



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 7255/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Gundara Enterprises Pty Ltd

### 1.3. Property details

Property: Mining Lease 04/461  
Colloquial name: Broome Hwy Site

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
7.9		Mechanical Removal	Sand Extraction and Associated Infrastructure

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 27 October 2016

## 2. Background

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

**Vegetation Description** The clearing permit application area has been broadly mapped as the following Beard vegetation association (GIS Database):

750: Shrublands, pindan; *Acacia tumida* shrubland with Grey Box (*Eucalyptus tectifica*)

A flora and fauna survey of the application area was undertaken by EcOz Environmental Consultants in June 2016 (EcOz Environmental Consultants, 2016). Three vegetation communities were identified within the application area:

1. Open canopy cover of *Bauhinia cunninghamii*, *Brachychiton diversifolius*, *Corymbia flavescens*, *Corymbia greeniana* over an open mid-layer of *Acacia eriopoda*, *Acacia tumida*, *Flueggea virosa*, *Grevillea pyramidalis*, *Grewia breviflora*, *Grewia retusifolia*, and *Hakea arborescens*.
2. Open canopy cover of *Brachychiton diversifolius*, *Corymbia flavescens*, *Corymbia greeniana* over an open mid layer of *Acacia eriopoda*, *Acacia tumida*, *Hakea arborescens*, and *Grevillea pyramidalis*. The ground layer consisted of *Aristida holathera*, *Chrysopogon pallidus*, and *Triodia* sp.
3. Open canopy cover of *Brachychiton diversifolius*, *Corymbia flavescens*, *Corymbia zygophylla* over an open mid-layer of *Acacia eriopoda*, *Grevillea pyramidalis*, and *Persoonia falcata*. The ground layer consisted of open *Aristida holathera*, *Chrysopogon pallidus*, and *Triodia* sp.

**Clearing Description** Broome Hwy Site  
Gundara Enterprises Pty Ltd proposes to clear up to 7.9 hectares of native vegetation within a total boundary of approximately 14.9 hectares, for the purpose of sand extraction and associated infrastructure. The project is located approximately seven kilometres north east of Broome, in the Shire of Broome.

**Vegetation Condition** Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Kieghery, 1994).

To

Completely Degraded: No longer intact; completely/almost completely without native species (Kieghery, 1994).

**Comment** The vegetation condition within the application area has been determined by use of flora survey photographs and aerial imagery (EcOz Environmental Consultants, 2016; GIS Database). Most of the vegetation within the application area appears to be in excellent condition. A very small section of the application area is considered degraded due to a track which runs through the south eastern corner (GIS Database). Clearing is for the development of a sand mine and associated infrastructure.

### 3. Assessment of application against Clearing Principles

#### Comments

The application area is located within the Pindanland subregion of the Dampierland Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). The Pindanland IBRA subregion comprises of sandplains of the Dampier Peninsula and western part of Dampier Land, including the hinterland of Eighty Mile Beach, and the vegetation is described primarily as Pindan (Graham 2001).

The application area is wholly located within a water reserve (Crown Reserve 25761). This area is proclaimed under the *Rights in Water and Irrigation Act 1914* (DoW, 2016). Advice from the Department of Water (DoW) is that the proponent will need to apply to the DoW for a 26D licence to construct or alter any water supply bores and a 5C licence to take groundwater (DoW, 2016). Any dewatering requirements may also need to be licensed and should be included in an application to take water (DoW, 2016).

The application area is wholly comprised of Beard vegetation association 750 (GIS Database). Greater than 99% of the pre-European extent of this association remains within the Dampierland bioregion (Government of Western Australia, 2015). Therefore the area proposed to be cleared does not represent a significant remnant of native vegetation within an area that has been extensively cleared.

The application area does not fall within the boundaries of any Priority Ecological Communities (PEC) or Threatened Ecological Communities (TEC) (GIS Database). The application area does not occur within a conservation area (GIS Database).

A flora and vegetation survey was undertaken over Mining Lease 04/461 by EcOz in June 2016 (EcOz Environmental Consultants, 2016). No Threatened or Priority flora were recorded during the survey.

A fauna survey was undertaken over Mining Lease 04/461 by EcOz Environmental Consultants in June 2016 (EcOz Environmental Consultants, 2016). Nineteen fauna species were recorded during the fauna survey comprising of 18 bird species and one mammal (EcOz Environmental Consultants, 2016). The application area falls within current known distributions of the Greater Bilby (DPaW, 2016a). There are records from the past two years surrounding the application area, including in areas of disturbance such as road verges and soil heaps (DPaW, 2016a). No burrows, diggings or other signs of the Greater Bilby were identified during the survey. No Threatened or Priority fauna were recorded during the survey (EcOz Environmental Consultants, 2016).

Several weed species have a potential to occur within the application area (DPaW, 2016b). Weeds have the potential to out-compete native flora and reduce the biodiversity of an area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

Areas surrounding the application area are known to be subjected to inundation during periods of heavy rain. Most rainfall occurs over the December to March period during the monsoonal season (BoM, 2016). Cleared areas will have the potential to experience erosion during these heavy rainfall events. Potential erosion resulting from the proposed clearing may be minimised by a staged clearing condition.

Given an average annual rainfall of 611 millimetres and an average annual evaporation rate of 3200 millimetres (BoM, 2016; GIS Database), any surface water resulting from normal rainfall events is likely to be relatively short lived. The application area is within the Cape Leveque Coast Basin catchment area which covers 2,137,723 hectares (GIS Database). Given the size of the area to be cleared (7.9 hectares) in relation to the size of the catchment area, the proposed clearing is not likely to increase the incidence or intensity of flooding. As evaporation rate greatly exceeds rainfall it is unlikely that the small scale of clearing will result in increased groundwater recharge or lead to a reduction in groundwater quality.

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*, and the proposed clearing is not likely to be at variance with Principles (a), (b), (c), (d), (f), (h), (i), and (j), may be at variance with Principle (g), and is not at variance to Principle (e).

#### Methodology

BoM (2016)  
DoW (2016)  
DPaW (2016a)  
DPaW (2016b)  
EcOz Environmental Consultants (2016)  
Government of Western Australia (2015)  
Graham (2001)

GIS Database:  
- DPaW Tenure  
- IBRA Australia  
- Imagery  
- Hydrographic Catchments - Catchments  
- Hydrography, linear

- Pre – European Vegetation
- Threatened and Priority Flora List
- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers

**Officer** Lauren Stirbinskis

### **Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.**

**Comments** There is one native title claim (WC1999/023) over the area under application (DAA, 2016). This claim has been registered with the Native Title Tribunal on behalf of the claimant group. However, the tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (ie. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Sites of Aboriginal Significance located in the area applied to clear (DAA, 2016). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Sites of Aboriginal Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, the Department of Parks and Wildlife and the Department of Water, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The clearing permit application was advertised on 3 October 2016 by the Department of Mines and Petroleum inviting submissions from the public. One submission was received, raising concerns in relation to native title rights and impacts to flora and fauna. A written response was provided on the matter raised.

**Methodology** DAA (2016)

**Officer** Lauren Stirbinskis

## **4. Assessor's recommendations**

### **Comment / recommendation**

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the Environmental Protection Act 1986, and the proposed clearing is not likely to be at variance with Principles (a), (b), (c), (d), (f), (h), (i), and (j), may be at variance with Principle (g), and is not at variance to Principle (e).

## **5. References**

- BoM (2015) Climate Statistics for Australian Locations. A Search for Climate Statistics for Newman, Australian Government Bureau of Meteorology. <http://www.bom.gov.au> (Accessed 20 October 2016)
- DAA (2016) Aboriginal Heritage Inquiry System, Department of Aboriginal Affairs, Perth, Western Australia < <http://maps.dia.wa.gov.au> > Accessed August 2016.
- DoW (2016) Advice received in relation to Clearing Permit Application CPS 7255/1. Department of Water, Western Australia, October 2016.
- DPaW (2016a) Advice received in relation to Clearing Permit Application CPS 7153/1 – Threatened and Priority Fauna. Department of Parks and Wildlife, Western Australia, September 2016.
- DPaW (2016b) NatureMap. Department of Parks and Wildlife. <http://naturemap.dec.wa.gov.au> (Accessed 20 October 2016)
- EcOz Environmental Consultants (2016) Level 1 Flora and Fauna Survey Report for Broome Hwy Site. Report prepared for Gundara Enterprises Pty Ltd, by EcOz Environmental Consultants, Western Australia, July 2016.
- Government of Western Australia (2015) 2015 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2015. WA Department of Environment and Conservation, Perth.
- Graham (2001) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Dampierland 2 (DL2 – Pindanland subregion) Department of Conservation and Land Management, Western Australia.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

## 6. Glossary

### Acronyms:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>DAA</b>	Department of Aboriginal Affairs, Western Australia
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia (now DPaW and DER)
<b>DER</b>	Department of Environment Regulation, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia
<b>DRF</b>	Declared Rare Flora
<b>DotE</b>	Department of the Environment, Australian Government
<b>DoW</b>	Department of Water, Western Australia
<b>DPaW</b>	Department of Parks and Wildlife, Western Australia
<b>DSEWPaC</b>	Department of Sustainability, Environment, Water, Population and Communities (now DotE)
<b>EPA</b>	Environmental Protection Authority, Western Australia
<b>EP Act</b>	<i>Environmental Protection Act 1986</i> , Western Australia
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
<b>GIS</b>	Geographical Information System
<b>ha</b>	Hectare (10,000 square metres)
<b>IBRA</b>	Interim Biogeographic Regionalisation for Australia
<b>IUCN</b>	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
<b>PEC</b>	Priority Ecological Community, Western Australia
<b>RIWI Act</b>	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
<b>TEC</b>	Threatened Ecological Community

### Definitions:

{DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia):-

<b>T</b>	<b>Threatened species:</b> Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).  <b>Threatened fauna</b> is that subset of ‘Specially Protected Fauna’ declared to be ‘likely to become extinct’ pursuant to section 14(4) of the Wildlife Conservation Act.  <b>Threatened flora</b> is flora that has been declared to be ‘likely to become extinct or is rare, or otherwise in need of special protection’, pursuant to section 23F(2) of the Wildlife Conservation Act.  The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.
<b>CR</b>	<b>Critically endangered species</b> Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
<b>EN</b>	<b>Endangered species</b> Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
<b>VU</b>	<b>Vulnerable species</b> Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
<b>EX</b>	<b>Presumed extinct species</b> Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i> , in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.

- IA Migratory birds protected under an international agreement**  
Birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- CD Conservation dependent fauna**  
Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- OS Other specially protected fauna**  
Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- P Priority species**  
Species which are poorly known; or  
Species that are adequately known, are rare but not threatened, and require regular monitoring. Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.
- P1 Priority One - Poorly-known species:**  
Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.
- P2 Priority Two - Poorly-known species:**  
Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.
- P3 Priority Three - Poorly-known species:**  
Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.
- P4 Priority Four - Rare, Near Threatened and other species in need of monitoring:**  
(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.  
(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for Vulnerable, but are not listed as Conservation Dependent.  
(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

**Principles for clearing native vegetation:**

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (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.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.
- (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.
- (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.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (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.
- (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.
- (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.