



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 6340/1
Permit Holder:	Western Australian Land Authority TA LandCorp
Duration of Permit:	15 February 2015 to 15 February 2020

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 realignment.

2. Land on which clearing is to be done

Lot 594 on Deposited Plan 71791, Roebuck.

3. Area of Clearing

The Permit Holder must not clear more than 5.1 hectares of native vegetation within the area hatched yellow on attached Plan 6340/1.

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 activities to the extent that the Permit Holder has the right to access land under the *Land Administration Act 1997* or any other written law.

PART II – MANAGEMENT CONDITIONS

6. Avoid, minimise etc clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- 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.

7. Weed control

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

- Clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- Ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- Restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

8. Fauna management

- (a) Prior to undertaking any clearing authorised under this Permit, the Permit Holder shall engage a *fauna specialist* to conduct a *fauna survey* of the area hatched yellow on attached Plan 6340/1 to identify *critical habitat* being utilised by fauna listed in the *Wildlife Conservation (Specially Protected Fauna) Notice* and *priority fauna*.
- (b) Prior to undertaking any clearing authorised under this Permit, the Permit Holder shall provide the results of the *fauna survey* in a report to the CEO.
- (c) The *fauna survey* report must include the following:
 - (i) the location of the *critical habitat* 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;
 - (ii) the location of any fauna species, 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;
 - (iii) the name of each fauna species identified;
 - (iv) the methodology, used to survey the Permit Area and to establish the *critical habitat*;
 - (v) the extent of the *critical habitat* of the identified rare or priority fauna shown on a map; and
 - (vi) a description of the *critical habitat* of rare or *priority fauna* found.
- (d) Where fauna are identified under condition 8(a) of this Permit, the Permit Holder shall ensure that:
 - (i) no clearing of *critical habitat* of the identified rare or *priority fauna* occurs, unless first approved by the CEO; and
 - (ii) no taking of identified fauna occurs, unless first approved by the CEO.

PART III – MONITORING, RECORD KEEPING AND REPORTING

9. Records to be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:
In relation to fauna management pursuant to condition 8 of this Permit:

- (a) The location of each fauna identified 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 species name of each fauna identified; and
- (c) a copy of the fauna specialist's report.

10. 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 9 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 31 December of each year.
- (c) Prior to 15 November 2019, the Permit Holder must provide to the CEO a written report of records required under condition 9 of this Permit where these records have not already been provided under condition 10(a) of this Permit.

DEFINITIONS

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

botanist: means a person who holds a tertiary qualification in environmental science or equivalent, and has a minimum of 2 years work experience in identification and surveys of flora native to the bioregion being inspected or surveyed, or who is approved by the CEO as a suitable botanist for the bioregion;

critical habitat: means any part of the Permit Area comprising of the habitat of flora or fauna species and its population, that is critical for the health and long term survival of the flora or fauna species and its population;

fauna specialist: means a person who holds a tertiary qualification specializing in environmental science or equivalent, and has a minimum of 2 years work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed, or who is approved by the CEO as a suitable fauna specialist for the bioregion, and who holds a valid fauna licence issued under the *Wildlife Conservation Act 1950*;

fauna survey: means a field-based investigation, including a review of established literature, of the biodiversity of fauna and/or fauna habitat of the Permit Area. Where conservation significant fauna are identified in the Permit Area, the survey should also include sufficient surrounding areas to place the Permit Area into local context;

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 Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

Wildlife Conservation (Specially Protected Fauna) Notice means those fauna taxa gazetted as rare fauna pursuant to section 14(4)(a) of the *Wildlife Conservation Act 1950* (as amended).

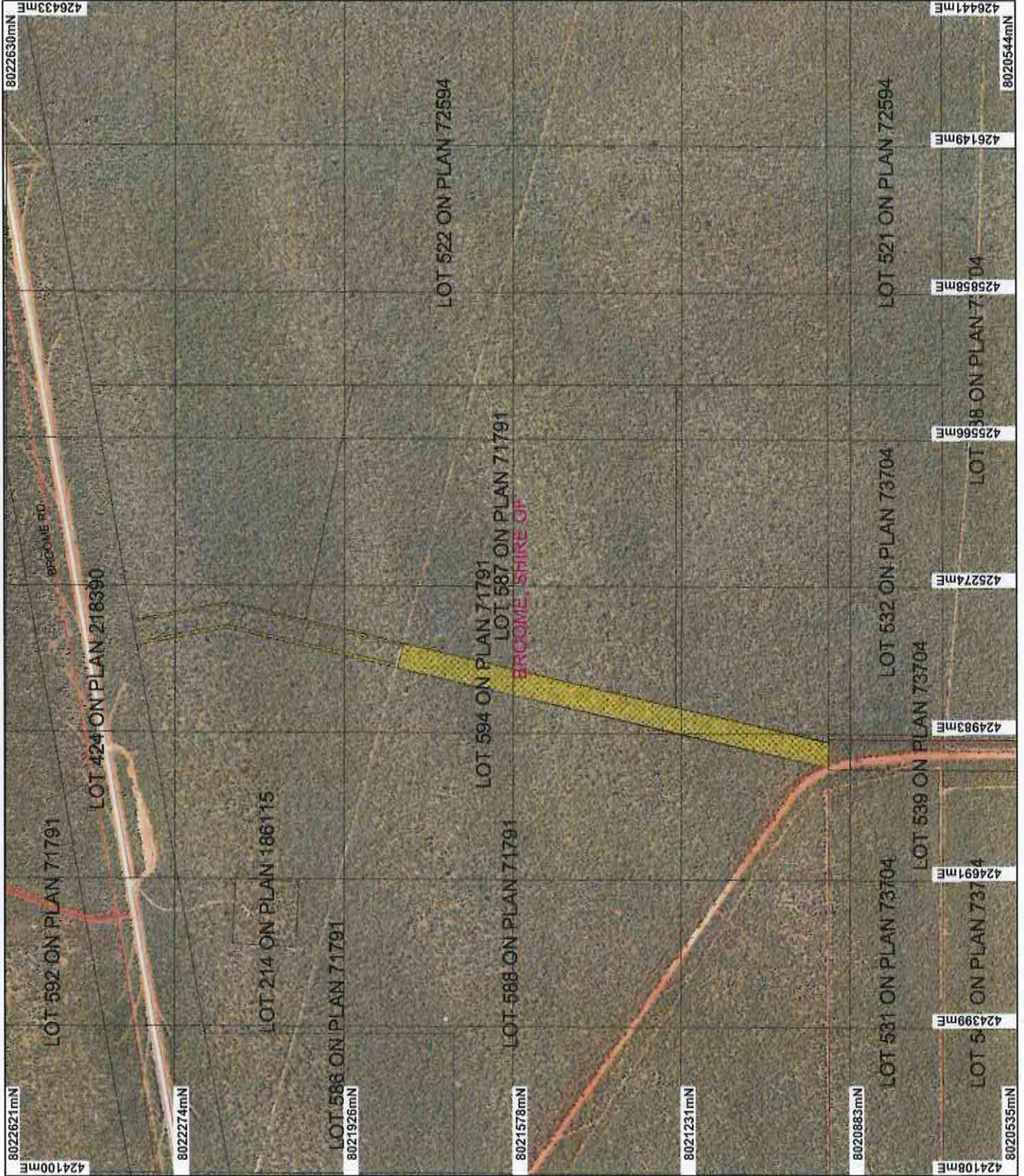


Jane Clarkson
A/SENIOR MANAGER
CLEARING REGULATION

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

15 January 2015

Plan 6340/1



- LEGEND**
- Local Government Authorities
 - Road Centrelines
 - Cadastral
 - Clearing Instruments
 - Areas Approved to Clear
 - Broome 50cm Orthomosaic - Landgate 2007



Scale 1:10666
 (Approximate when reproduced at A4)
 Geocentric Datum Australia 1994
 Note: the data in this map have not been projected. This may result in geometric distortions of measurement instructions.

Jane Clarkson
 Jane Clarkson
 Date 15/1/15

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986
 Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.





Clearing Permit Decision Report

Government of Western Australia
Department of Environment Regulation

1. Application details

1.1. Permit application details

Permit application No.: 6340/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Western Australian Land Authority TA Landcorp

1.3. Property details

Property: LOT 594 ON PLAN 71791 (ROEBUCK 6725)
Local Government Area: Shire of Broome

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 15 January 2015

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Mapped Beard Vegetation Association 750 is described as Shrublands, pindan; Acacia tumida shrubland with grey box & cabbage gum medium woodland over ribbon grass & curly spinifex (Shepherd et al, 2001).	The clearing of 7.32 hectares of native vegetation within Lot 594 on Deposited Plan 71791, Roebuck, is for the purpose of realigning Crab Creek Road.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994) To Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The condition and description of the vegetation was determined via a Preliminary Environmental Impact Assessment and Biological Survey (GHD, 2010). The vegetation under application is comprised of Pindan Woodland which has an emergent tree layer and is dominated by Acacia species. Other species include Eucalyptus and Grevillea species, Gyrocarpus americanus, Erythrophloeum chlorostachys, Bauhinia cunninghamii, Adansonia gregorii, Buchanania obovata and Terminalia canescens (GHD, 2010).

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 may be at variance to this Principle

The clearing of 5.1 hectares of native vegetation within Lot 594 on Deposited Plan 71791, Roebuck, is for the purpose of realigning Crab Creek Road. The condition of the vegetation ranges from good to very good (Keighery, 1994) (GHD, 2010).

The vegetation under application is comprised of Pindan Woodland which has an emergent tree layer and is dominated by Acacia species. Other species include Eucalyptus and Grevillea species, Gyrocarpus americanus, Waltheria indica and Bauhinia cunninghamii (GHD, 2010).

Several priority flora species have been recorded in the local area (10 kilometre radius). The closest of these, is a priority 3 species mapped approximately 350 metres north-west of the application area. A flora survey identified three priority 3 flora species within a larger survey area encompassing the application area. Priority 3 species are known from several locations not under imminent threat, or from few but widespread locations with either a large population size or significant remaining areas of apparently suitable habitat, much of which is not under imminent threat (Parks and Wildlife, 2014). Given the linear shape of the application area, the proposed clearing is not likely to impact on the conservation status of these species (Parks and Wildlife, 2014a).

The application area provides suitable habitat for Bilby and two potential Bilby burrows were observed within the study area (GHD, 2010). This species is classified as rare or likely to become extinct and declared to be in need of special protection under Wildlife Conservation (Specially Protected Fauna) Notice 2014. The application area is situated within close proximity to significant roosting habitat for migratory birds and may therefore also provide habitat for these species. The proponent will be required to engage a fauna specialist to survey the application area for the presence of significant fauna prior to any clearing being undertaken.

There is no rare flora or priority ecological communities mapped within the local area (10 kilometre radius). A Biological Survey undertaken by GHD (2010) identified that the application area does not match that which supports the closest mapped threatened or priority ecological communities.

The local area surrounding the application is extensively vegetated and the Shire of Broome retains approximately 99 per cent of its pre-European vegetation extent (Government of Western Australia, 2013).

Ten weed species were recorded from the study area and two of these species are listed as Declared Plants under the Agriculture and Related Resources Protection Act 1976 (GHD, 2010). The proposed clearing will increase the risk of these species spreading into adjacent vegetated area. Weed mitigation measures will assist in minimising this risk.

The application area may contain three priority 3 flora species and provides suitable habitat for Bilbies and conservation significant migrating bird species, therefore the proposed clearing may be at variance to this Principle. The proposed clearing is not likely to impact on the conservation status of the flora species and the proponent will be required to survey the application area for the presence of the abovementioned fauna prior to clearing, whereby no clearing is to occur without prior approval if these species are found on site.

Methodology

References:

- GHD (2010)
- Parks and Wildlife (2014)
- Parks and Wildlife (2014a)
- Keighery (1994)
- Government of Western Australia (2013)

GIS Databases:

- SAC Bio Datasets (Accessed January 2015)

(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 may be at variance to this Principle

The application area is situated in relatively close proximity to Roebuck Bay which provides a significant habitat for migratory birds.

Six fauna species listed as Migratory and/or Marine under the Environment Protection and Biodiversity Conservation Act 1999 were recorded during a field survey of a larger area incorporating the application area, including the Whistling Kite (*Haliastur sphenurus*), Black-faced Cuckoo-shrike (*Coracina novaehollandiae melanops*), Pallid Cuckoo (*Cuculus pallidus*), Magpie Goose (*Anseranas semipalmata*), Rainbow Bee-eater (*Merops ornatus*) and the Strawnecked Ibis (*Threskiornis spinicollis*) (GHD, 2010). Two priority 4 fauna species, the Bush Stone curlew (*Burhinus grallarius*) and Australian Bustard (*Ardeotis australis*) were also recorded within the larger biological survey area (GHD, 2010).

Although many of the abovementioned bird species have extended home ranges, the application area includes vegetation in a good to very good (Keighery, 1994) condition, and may provide habitat for these species. Given the extent of vegetation remaining within the local area (99 per cent pre-European vegetation remaining within the Shire of Broome), the vegetation on site is not likely to provide significant habitat, however there is the potential for some species to be impacted upon during the clearing process.

The application area is considered to contain suitable habitat for Bilbies, which are known to occur in habitat of Pindan Acacia woodlands (Parks and Wildlife 2014b), which is the identified vegetation type on site (GHD, 2010). The Bilby's distribution in Western Australia is restricted to the northern parts of Western Australia. They are found within the Gibson and Great Sandy deserts, eastern Pilbara and the southern edge of the Kimberley. Bilbies usually spend the daytime in burrows, often built against termite mounds, spinifex hummock or shrub (GHD, 2010).

Two potential Bilby burrows were observed within the study area during the survey of a larger footprint incorporating the application area (GHD, 2010). The hollows appeared unused and no Bilbies were captured during trapping programs engaged by GHD (2010). Despite this, given that the survey and trapping program were undertaken in 2010, and that Bilbies occupy a large foraging range and are known to move up to five kilometres between burrows on consecutive days (Parks and Wildlife 2014b), the application area may form habitat for this species.

Given the above, the proposed clearing may be at variance to this Principle. The proponent will be required to survey the application area for the presence of conservation significant fauna prior to clearing, whereby no clearing is to occur without prior approval if these fauna are found on site.

Methodology

References:

- DEWHA (2012)
- GHD (2010)
- Parks and Wildlife (2014b)

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

Comments Proposal is not at variance to this Principle

There is no rare flora mapped within the local area (10 kilometre radius), and no rare flora species were recorded in a biological survey incorporating the application area (GHD, 2010). Therefore, the proposed clearing does not include rare flora.

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

Methodology References:
-GHD (2010)

GIS Databases:
-SAC Bio Datasets (Accessed January 2015)

(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 at variance to this Principle

The closest threatened ecological community (TEC) to the application area is the Vulnerable Roebuck Bay Mudflats mapped approximately 4.5 kilometres south west of the application area.

The habitat within the application area is not consistent with this habitat type, and given the distance to this TEC, the proposed clearing will not impact on this community.

There were no TECs identified within a biological survey of the application area (GHD, 2010).

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

Methodology References:
-GHD (2010)

GIS Databases:
-SAC Bio Datasets (Accessed January 2015)

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments Proposal is not at variance to this Principle

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

The Dampierland Bioregion, Shire of Broome and mapped Beard Vegetation Association (750) all retain approximately 99 per cent of their pre-European vegetation extent.

The application area is in good to very good (Keighery, 1994) condition (GHD, 2010) and may contain habitat for conservation significant fauna, however is not located within an area that has been extensively cleared.

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

	Pre-European Extent (ha)	Current Extent (ha)	Remaining (%)	Extent in DPaW Managed Lands (%)
IBRA Bioregion*				
Dampierland	8,343,939	8,319,872	99	1
Shire*				
Shire of Broome	5,469,436	5,436,201	99	1
Beard Vegetation Association				
750	1,229,182	1,225,280	99	2

Government of Western Australia (2013)

Methodology References:
-Government of Western Australia (2013)
-Commonwealth of Australia (2001)

(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 Proposal is not at variance to this Principle

The closest watercourse to the application area is an area subject to inundation located approximately five kilometres west. Roebuck Bay, an internationally significant wetland (Ramsar listed site) is located approximately eight kilometres south east of the study area.

Given the distance to mapped hydrological features, and absence of riparian vegetation on site (GHD, 2010), the proposed clearing is not at variance to this Principle.

Methodology GIS Databases:
-Ramsar Sites
-Hydrography, linear
-Hydrography, hierachy

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

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

The soils within the application area have been mapped by Northcote et al (1960-68) as Pindan country with gently undulating sand plains with small rocky sandstone residuals and no external drainage. Chief soils comprise red earthy sands, with associated hummocks of siliceous sands.

Sand plains are highly susceptible to wind erosion, however given the linear shape of the application area, it is not likely that the proposed clearing will result in wind erosion causing appreciable land degradation.

Earthy and siliceous soils are highly permeable, therefore water erosion resulting from the proposed clearing is unlikely, particularly given linearity of the application area and distance to nearest hydrological features.

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

Methodology References:
-Northcote et al (1960-68)

GIS Databases:
-SAC Bio Datasets (January 2015)

(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 at variance to this Principle

The closest conservation area to the proposed clearing is the Roebuck Bay Ramsar site located approximately eight kilometres south east.

Given the distance to this area, and linearity of the application area, the proposed clearing will not impact on this conservation area.

The proposed clearing is not at variance to this Principle.

Methodology GIS Databases:
-Ramsar Sites

(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 is not at variance to this Principle

The closest watercourse to the application area is an area subject to inundation located approximately five kilometres west. Given the distance to this watercourse and lack of connectivity between the application area and the vegetation associated with this watercourse, the proposed clearing will not impact on the quality of surface water.

Groundwater salinity mapped within the application area is less than 500 milligrams per litre (fresh). Given this low salinity level and linearity of the proposed clearing, it is considered that the proposed clearing will not lead to a perceptible rise in the watertable and thus an increase in groundwater salinity levels.

The proposed clearing is not at variance to this Principle.

Methodology GIS Databases:
-Hydrography, linear
-Hydrography, hierachy

(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

Given the linearity of the proposed clearing and distance to hydrological features, the proposed clearing will not cause or exacerbate the incidence or intensity of flooding.

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

Methodology GIS Databases:
-Hydrography, linear
-Hydrography, hierachy

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

Comments

The clearing of 5.1 hectares of native vegetation within Lot 594 on Deposited Plan 71791, Roebuck, is for the purpose of realigning Crab Creek Road. The road is associated with the Broome Road Industrial Area which is proposed for the area north east (adjacent) of the road realignment. The application was initially for 7.52 hectares, however the proponent has amended the application area to exclude parts of the northern portion, as this area had been partially cleared under Clearing Permit CPS 5252/1 for the purpose of constructing an access track.

The application area is zoned 'Industry' under the town planning scheme.

There have been no submissions received from the public for the proposed clearing.

A small portion (northern) of the application area was formerly mapped within the Broome Water Reserve, recognised by the Department of Water as a Priority 3 Public Drinking Water Source Area. The Department of Water (DoW, 2014) has advised that it does not object to the proposed clearing as the previous Priority 3 boundary no longer exists over the application area, due to a boundary revision. The DoW (2014) has advised that the application area is within the Canning-Kimberley Groundwater Area, proclaimed under the Rights in Water and Irrigation Act 1914, whereby there is a current water licence held by a company 20 metres from the road alignment. The DoW (2014) advise that while the licence is not likely to be impacted by the adjacent clearing, recommends that the applicant contact with the licensee to ensure that no infrastructure will be damaged during the works.

Methodology References:
-DoW (2014)

GIS Databases:
-Town Planning Scheme Zones

4. References

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.

DEWHA (2012) Species Profile and Threats Database, *Macrotis lagotis*. <http://www.environment.gov.au/cgi-bin/sprat>. Accessed 13 May 2013. Department of Environment, Water, Heritage and the Arts, Canberra, ACT

DoW (2014) Direct Interest Submission for Clearing Permit Application CPS 6340/1. Department of Water, Perth, Western Australia.

GHD (2010) Preliminary Environmental Impact Assessment and Biological Survey. Additional Information for Clearing Permit Application CPS 6340/1.

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.

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press.

Parks and Wildlife (2014) Conservation Codes For Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia.

Parks and Wildlife (2014a) Flora advice for Clearing Permit Application CPS 6340/1 received 23 December 2014; Department of Parks and Wildlife

Parks and Wildlife (2014b) Fauna advice for Clearing Permit Application CPS 6318/1 received 26 November 2014; Department of Parks and Wildlife (DER ref A836693)

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.