



## CLEARING PERMIT

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

### PERMIT DETAILS

Area Permit Number: 5649/1  
File Number: 2013/003536-1  
Duration of Permit: From 12 October 2013 to 12 October 2015

### PERMIT HOLDER

Richard Kenneth Maslen and Rachel Jane Maslen

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 24 on Plan 50146

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 46 hectares of native vegetation within the area hatched yellow on attached Plan 5649/1a.

### CONDITIONS

#### 1. Clearing not authorised

This Permit does not authorise the Permit Holder to clear *Eucalyptus loxophleba* and *Eucalyptus camaldulensis*.

#### 2. Vegetation management - watercourses

The Permit Holder shall not clear native vegetation within 30 metres of any *watercourse* or *wetland* within and/or adjacent to the area cross-hatched yellow on Plan 5649/1.

#### 3. Vegetation management - fencing

- (a) Prior to 31 December 2013, the Permit Holder shall construct a fence enclosing the area outlined in red on attached Plan 5649/1b, so as to exclude all classes of livestock.
- (b) Within one month of installing the fence the Permit Holder shall notify the Chief Executive Officer of the Department of Environment Regulation in writing that the fence has been completed.

### DEFINITIONS

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

*watercourse* has the meaning given to it in section 3 of the *Rights in Water and Irrigation Act 1914*;

*wetland/s* means an area of seasonally, intermittently or permanently waterlogged or inundated land, whether natural or otherwise, and includes a lake, swamp, marsh, spring, dampland, tidal flat or estuary.

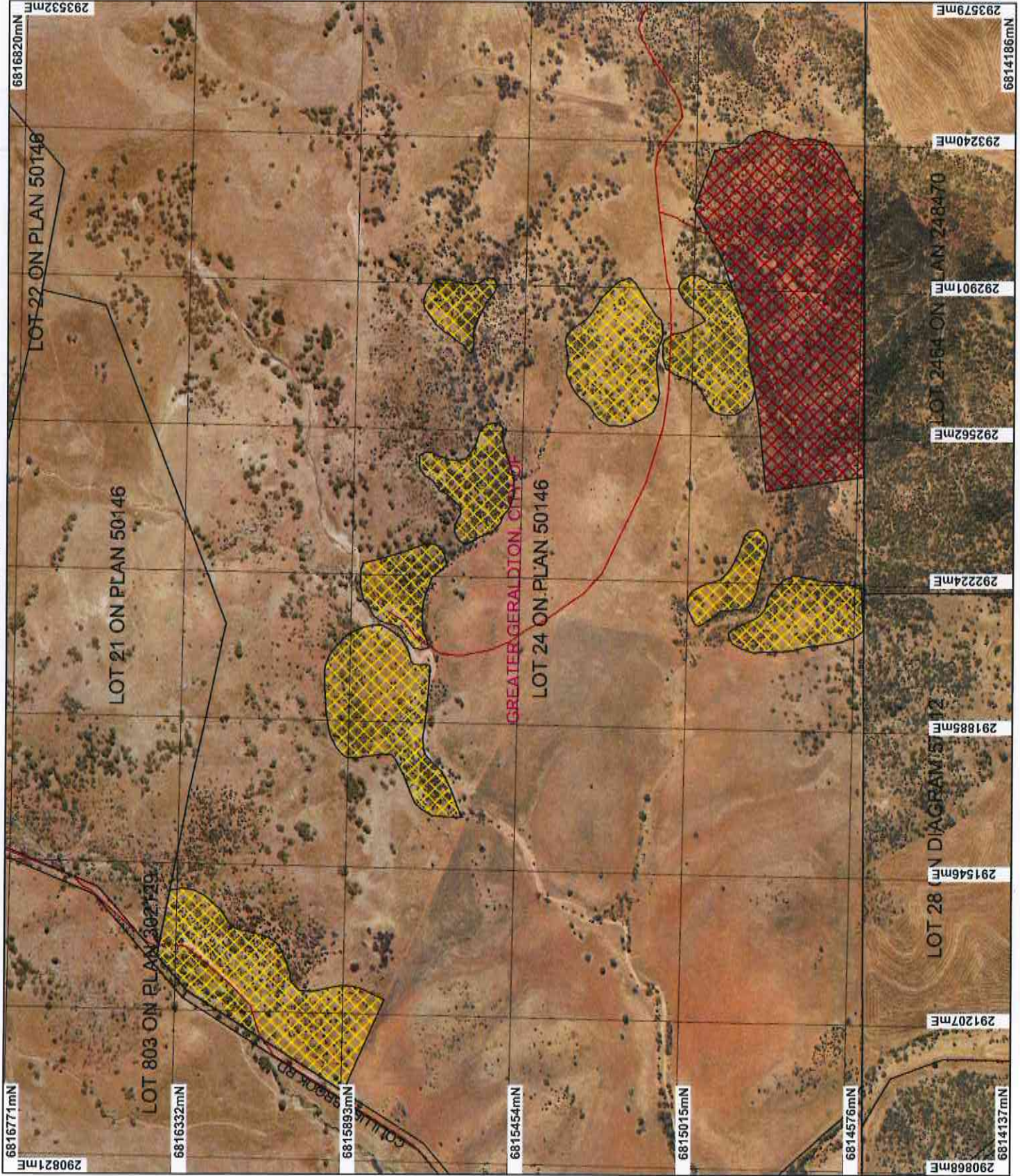
M Warnock  
MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

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

12 September 2013



# Plan 5649/1



## LEGEND

- Clearing Instruments**
- Areas Subject to Conditions
  - Areas Approved to Clear
  - Road Centrelines
  - Cadastral
- Local Government Authorities**
- Geraldton 50cm Orthomosaic - Landgate 2006



0 375 m

Scale 1:12877

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

*M Warrack* Date 12/9/13

M Warrack

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

Information derived from this map should be confirmed with the data collaborator acknowledged by the agency acronym in the legend.



Government of Western Australia  
Department of Environment Regulation

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# Clearing Permit Decision Report

Government of Western Australia  
Department of Environment Regulation

## 1. Application details

### 1.1. Permit application details

Permit application No.: 5649/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Richard Kenneth and Rachel Jane Maslen

### 1.3. Property details

Property: LOT 24 ON PLAN 50146 (KOJARENA 6532)  
Local Government Area: City of Geraldton-Greenough  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
46		Mechanical Removal	Grazing & Pasture

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 12 September 2013

## 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
Beard Vegetation Association: 35 - Shrublands; jam scrub with scattered York gum (Shepherd et al. 2001).	The application is to clear up to 46 hectares of native vegetation within Lot 24 on Deposited Plan 50146, Kojarena, for the purpose of establishing pasture, reducing water run-off, and weed control.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation description and condition were determined through a Department of Parks and Wildlife site inspection (2013).  The vegetation under application consists of occasional large Eucalyptus loxophleba (York gum) with an understory of Hakea priessii and occasional Acacia tetragonaphylla, with Eucalyptus camaldulensis along creek lines. Other species observed include occasional Banksia sessilis, Pimelea microcephala and several Solanum lasiophyllum. There is no native groundcover (DPaW 2013).
Beard Vegetation Association: 675 - Shrublands; mixed thicket (melaluca & hakea) (Shepherd et al. 2001).			The vegetation under application has been modified by a long history of grazing and previous clearing. No areas of Jam scrub (Acacia accuminata) or Melaleuca sp. were observed and the vegetation is not representative of the mapped vegetation associations (DPaW 2013).

## 3. Assessment of application against clearing principles

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

#### Comments

#### Proposal is not likely to be at variance to this Principle

The application is to clear up to 46 hectares of native vegetation within Lot 24 on Deposited Plan 50146, Kojarena, for the purpose of establishing pasture, reducing water run-off and weed control.

The vegetation under application consists of occasional large Eucalyptus loxophleba (York gum) with an understory of Hakea priessii and occasional Acacia tetragonaphylla, with Eucalyptus camaldulensis (River Red Gum) along creek lines. Other species observed include Banksia sessilis, Pimelea microcephala and several Solanum lasiophyllum. There is no native groundcover (DPaW 2013). The vegetation under application has been modified by a long history of grazing and previous clearing. No areas of Jam scrub (Acacia accuminata) or Melaleuca sp. were observed (DPaW 2013). The vegetation is in degraded (Keighery 1994) condition.

There are numerous priority flora species within the local area (20 kilometre radius). A site inspection by Department of Parks and Wildlife (DPaW) officers did not observe any priority flora species within the application area (DPaW 2013). Given the degraded condition of the vegetation and the history of grazing, it is unlikely that priority flora species occur within the application area.

There is one priority ecological community (PEC) within the local area (20 kilometre radius). This community is the "Plant Assemblages of the Moresby Range System" (Priority 1), which is located approximately 17 kilometres from the application area. The application area is not located within the Moresby Range system and is therefore not representative of this PEC.

A site inspection of the application area (DPaW 2013) did not reveal significant habitat for conservation significant fauna. Given the degraded nature of the application area it is not likely to contain significant habitat for fauna indigenous to Western Australia.

Given the degraded condition of the vegetation, the application area is not likely to comprise a high level of biodiversity and is not likely to be at variance to this clearing Principle.

**Methodology** References:  
DPaW 2013  
Keighery 1994

GIS Databases:  
- Geraldton 50cm Othomosaic - Landgate 2006  
- Pre-European vegetation  
- SAC Biodatasets  
- Soils, Statewide

**(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** **Proposal is not likely to be at variance to this Principle**

Six conservation significant fauna species have been recorded within 20 kilometres of the application area (DEC 2007- ). Three of these are listed as "rare or likely to become extinct" under the Wildlife Conservation Act 1950 (WC Act), specially protected fauna notice. These are Carnaby's cockatoo (*Calyptorhynchus latirostris*), shield-backed trapdoor spider (*Idiosoma nigrum*) and gilled slender blue-tongue skink (*Cyclodomorphus branchialis*). Carnaby's cockatoo and the shield-backed trapdoor spider are also listed under the Environment Protection and Biodiversity Conservation Act, 1999 as 'endangered' and 'vulnerable' respectively.

The application area occurs within the Carnaby's cockatoo non-breeding habitat range (Commonwealth of Australia 2012). The dominant plant species observed within the application area, *Eucalyptus loxophleba* and *Eucalyptus camaldulensis* (DPaW 2013), may provide some foraging habitat. It is however, likely to be of a low quality. Given the degraded condition of the vegetation under application, the application area is not likely to represent significant foraging habitat for Carnaby's cockatoo.

The shield-backed trapdoor spider occurs in *Eucalyptus* woodlands and *Acacia* vegetation, relying heavily on leaf litter and twigs to build its burrow (DSEWPaC 2013). The application area has no native groundcover and minimal leaf litter. This species relies on clay soils, whilst the application area has red-brown loam soil with decomposing granite (DPaW 2013). Therefore, this species is unlikely to occur within the application area.

There are three records of the gilled slender blue-tongue skink (*Cyclodomorphus branchialis*) within a 20 kilometre radius of the application area (DEC 2007- ). Two of these records have a low certainty of correct identification (DEC 2007- ). There is little information available about the habitat requirements of this species although it may prefer loamy soils and rocky areas within wattle woodlands (Turpin et al. 2012). Given the history of grazing within the application area and lack of groundcover, the application area is unlikely to contain significant habitat for this species.

During a DPaW site inspection, non-conservation significant fauna such as eagles, crows and kangaroos were observed within the application area, as well as feral animals such as the European fox (DPaW 2013). DPaW also noted that there are large *E. camaldulensis* in the creeklines and large *E. loxophleba* in other parts of the application area but did not note hollows or evidence of fauna near these trees (DPaW 2013).

The local area (20 kilometre radius) surrounding the application area has been highly cleared, retaining approximately 20 percent pre-European vegetation. Although any remaining vegetation in a highly cleared landscape may be significant as fauna habitat, the predominant vegetation under application is degraded (Keighery 1994) regrowth and holds minimal fauna value.

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

**Methodology** References:  
Commonwealth of Australia 2012  
DEC 2007-  
DPaW 2013  
DSEWPaC 2013  
Turpin et al. 2012

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

**Comments** **Proposal is not likely to be at variance to this Principle**  
 There are several rare flora species recorded within the local area (20 kilometre radius). The closest record is located approximately 3.7 kilometres from the application area.

Although the mapped vegetation association is consistent with the habitat preferences for this rare flora, given the degraded condition of the vegetation and the long history of grazing, it is unlikely to occur and was not observed within the application area (DPaW 2013).

Given the above, the proposed clearing is not likely to contain rare flora species and is not likely to be at variance to this clearing Principle.

**Methodology** References:  
 DPaW 2013

GIS Databases:  
 - Pre-European vegetation  
 - SAC Biodatasets  
 - Soils, Statewide

**(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** **Proposal is not likely to be at variance to this Principle**  
 There are no records of threatened ecological communities (TEC) within 20 kilometres of the application area. The nearest TEC is located over 90 kilometres from the application area.

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

**Methodology** GIS Databases:  
 - SAC Biodatasets

**(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** **Proposal is not likely to be at variance to this Principle**  
 Aerial photography indicates the local area (20 kilometre radius) is approximately 20 percent vegetated.

The IBRA Bioregion (Geraldton Sandplains) and the local government agency (City of Greater Geraldton) retain approximately 45 percent and 44 percent of their respective pre-European vegetation extents (Government of Western Australia 2013).

The application area is mapped as Beard Vegetation Association 35 and 675, which retain approximately 31 397 hectares (17 percent) and 14 191 hectares (27 percent) of their respective pre-European vegetation extent within the Geraldton Sandplains IBRA Bioregion (Government of Western Australia 2013).

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

The vegetation associations mapped over the application area have less than 30 percent of their pre-European extents remaining. However, given their historic disturbance and degraded (Keighery 1994) condition, the vegetation under application is no longer representative of the mapped vegetation types (DPaW 2013).

Although, the proposed clearing is not likely to be at variance to this clearing Principle, further incidental damage to the remaining remnant vegetation in a good or better condition through grazing is being addressed by imposing a fencing condition on the clearing permit.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Geraldton Sandplains	3 136 038	1 408 729	45	40
Shire*				
City of Greater Geraldton	988 313	431 113	44	16
Beard Vegetation Association in Bioregion*				
35	184 502	31 397	17	2
675	51 851	14 191	27	6

**Methodology**   References:  
Commonwealth of Australia 2001  
DPaW 2013  
\*Government of Western Australia 2013  
GIS Databases:  
- Geraldton 50cm Othomosaic - Landgate 2006  
- 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**

The application area falls within the catchment area of the Greenough River and there are several minor, non-perennial watercourses within and adjacent to the application area. These watercourses flow into tributaries of the Greenough River which lies approximately five kilometres from the application area.

The dominant species along the watercourses have been identified as *Eucalyptus loxophleba* and *Eucalyptus camaldulensis* (DPaW 2013). There is likely to be other species growing in association with these watercourses not observed during the site inspection.

The applicant has stated that "some larger trees and those holding the creek line together will be left". The applicant also stated to the former Department of Environment and Conservation staff on the 19 June 2013 that the vegetation along the creek lines will not be cleared. The dominant species along the watercourses have been identified as *Eucalyptus loxophleba* and *Eucalyptus camaldulensis* (DPaW 2013).

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

Conditions to retain all *Eucalyptus loxophleba*, *Eucalyptus camaldulensis* and a vegetation buffer of 30 metres from any watercourse would assist in mitigating impacts to watercourses.

**Methodology**   References:  
DPaW 2013  
Applicant 2013

GIS Databases:  
- Hydrography, Linear

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

**Comments**

**Proposal is at variance to this Principle**

Groundwater salinity within the application area is mapped as 1000 - 3000 milligrams per litre total dissolved solids, which is (list medium, low, high etc). The application is unlikely to cause land degradation in the form of salinity (Commissioner of Soil and Land Conservation, 2013).

Active gullying and water erosion is evident on properties surrounding the application area and within the adjoining brook (Commissioner of Soil and Land Conservation, 2013). A site inspection of the application area undertaken by Department of Parks and Wildlife staff (DPaW, 2013) observed water erosion within the application area. The site inspection also identified that the soil of application area is highly compacted from a past history of grazing and the main flora species along the watercourses are *Eucalyptus loxophleba* and *Eucalyptus camaldulensis*.

Three minor non-perennial watercourses cross the application area. Given the erosion present within the area it is likely that the banks of these watercourses will become destabilised if the vegetation surrounding them is removed.

Given the identified erosion within the application area and surrounding properties, the Commissioner of Soil and Land Conservation (2013) advises that within the application area, slopes greater than three percent should not be cleared and a vegetation buffer should be retained along watercourses.

The applicant (2013) has stated that "some larger trees and those holding the creek line together will be left" and has stated to Department of Environment Regulation staff that the vegetation along the creek lines will not be cleared.

The application is likely to cause land degradation in the form of water erosion and is at variance to this clearing Principle. Conditions to retain all *Eucalyptus loxophleba*, *Eucalyptus camaldulensis* and a vegetation buffer of 30 metres from any watercourse would assist in mitigating these impacts.

**Methodology**   References:  
DPaW 2013  
Commissioner of soil and land conservation 2013  
Applicant 2013



GIS Databases:  
- Hydrography, Linear  
- 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**      **Proposal is not likely to be at variance to this Principle**  
There are four DPaW managed lands within the local area (20 kilometre radius); Cutubury Nature Reserve, Eradu Nature Reserve, Beetalyinna Nature Reserve and an unnamed nature reserve. The closest of these is the unnamed reserve, which is located approximately 10 kilometres from the application area.

The application area does not form part of an ecological corridor contributing to the ecological functioning of remnant patches of native vegetation.

Given the distance to the nearest conservation area, the proposed clearing is not likely to be at variance to this clearing Principle.

**Methodology**      GIS Databases:  
- DEC Tenure  
- Geraldton 50cm Othomosaic - Landgate 2006

**(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**      **Proposal may be at variance to this Principle**  
There are several minor, non-perennial watercourses within and adjacent to the application area.

Groundwater salinity within the application area is mapped as 1000 - 3000 milligrams per litre total dissolved solids, which is described as brackish (Water and Rivers Commission 2000). The application is unlikely to cause salinisation of groundwater or surface water (Commissioner of Soil and Land Conservation 2013).

Active gullying and water erosion is evident on properties surrounding the application area and within the adjoining brook (Commissioner of Soil and Land Conservation, 2013). Clearing along watercourses within the application area may cause erosion and sedimentation, deteriorating the quality of surface water.

The applicant (2013) has stated that "some larger trees and those holding the creek line together will be left" and the vegetation along the creek lines will not be cleared.

The application to clear may cause a deterioration in the quality of surface water and may be at variance to this clearing Principle. Conditions to retain all Eucalyptus loxophleba, Eucalyptus camaldulensis and a vegetation buffer of 30 metres from any watercourse would assist in mitigating these impacts.

**Methodology**      References:  
Applicant 2013  
Commissioner of Soil and Land Conservation 2013  
Water and Rivers Commission 2000

GIS Databases:  
- Hydrography, Linear

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

**Comments**      **Proposal is not likely to be at variance to this Principle**  
There are several minor, non-perennial watercourses within and adjacent to the application area. The mean annual rainfall of the application area is 500 millimetres and it is not located within a floodplain area.

Although the soil within the application area is likely to become waterlogged during wetter periods, the application is not likely to increase the number or severity waterlogging events (Commissioner of Soil and Land Conservation 2013).

Given the above, and the limited deep rooted vegetation within the application area, the proposed clearing is not likely to increase the incidence or severity of flooding and is not likely to be at variance to this Principle.

**Methodology**      References:  
Commissioner of soil and land conservation 2013

GIS Databases  
- Hydrography, Linear  
- Mean annual rainfall

## Planning instrument, Native Title, Previous EPA decision or other matter.

### Comments

The application is to clear for the purpose of establishing pasture, reducing water run-off and weed control. The applicant has advised that the soil of the application area has become a scalded hard pan which does not absorb water and, as a result, water run-off is causing erosion (Maslen 2013). This was observed during a site inspection (DPaW 2013). The applicant wants to rip the compact areas to reduce this problem and put in pasture. There are areas of *Carduus* sp. (thistle) infestation within the application area which the applicant has advised are currently hard to control.

The application area falls within the Environmental Protection Authority Position Statement No.2 which acknowledges the significant amount of clearing of native vegetation that has already occurred on agricultural land, which has led to the reduction in biodiversity and increased land salinisation (EPA 2000). A further reduction in native vegetation through clearing for agriculture cannot be supported and all existing remnant native vegetation should be protected.

The applicant has indicated he is willing to fence an area of vegetation in the south of his property for conservation. This area is in good or better (Keighery 1994) condition and has not been disturbed by grazing or clearing (DPaW 2013). The vegetation extends into adjacent properties.

The City of Geraldton-Greenough has objected to the clearing due to potential erosion and nutrient impacts to the tributaries of the Greenough River. If clearing was to be granted, they recommend that an offset is required and the native vegetation cleared to be retained for rehabilitation purposes. Conditions to retain all *Eucalyptus loxophleba*, *Eucalyptus camaldulensis* and a vegetation buffer of 30 metres from any watercourse would assist in mitigating these impacts.

The application area is located within the Greenough River and Tributaries Surface Water Area and the Gascoyne Groundwater Area covered by the Rights in Water and Irrigation Act 1914. One of the applicants has advised that he will not interfere with bed and banks and therefore will not require a Department of Water licence.

No public submissions have been made in relation to the proposed clearing and no Aboriginal Sites of Significance are present within the application area.

### Methodology

#### References:

DPaW 2013  
EPA 2000

#### GIS Databases:

- RIWI Act areas

## 4. References

- Commissioner of Soil and Land Conservation (2013); Land Degradation Advice and Assessment Report for clearing permit application CPS 5649/1 received 23/08/2013; Department of Agriculture and Food Western Australia (DER ref. A665784).
- 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
- DEC (2007 - ) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed July 2013
- DPaW (2013) Site Inspection Report for Clearing Permit Application CPS 5649/1, Lot 24 on deposited plan 50146, Kojarena. Site inspection undertaken 1 July 2013. Department of Parks and Wildlife, Western Australia (DER Ref. A646636).
- DSEWPaC (2013) *Idiosoma nigrum* in Species Profile and Threats Database. Department of Sustainability, Environment, Water, Population and Communities, Canberra.
- EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority, Western Australia.
- Government of Western Australia. (2013). 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, 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.
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- Turpin, J., Basnett, G., Bamford, M., Huang, N. (2013) Shine Project Area Fauna Assessment. M.J. & A.R. Bamford Consulting Ecologists, Western Australia.
- Water and Rivers Commission (2000) Water Facts 15: Salinity, Water and Rivers Commission, Perth. June 2000.