



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit Application No.: 5228/2  
Permit Type: Purpose

### 1.2. Proponent details

Proponent's Name: Onslow Resources Ltd

### 1.3. Property details

Property: Mining Lease 08/468  
Local Government Area: Shire of Ashburton  
Colloquial Name: Duck Creek Shingle Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
83		Mechanical	Mineral Production

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 22 August 2013

## 2. Site Information

### 2.1. Existing environment and information

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

**Vegetation Description** Beard vegetation associations have been mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. The following Beard vegetation association is located within the application area (GIS Database):

103: Hummock grasslands, shrub steppe; snakewood over soft spinifex and *Triodia wiseana*.

A flora and vegetation survey of the application area was undertaken by Pilbara Flora as part of a larger survey of five different project areas occurring over 13 mining tenements in the Ashburton Onslow region (Duck Creek Shingle Project being one of the projects). The application area was surveyed between 7 and 8 November 2009 and 22 and 24 March 2010. The survey identified the following nine vegetation types and disturbed area in the application area (Newland Environmental Pty Ltd (Newland Environmental), 2012):

#### Hills

1. Vegetation type 5: Open grassland of *Triodia wiseana* on low schistose hills.

#### Plains

2. Vegetation type 26: Low woodland of *Acacia citrinoviridis* and *Eucalyptus victrix* on floodplains.

3. Vegetation type 27: High shrubland of *Acacia synchronicia* on floodplains.

#### River Banks

4. Vegetation type 31: Woodland of *Melaleuca argentea* and *Eucalyptus victrix* on the Duck Creek river banks.

5. Vegetation type 32: Low open forest of *Eucalyptus victrix*, *Eucalyptus camaldulensis* var. *obtusa* and *Acacia citrinoviridis* on Duck Creek river banks.

6. Vegetation type 33: Open forest of *Eucalyptus victrix* over *Melaleuca glomerata* and *Acacia citrinoviridis* on the Duck Creek river banks.

#### River Beds

7. Vegetation type 34: Scattered low trees of *Eucalyptus camaldulensis* var. *obtusa* in the Duck Creek river bed.

8. Vegetation type 35: Open forest of *Eucalyptus victrix*, *Eucalyptus camaldulensis* var. *obtusa* and *Acacia citrinoviridis* in the Duck Creek river bed.

9. Vegetation type 37: Mixed species scattered herbs in the disturbed and scoured Duck Creek river bed.

#### Clearing Description

Onslow Resources Limited has applied to clear 83 hectares within an application area of approximately 226 hectares (GIS Database). The application area is located approximately 130 kilometres south east of Onslow (GIS Database).

The purpose of the application is for sand and shingle mining which involves excavation of sand and shingle from the Duck Creek river bed. Stage 1 of the operations consists of 3 hectares of proposed clearing for a small mining area, and a processing and stockpiling area in the east of the tenement. Stage 2 of the proposed operation includes river bed excavation areas (12 hectares), processing and stockpiling areas (13 hectares) and roads (5 hectares) (Newland Environmental, 2012). A further 50 hectares has been included for a possible Stage 3 mining project. Clearing will be by mechanical means.

**Vegetation Condition** Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994);  
To  
Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).

**Comment** The vegetation condition of each vegetation type was determined by Pilbara Flora using a scale based on Trudgen (1988). These condition ratings were converted to the Keighery (1994) scale.

The application area is located on Mount Stuart Pastoral Station and Crown Reserve 1108. According to Newland Environmental (2012), Reserve 1108 is vested with the Department of Planning and Infrastructure as a 'Watering Place' and appears to be historical and inactive for a considerable amount of time.

Due to time constraints only reconnaissance and vegetation mapping was undertaken in the western portion of Mining Lease 08/468 (Newland Environmental, 2012). Pilbara Flora (2012) notes that poor rainfall conditions in 2009 and 2010 could have affected the growth of annuals and forbs, however any impact on the flora survey would have been minimised to some extent by the pre-survey rainfall that did occur.

Clearing permit CPS 5228/1 was granted by the Department of Mines and Petroleum (DMP) on 13 December 2012 and was valid from 5 January 2013 to 5 January 2018. The clearing permit authorised the clearing of up to 80 hectares of native vegetation. An application for an amendment to clearing permit CPS 5228/1 was submitted to DMP on 28 June 2013 to increase the amount of clearing authorised to 83 hectares and increase the clearing permit boundary.

### 3. Assessment of application against clearing principles

#### Comments

Onslow Resources Ltd has applied to increase the amount of clearing authorised from 80 hectares to 83 hectares, and increase the clearing permit boundary from approximately 194 hectares to 226 hectares. The permit boundary would increase to the whole of Mining Lease 08/468.

The flora and vegetation survey by Pilbara Flora covered the entirety of Mining Lease 08/468 so the additional area being applied for is covered by the original survey. The additional area comprises the same vegetation types as the original application area (Newland Environmental, 2012). No vegetation formations recorded were considered to be Threatened or Priority Ecological Communities and no Threatened or Priority Flora were recorded within the additional area (Newland Environmental, 2012). The fauna habitat assessment by Newland Environmental in March 2010 covered the additional area and the fauna habitat types are as described for the original permit area (Newland Environmental, 2012). The assessment of Clearing Principles (a), (b), (c) and (d) is consistent with the assessment in Clearing Permit Decision Report CPS 5228/1. Therefore, the proposed clearing may be at variance to Principle (b), and is not likely to be at variance to Principles (a), (c) and (d).

Part of the additional area is within the Duck Creek and represents riparian vegetation. To reduce the impact of the mining operations on the river bed vegetation formations, Onslow Resources Ltd has made a commitment to avoid riverine vegetation wherever practical and, in particular, the larger tree species occurring in Duck Creek (Newland Environmental, 2012). The proposed clearing is at variance to Principle (f).

Current environmental information has been reviewed (GIS Database) and the assessment of Clearing Principles (e), (g), (h) and (j) is consistent with the assessment in Clearing Permit Decision Report CPS 5228/1.

**Methodology** Newland Environmental (2012)  
GIS Database:  
- DEC Tenure  
- Hydrography, Linear  
- IBRA WA (Regions – Subregions)  
- Pre-European Vegetation  
- Public Drinking Water Source Areas (PDWSAs)  
- Rangeland Land System Mapping  
- Threatened and Priority Flora  
- Threatened Ecological Sites Buffered  
- Threatened Fauna

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

#### Comments

There is one Native Title Claim (WC05/4) over the area under application (GIS Database). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the mining tenure

has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. 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 two registered Aboriginal Sites of Significance within the application area (GIS Database). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal sites of significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation (formerly the Department of Environment and Conservation) 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 amendment was advertised on 15 July 2013 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

**Methodology** GIS Database  
- Aboriginal Sites of Significance  
- Native Title Claims – Registered with the NNTT

#### 4. References

- Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Newland Environmental (2012) Supporting Information for a Native Vegetation Clearing Permit Application Purpose Permit Duck Creek Shingle Project – Stage 2 on M08/468. Unpublished report for Onslow Resources Ltd dated August 2012.
- Pilbara Flora (2012) *Flora and Vegetation Survey for the Duck Creek Sand and Shingle Operation on M08/456, M08/468 and L08/44*. Unpublished report for Onslow Resources Ltd dated May 2010 (Revised August 2012).
- Trudgen, M.E. (1988) *A Report on the Flora and Vegetation of the Port Kennedy Area*. Unpublished Report Prepared for Bowman Bishaw and Associates, West Perth.

#### 5. Glossary

##### Acronyms:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>CALM</b>	Department of Conservation and Land Management (now DEC), Western Australia
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia
<b>DEH</b>	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
<b>DEP</b>	Department of Environment Protection (now DEC), Western Australia
<b>DIA</b>	Department of Indigenous Affairs
<b>DLI</b>	Department of Land Information, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia
<b>DoE</b>	Department of Environment (now DEC), Western Australia
<b>DoIR</b>	Department of Industry and Resources (now DMP), Western Australia
<b>DOLA</b>	Department of Land Administration, Western Australia
<b>DoW</b>	Department of Water
<b>EP Act</b>	Environmental Protection Act 1986, Western Australia
<b>EPBC Act</b>	Environment Protection and Biodiversity Conservation Act 1999 (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>RIWI Act</b>	Rights in Water and Irrigation Act 1914, Western Australia
<b>s.17</b>	Section 17 of the Environment Protection Act 1986, Western Australia
<b>TEC</b>	Threatened Ecological Community

##### Definitions:

{Atkins, K (2005). *Declared rare and priority flora list for Western Australia, 22 February 2005*. Department of Conservation and Land Management, Como, Western Australia} :-

**P1** **Priority One - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands.

Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.

- P2** **Priority Two - Poorly Known taxa:** taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
- P3** **Priority Three - Poorly Known taxa:** taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.
- P4** **Priority Four – Rare taxa:** taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.
- R** **Declared Rare Flora – Extant taxa (= Threatened Flora = Endangered + Vulnerable):** taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.
- X** **Declared Rare Flora - Presumed Extinct taxa:** taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

- Schedule 1** **Schedule 1 – Fauna that is rare or likely to become extinct:** being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.
- Schedule 2** **Schedule 2 – Fauna that is presumed to be extinct:** being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.
- Schedule 3** **Schedule 3 – Birds protected under an international agreement:** being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.
- Schedule 4** **Schedule 4 – Other specially protected fauna:** being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). *Priority Codes for Fauna*. Department of Conservation and Land Management, Como, Western Australia} :-

- P1** **Priority One: Taxa with few, poorly known populations on threatened lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P2** **Priority Two: Taxa with few, poorly known populations on conservation lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P3** **Priority Three: Taxa with several, poorly known populations, some on conservation lands:** Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P4** **Priority Four: Taxa in need of monitoring:** Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.
- P5** **Priority Five: Taxa in need of monitoring:** Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

**Categories of threatened species (*Environment Protection and Biodiversity Conservation Act 1999*)**

- EX** **Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.
- EX(W)** **Extinct in the wild:** A native species which:  
(a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or  
(b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
- CR** **Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
- EN** **Endangered:** A native species which:  
(a) is not critically endangered; and

(b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.

**VU**

**Vulnerable:** A native species which:

(a) is not critically endangered or endangered; and

(b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.

**CD**

**Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

**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.