



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 6654/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Western Areas Limited

### 1.3. Property details

Property: Mineral Lease 77/545  
Local Government Area: Shire of Kondinin  
Colloquial name: Forrestania Nickel Operation.

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
12		Mechanical Removal	Mineral Production and Associated Activities

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 20 August 2015

## 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. One Beard vegetation association is located within the application area (GIS Database):

**Beard vegetation association 2048:** Shrublands; scrub-heath in the Mallee Region.

Astron Environmental Services conducted a flora and vegetation survey over the application area during October 2014. The survey identified three vegetation types:

- 1) *Banksia cirsioides* open low scrub over mixed dwarf scrub
- 2) *Eucalyptus eremophila* open tree mallee over mixed *Melaleuca* species open dwarf scrub to Heath: and
- 3) *Eucalyptus platycorys* open tree mallee to tree mallee over *Melaleuca hamata* open low scrub to low scrub over mixed open dwarf scrub.

**Clearing Description** Forrestania Nickel Operation.  
Western Areas Limited proposes to clear up to 12 hectares of native vegetation within a total boundary of approximately 121 hectares, for the purpose of mineral production and associated activities. The project is located approximately 80 kilometres east of Hyden in the Shire of Kondinin.

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

**Comment** Vegetation condition was derived from a flora and vegetation survey conducted by Astron Environmental Services (2014)

**Note:** There is a small area within the northern section of the application area where disturbance has occurred as a result of previous operations. The vegetation in this area (~1% of application area) is considered to be in Good condition (Astron, 2014).

## 3. of application against clearing principles

### Comments

The application area within falls within the Eastern Mallee (Mal) subregion of the Mallee Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). The Mallee IBRA region is considered a Schedule 1 Area (GIS Database). The Eastern Mallee subregion comprises calcareous clays and loams as duplex soils that often contain sheet and modular kankar, outcrops of metamorphosed sandstone, and white and yellow sandplains and loamy plains with numerous salt pans (pan fields) (CALM, 2002). The subregion is characterised by mallee on sandplains, samphire around small salt lakes, mallee and patches of woodland on clay, and scrubheath on sandstone (CALM, 2002).

The proposed clearing of up to 12 hectares of native vegetation is for the purpose of mineral production and associated activities and involves the installation of an access road and a sand pit (Western Areas Limited, 2015). The vegetation under application is considered to be in excellent condition (Astron, 2014), however there is significant disturbance to the east of the application area, in the form of previous mine development and previously cleared areas are currently being rehabilitated immediately east of the application area (Astron, 2014; GIS Database).

The majority of the application area (104 hectares) lies within the buffer of the Lake Cronin (an Environmentally Sensitive Area). While vegetation providing protection to the Lake Cronin wetland may be locally significant (Astron, 2014), the proposed clearing is situated on the edge of the buffer, over 8 kilometres west of the lake itself (GIS Database). Disturbance within adjacent areas directly east of the application area are present in the form of historic and current mining activities and the vegetation under application is unlikely to be necessary for the continued protection of Lake Cronin.

A flora and vegetation survey of the application area identified 128 taxa from 32 families and 72 genera (Astron, 2014). No threatened flora were identified and, based on comprehensive searches of the area, none are considered likely to occur (Astron, 2014). A population of the Threatened flora species, *Eucalyptus Steedmanii*, is located 1 kilometre south of the application area. The proponent has developed a management plan and is currently monitoring this population (Western Areas Ltd, 2015). Impacts to the nearby population of *Eucalyptus Steedmanii* as a result of the proposed clearing are considered unlikely.

One Priority flora species, *Eutaxia hirsuta* (P2), was recorded during the flora and vegetation survey (Astron, 2014). One individual of this species was identified in association with sandplain heath vegetation. This species is known from several locations at some distance from the application area and occurs in areas reserved for conservation (Astron, 2014). Given the known distribution of this species, the occurrence of specimens within conservation reserves and the extent of suitable habitat outside of the survey area, it is unlikely that the proposed clearing will have a significant impact on the regional conservation status of this taxa (Astron, 2014).

It is possible that up to 23 flora species of conservation significance were not recorded during the flora and vegetation survey due to their cryptic nature, but may persist within the application area (Astron, 2014). At least 12 flora and vegetation surveys have been completed in the local area and the occurrence of priority flora species has been well documented. Based on the known locations and number of individuals recorded in previous surveys, the proposed clearing is unlikely to result in significant impacts, at a population or community level, to any of the 23 Priority flora species identified as potentially occurring within the application area (Astron, 2014). The proponent has developed and will implement internal procedures, which includes the identification and avoidance of Priority flora species (Western Areas Limited, 2015). Potential impacts to Priority flora species as a result of the proposed clearing may be minimised by the implementation of a flora management condition.

No introduced plant taxa (weeds) were identified within the application area (Astron, 2014). The proposed clearing activities have the potential to result in the introduction or spread of weed species, which may negatively impact on the biodiversity of the local area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

One Beard vegetation association is mapped over the area under application. Beard vegetation association 2048 retains over 49% of pre-European levels of vegetation within the state and bioregion (Commonwealth of Australia, 2001; Government of Western Australia, 2013). This is above the 30% threshold level recommended in the National Objectives Targets for Biodiversity Conservation below which, species loss appears to accelerate exponentially at an ecosystem level (EPA, 2000).

No threatened or priority ecological communities are known within the application area. The closest of which, a Priority 3 Priority Ecological Community (PEC) "Ironcap Hills vegetation complexes" is situated approximately 800 metres south. The proposed clearing is located outside the buffer to this PEC and therefore the proposed clearing is unlikely to result in any significant impacts to this community.

Five fauna species of conservation significance listed as either threatened species under the *Environment Protection and Biodiversity Conservation Act* (EPBC) 1999 or protected under Western Australian legislation (*Wildlife Conservation Act 1950* (WC)) have been recorded, or are highly likely to utilise the vegetation under application (Astron, 2014, AES, 2015):

- Carnaby's Black Cockatoo (*Calyptorhynchus latirostris* – EPBC Act and WC Act Endangered);
- Rainbow Bee-eater (*Merops ornatus* – EPBC Act, Migratory);
- Carpet Python (*Morelia spilota imbricata* – WC Act Schedule 4);
- Chuditch (*Dasyurus geoffroii* – WC Act, Schedule 1); and
- Malleefowl (*Leipoa ocellata* - WC Act, Schedule 1)

An additional 5 Priority listed species, recognised by DPaW as being of conservation significance have also been identified as potentially utilising the application area; the Shy Heathwren (*Hylacola cauta whitlocki* - P4), Rufous Fieldwren (*Calamanthus campestris montanellus* - P4), Lake Cronin Snake (*Paroplocephalus atriceps* – P3), Western Rosella (*Platycercus icterotis xanthogenys* – P4) and Western Brush Wallaby (*Macropus imma* - P4) (AES, 2015). Given the amount of surrounding vegetation and highly mobile nature of the abovementioned fauna species, clearing related impacts are likely to be negligible (Astron, 2014). The Lake Cronin Snake is

poorly understood and despite several fauna surveys in the local area, this species has not been recorded (Astron, 2014).

Of the fauna species likely to occur within the application area, the Carpet Python is the least mobile and potential impacts may arise from the proposed activities. The proponent has developed and will implement fauna management measures to reduce potential impacts to local fauna species.

A level one fauna survey of the application area recorded twenty-seven fauna species, comprised of 26 bird species and one mammal. One fauna of conservation significance was recorded; the Crested bellbird (*Oreoica gutturalis gutturalis* – P4) and suitable habitat for Carnaby's Black Cockatoo was identified throughout the application area (Astron, 2014).

The crested bellbird is a highly mobile species that has been recorded from several locations in the vicinity. It is likely to be widespread throughout the area in low densities and is considered unlikely to be reliant on the vegetation under application (Astron, 2014).

The clearing permit boundary covers an area of approximately 121 hectares. Of this area, approximately 87.8 hectares consists of *Banksia* low heath habitat and 54.7 hectares is considered *Eucalyptus* mallee woodland habitat (Astron, 2014). Both habitat types provide potential foraging habitat for Carnaby's Black Cockatoo. This species could be expected to occur on an infrequent basis, foraging within the application area during their annual migration activities (Astron, 2014). However similar foraging habitat exists within the local area and both habitat types can be broadly found within the Western Mallee subregion (Astron, 2014). In addition to this, no breeding hollows or potential breeding trees were recorded during a site inspection (Astron, 2014).

Australasian Ecological Services (AES) reviewed the Astron survey, as well as aerial imagery and conducted a brief site inspection of the application area. AES (2015) estimated that there is approximately 2,467 ha of good quality potential foraging habitat for Carnaby's Black Cockatoos in the local area and that the proposed clearing would represent only a very negligible loss of potential foraging habitat (AES, 2015). During the site inspection the *Banksia* low heath was not flowering but did have fruit and no evidence of feeding was observed (AES, 2015). It must be noted that the date of the site inspection was not provided by AES. This being considered the proposed clearing of up to 12 ha of native vegetation is unlikely to significantly impact on the availability of foraging habitat for Carnaby's Black Cockatoos on a local or regional scale.

Three Malleefowl mounds were recorded to the south application area, where areas of denser mallee vegetation persists (AES, 2015). There is very little preferred habitat within the application area (GIS Database) and the proponent has developed a Malleefowl Conservation Plan for nearby areas that will be implemented when conducting the proposed clearing.

The nearest conservation area is situated approximately 9 kilometres from the application area (GIS Database) and large continuous areas of vegetation remain in the local area and region (GIS Database; Western Areas Ltd, 2015).

There are no major or minor watercourses mapped as occurring within the application area (GIS Database) and given the location and relatively small scale of the proposed clearing, land degradation issues are unlikely to arise as a result. The proponent has developed mitigation measures to reduce the potential for land degradation (Western Areas Ltd, 2015). Potential impacts to surface stability as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition.

The application to clear 12 hectares of native vegetation for the purpose of a mineral production and associated activities in an already highly disturbed setting is unlikely to have any significant, unmanageable environmental issues.

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 may be at variance to Principles (a) and (b), is not likely to be at variance with Principles (c), (d), (f), (g), (h), (i), and (j) and is not at variance to Principle (e).

## Methodology

AES (2015)  
Astron (2014)  
CALM (2002)  
Commonwealth of Australia (2001)  
EPA (2000)  
Government of Western Australia (2013)  
Keighery (1994)  
Western Areas (2015)  
GIS Database:  
- DEC Tenure  
- Imagery  
- Groundwater Salinity  
- Hydrographic Catchments – Catchments  
- Hydrography, linear  
- IBRA WA (Regions - Sub Regions)

- Pre-European Vegetation
- Public Drinking Water Source Areas (PDWSAs)
- RIWI Act, Groundwater Areas
- Soils, statewide
- Threatened and Priority Flora List
- Threatened Ecological Sites Buffered
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Ecological Communities Boundaries

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

### Comments

There are two Native Title Claims (WC2003/006 and WC2000/007) over the area under application (GIS Database). These claims claim has been registered with the National 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 (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 no registered Sites of Aboriginal Significance located in the area applied to clear (GIS Database; DAA, 2014). 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.

It is noted that the proposed clearing may impact on a protected matter under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). The proponent may be required to refer the project to the (Federal) Department of the Environment for environmental impact assessment under the EPBC Act. The proponent is advised to contact the Department of the Environment for further information regarding notification and referral responsibilities under the EPBC Act.

The clearing permit application was advertised on 27 July 2015 by the Department of Mines and Petroleum (DMP) inviting submissions from the public. No submissions were received.

**Methodology** DAA (2015)  
GIS Database:  
- Aboriginal Sites of Significance

## 4. References

- AES (2015) Proposed Flying Fox Lounge Lizard sandpit clearing permit envelope fauna review. Australasian Ecological Services, Wanneroo, Western Australia.
- Astron (2014) Forrestania Nickel Operations Lounge Lizard Vegetation, Flora and Fauna Biological Assessment (Unpublished report). Astron Environmental Services, East Perth, Western Australia.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management.
- Commonwealth of Australia (2001) National Targets and Objectives for Biodiversity Conservation 2001-2005, AGPS, Canberra
- DAA (2015) Aboriginal Heritage Inquiry System, Government of Western Australia, Department of Aboriginal Affairs, Perth, < <http://maps.dia.wa.gov.au/AHIS2/>>.
- 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 June 2014. 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.
- Western Areas Ltd (2015) Supporting Document for Clearing Permit Application CPS 6654/1 - Mining Tenement M77/545. Unpublished Report Prepared by Western Areas Limited.

## 5. 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

DotE	Department of the Environment, Australian Government
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DotE)
EPA	Environmental Protection Authority, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
s.17	Section 17 of the <i>Environment Protection Act 1986</i> , Western Australia
TEC	Threatened Ecological Community

## **Definitions:**

{DPaW (2013) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

- T Threatened species:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna or the Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).  
  
Threatened Fauna and Flora are further recognised by the Department according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorhynchus latirostris* is specially protected under the *Wildlife Conservation Act 1950* as a threatened species with a ranking of Endangered.  
  
Rankings:  
CR: Critically Endangered - considered to be facing an extremely high risk of extinction in the wild.  
EN: Endangered - considered to be facing a very high risk of extinction in the wild.  
VU: Vulnerable - considered to be facing a high risk of extinction in the wild.
- X Presumed Extinct species:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora (which may also be referred to as Declared Rare Flora).
- IA Migratory birds protected under an international agreement:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice.  
Birds that are subject to an agreement between governments of Australia and Japan, China and The Republic of Korea relating to the protection of migratory birds and birds in danger of extinction.
- S Other specially protected fauna:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- P1 Priority One - Poorly-known species:**  
Species that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, rail reserves and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.
- P2 Priority Two - Poorly-known species:**  
Species that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.
- P3 Priority Three - Poorly-known species:**  
Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities 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 localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.
- 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 do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
- (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

**P5**

**Priority Five - Conservation Dependent species:**

Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five 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.