearing Description

The application is for the proposed clearing of 2.2429 hectares of native vegetation within Lots 61 to 70 and 73 to 87 on Plan 2260, Lot 116 on Plan 2260, Johns Street Road reserve (PINs 1384147 and 11420008), Parsons Street Road reserve (PIN 1384143), Ocean Street Road reserve (PIN 1384144), and Moir Street Road reserve (PIN 11420007), Sinclair, for the purpose of sand extraction (Figure 1).

### Vegetation Description

The vegetation within the application area is mapped within Beard vegetation association 42, which is described as shrublands comprising mallee and acacia scrub on south coastal dunes (Shepherd et al., 2001).

A site inspection completed by the Shire of Esperance described the vegetation within the application area comprising an acacia scrubland with *Templetonia retusa* and *Spyridium globulosum* on coastal dunes (Shire of Esperance, 2019).

### Vegetation Condition

The condition of the vegetation within the application area was determined from the description provided by the applicant (Shire of Esperance, 2019). The vegetation within the application area is considered to be in very good to completely degraded (Keighery, 1994) condition, described as;

- 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).

### Soil type

The application area has been mapped by the Department of Primary Industries and Regional Development (DPIRD) as the following soil types:

- Tooregullup 5 Subsystem which is described as calcareous sand- white, medium-grained, rounded quartz and shell debris, well sorted, of eolian origin (Schoknecht et al., 2004); and
- Tooregullup 1 Subsystem which is described as Calcareous uniform sands on parabolic dunes (Schoknecht et al., 2004).

### Comments:

The local area referred to in the assessment of this application is defined as a 10 kilometre radius measured from the perimeter of the application area. The local area retains approximately 45 per cent native vegetation cover.



Figure 1: Application Area (hatched blue)

## 3. Minimisation and mitigation measures

The proposed clearing area is within a residential area with the future land use to be residential lots. The proposed clearing for the purpose of sand extraction (prior to construction of residential dwellings) avoids clearing in other areas for the sole purpose of sand extraction (Shire of Esperance, 2019).

#### 4. Assessment of application against clearing principles

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

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

As discussed in Section 2 above, the application area consists of Acacia scrubland (Shire of Esperance, 2019). The flora survey provided indicates the proposed clearing does not contain a high level of floristic diversity.

According to available datasets, 13 priority (P) flora species (listed by the Department of Biodiversity, Conservation and Attractions (DBCA)) have been recorded within the local area (DBCA, 2007-). Based on the mapped soil and vegetation types, the application area may provide suitable habitat for eight priority flora species, namely;

- *Hopkinsia adscendens* (Priority 3 (P3));
- *Banksia prolata* subsp. *calvicola* (P4);
- *Lepidium fasciculatum* (P3);
- *Leucopogon cymbiformis* (P2);
- *Grevillea baxteri* (P4);
- *Eucalyptus x missilis* (P4);
- *Leucopogon rotundifolius* (P3); and
- *Adelphacme minima* (P3)

A flora survey provided by the applicant noted no Priority or Threatened flora have been recorded within the application area (Shire of Esperance, 2019).

Given the above, the proposed clearing is not likely to impact upon the conservation significant flora known to occur within the local area.

As discussed under Principle (b), the application area does not contain significant habitat for the conservation significant fauna species within the local area. The clearing of 2.24 hectares of native vegetation in very good to completely degraded condition is not likely to impact significant habitat for conservation significant fauna.

According to available datasets, the vegetation within the application area is within the mapped occurrence of the Proteaceae Dominated Kwongkan Shrublands of the southeast coastal floristic province of Western Australia, which is recognised by the State (as listed by DBCA) as a Priority 3 Priority Ecological Community (PEC) and federally as a Threatened Ecological Community (TEC), listed as endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The vegetation within the application area is not representative of this vegetation community (Shire of Esperance, 2019). State listed TEC's are discussed under Principle (d).

As discussed under Principles (f) and (i), the application area is not located within any wetlands or waterways and does not contain riparian vegetation. The closest waterbody is the coastline located approximately 1.2 kilometres from the application area. The proposed clearing is not likely to impact on any wetlands or waterways.

The vegetation within the application area is considered to be in very good to completely degraded condition, does not contain significant habitat for fauna, is not necessary for the continued existence of threatened and priority flora, does not contain riparian vegetation and is not representative of a TEC or PEC. Given the above, the proposed clearing is not likely to comprise an area of high biodiversity and is not likely to be at variance with this Principle.

##### (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.

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

According to available datasets, 40 records of conservation significant fauna taxa have been recorded within a 10 kilometre radius of the application area including 14 threatened fauna species, 16 species protected under international agreement, eight priority fauna species and two specially protected fauna species (DBCA, 2007-). The majority of the conservation significant fauna species are shorebird species that are likely to utilise the less disturbed coastal areas. These waterbird species are not likely to utilise the application area given it lies between residential areas.

Some of the conservation significant fauna recorded in the local area are ground dwelling species, including:

- *Leipoa ocellata* (Malleefowl) (vulnerable under the EPBC Act the BC Act)
- *Acanthophis antarcticus* (Southern Death Adder) (P3);
- *Isoodon fusciventer* (Quenda) (P4); and
- *Notamacropus irma* (Western Brush Wallaby) (P4).

Whilst the vegetation within the application area contains understory, it is unlikely that the vegetation within the application area would contain significant habitat for ground dwelling species due to the historical disturbance and the positioning of the area between residential areas and existing roadways. Furthermore, other remnant vegetation types located in close proximity to the application area are likely to contain habitat in better condition that are better connected to other remnants of native vegetation.

One threatened black cockatoo species has been recorded in the local area, *Calyptorhynchus latirostris* (Carnaby's cockatoo) (Endangered under EPBC Act) and the *Biodiversity Conservation Act 2016* (BC Act).

Carnaby's cockatoo forage on the seeds, nuts and flowers of a large variety of plants including Proteaceous species (*Banksia*, *Hakea*, *Grevillea*), *Eucalyptus*, *Corymbia* species and a range of introduced species (Valentine and Stock, 2008). Carnaby's cockatoo breed in large hollow-bearing trees, generally within woodlands or forests or in isolated trees (Commonwealth of Australia, 2012). The application area is within the mapped non-breeding range for Carnaby's cockatoo and the survey provided noted that no Carnaby's cockatoo were observed during the flora survey, or on any other day. The vegetation type within the application area does not contain suitable foraging habitat for the species as there are no Proteaceous species within the application area (Shire of Esperance, 2019).

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

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

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

No threatened flora species have been recorded in the local area (Western Australian Herbarium, 1998-). The closest record is *Eucalyptus insularis* subsp. *continentalis*, located approximately 26 kilometres from the application area.

The flora survey provided noted no threatened flora species were recorded within the application area (Shire of Esperance, 2019).

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

**(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 with this Principle**

According to available datasets, no mapped occurrences of State listed TEC's occur within the application area.

The vegetation proposed to be cleared is not likely to comprise the whole or a part of, or be necessary for the maintenance of a state listed TEC.

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

**(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 with this Principle**

The National Objectives and Targets for Biodiversity Conservation 2001-2005 include a target to have clearing controls in place that prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750 (i.e. pre-European settlement) (Commonwealth of Australia, 2001).

As indicated in Table 1, the Esperance Plains Biogeographic Regionalisation of Australia (IBRA) bioregion, and the mapped Beard vegetation association retain greater than 30 per cent of their pre-European extents. The local area retains approximately 45 per cent native vegetation cover.

The application area is not likely to contain conservation significant flora, fauna or communities. Given the above, the application area is not likely to be significant as a remnant of native vegetation.

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

**Table 1: Remnant native vegetation extents**

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Current Extent in all DBCA managed lands (ha)	Extent remaining in all DBCA managed lands (proportion of Pre-European extent) (%)
<b>IBRA Bioregion*</b>					
Esperance Plains	2,899,940.66	1,494,450.87	51.53	55.05	28.37
<b>Beard vegetation association:</b>					
42	306,506.03	296,841.67	96.85	46.12	44.66
<b>Beard vegetation association in IBRA region:</b>					
42 (Esperance Plains)	135,419.99	128,052.58	94.56	56.82	53.73

**(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 at variance with this Principle**

According to available databases, the application area is not mapped within any wetlands or watercourses. The closest waterbody to the application area is the coastal waterline approximately 1.2 kilometres to the south-east. The nearest mapped watercourses to the application area are Pink Lake and Lake Warden which are both located approximately 3.5 kilometres from the application area. Noting the descriptions and photographs of the vegetation within the application area and the distance from any known watercourses or wetlands, it is considered that the vegetation within the application area is not growing in association with a watercourse or wetland.

Given the above, the proposed clearing is not at variance with this Principle.

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

**Proposed clearing may be at variance with this Principle**

As described under Section 2, the application area is situated within two mapped soil types, being the Tooregullup 5 Subsystem and the Tooregullup 1 Subsystem.

Noting the sandy soil types within the application area and the risks detailed in Table 2, below, there is a moderate to high risk of wind erosion but a low risk of water erosion, flood risk, water logging, phosphorus export, salinity and subsurface acidification.

The risk of wind erosion causing land degradation may be increased, should the surface soils within the application area be exposed for a prolonged period post clearing. Ensuring the extraction activities occur within two months of cessation of clearing will manage wind erosion risk and prevent the prolonged exposure of bare uncompacted sandy soils.

**Table 2: Land Degradation risks for mapped soil units (DPIRD 2018)**

<b>Risk categories</b>	<b>Tooregullup 5 Subsystem</b>	<b>Tooregullup 1 Subsystem</b>
Wind erosion	10-30% of the map unit has a high to extreme hazard	50-70% of the map unit has a high to extreme hazard
Water erosion	3-10% of the map unit has a very high to extreme hazard	3-10% of the map unit has a very high to extreme hazard
Salinity	<3% of the map unit has a moderate or high hazard or is presently saline	<3% of the map unit has a moderate or high hazard or is presently saline
Subsurface Acidification	10-30% of the map unit has a high susceptibility	3-10% of the map unit has a high susceptibility
Flood risk	<3% of the map unit has a moderate to high hazard	<3% of the map unit has a moderate to high hazard
Water logging	<3% of the map unit has a moderate to very high to risk	<3% of the map unit has a moderate to very high to risk
Phosphorus export risk	10-30% of the map unit has a high to extreme hazard	10-30% of the map unit has a high to extreme hazard

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

**(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 with this Principle**

A number of conservation areas are located within the local area, with the closest being approximately 600 metres east of the application area at its closest point.

While the application area is close to a number of unmanaged reserves, noting that the application area is separated from these areas by numerous residential areas, it is not likely the proposed clearing will impact upon the environmental values of conservation areas within the local area.

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



**(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 may be at variance with this Principle**

As discussed under Principle (f), the application area is not located within any known wetlands or waterways. The closest waterbody is the coastline located over 1.2 kilometres meters from the application area.

Mapped groundwater salinity within the application area is marginal (500 to 1000 milligrams per litre total dissolved solids). This level of groundwater salinity is classified as 'fresh'.

The proposed clearing is within a Priority 3 area of the Esperance Water Reserve proclaimed under the *Country Areas Water Supply Act (1947)* and within a Wellhead Protection Zone of an operational production bore. The proposed clearing can lead to exposure of the groundwater table and provide a pathway for contamination to enter the aquifer from the surrounding residential area. The intended use as sand extraction may impact on the drinking water source (DWER, 2019) (discussed further under Planning instruments and other relevant matters).

The proposed clearing may include vegetation that is providing a buffer to a public drinking water source. Advice received in relation to protection of groundwater source from the proposed sand extraction are detailed in Planning instruments and other relevant matters.

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

**(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 with this Principle**

Noting the moderate rainfall experienced by the region (700 millimetres per annum), the size of the proposed clearing and the well-drained sandy soils of the application area, the proposed clearing is not likely to cause, or exacerbate, the incidence or intensity of flooding.

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

**Planning instruments and other relevant matters.**

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

As discussed above in Principle (i), the proposed clearing is within a Priority 3 area of the Esperance Water Reserve proclaimed under the *Country Areas Water Supply Act (1947)* and within a Wellhead Protection Zone of an operational production bore. The underlying aquifer is shallow and unconfined and is highly vulnerable to contamination (DWER, 2019). The exposure of the groundwater table through basic raw materials extraction can pose risk to water resources by exposing the groundwater table which can lead to evaporation, and expose the aquifer to contamination. Advice received in relation to the proposed sand extraction has detailed the following (DWER, 2019):

- Extractive industry should be undertaken in accordance with WQPN 15 Basic raw materials extraction (July 2019).
- Under WQPN 15, wellhead protection zones (WHPZs) are to be avoided unless DWER approves in writing. As such, the Shire of Esperance should consult with the regional office prior to works to ensure best management practices are applied within the protection zone and water supply abstraction point.
- In accordance with WQPN 15, in P2 areas a minimum of 2 meters of undisturbed profile should be maintained to the highest groundwater level.

The clearing permit application was advertised on the DWER website on 17 July 2019 with a 21 day submission period. No public submissions have been received in relation to this application.

**5. 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, 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 April 2019.
- Department of Water and Environmental Regulation (DWER) (2019) Planning Advice CPS 8568/1. DWER reference: DWERDT189023, A1821120, A1830853, A1831248
- Government of Western Australia (2019). 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, 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
- Shepherd, D.P. (2009) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.
- Shire of Esperance (2019) Clearing Permit Application CPS 8568/1. DWER reference: A1801937
- Valentine L. E. & Stock W. (2008) Food Resources of Carnaby's Black-Cockatoo (*Calyptrorhynchus latirostris*) in the Gngara Sustainability Strategy study area. Unpublished report to the Forests Products Commission.

Western Australian Herbarium (1998- ) FloraBase - The Western Australian Flora. Department of Parks and Wildlife.  
<http://florabase.dpaw.wa.gov.au/> (Accessed August 2019).

GIS Databases:

- Aboriginal Sites of Significance
- DBCA Managed Estate
- Directory of Important Wetlands
- Geomorphic Wetlands
- Groundwater salinity
- Hydrography, hierarchy
- Hydrography, linear
- Land Degradation datasets
- SAC Bio Datasets (accessed August 2019)
- Soils, Statewide
- Topographic contours
- TPFL
- WAHerb Data
- WA TEC PEC Boundaries