



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7823/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: John Kiesey, Andrea Kiesey, John Ogg, Kerrie Ogg

1.3. Property details

Property: Mining Lease 08/510
Local Government Area: Shire of Exmouth
Colloquial name: Exmouth Sands Supply

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
6.9		Mechanical Removal	Sand Mining and associated activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 21 December 2017

2. Site Information

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: 662: Hummock grassland; shrub steppe; mixed acacia scrub and dwarf scrub with soft spinifex and *Triodia basedowii* (GIS Database).

A Level 1 flora and vegetation survey was conducted over Mining Lease 08/510 on 29 November 2014, and recorded the following two vegetation communities (Exmouth Sands Supply, 2017):

Mulga Scrubland over Spinifex and Buffel Grass; and

Mulga Scrub with Banksia and Myrtaceous Heath over Spinifex and Buffel Grass.

Clearing Description Exmouth Sands Supply.
J and A Kiesey and J and K Ogg propose to clear up to 6.9 hectares of native vegetation within a boundary of approximately 7.45 hectares, for the purpose of sand mining and associated activities. The project is located approximately 5 kilometres north of Exmouth, within the Shire of Exmouth.

Vegetation Condition Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

Comment The proposed clearing comprises of five hectares for sand mining operations, and 1.9 hectares for an access road and laydown areas (Exmouth Sands Supply, 2017). The access road is approximately 800 meters long and runs in an easterly direction from the proposed sand mining area, connecting to a shire road.

Clearing for sand extraction activities will be conducted in stages, with rehabilitation occurring progressively as the active mining area moves slowly across the site (Exmouth Sands Supply, 2017).

3. Assessment of application against clearing principles

Comments

The clearing permit application area is located north of Exmouth on the north-eastern part of the Cape Range peninsula, within the Cape Range subregion of the Carnarvon Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). The Cape Range peninsula is characterised by rugged tertiary limestone ranges and extensive areas of red aeolian dunefields (CALM, 2002). The climate of the area is arid, semi-desert to subtropical, with variable summer and winter rainfall (CALM, 2002).

The native flora and fauna of the Cape Range peninsula has been recognised as rich and diverse, in particular the limestone karst areas (EPA, 1999). The limestone karst areas support a species rich flora, one of the world's most diverse subterranean fauna, and are also rich in terrestrial fauna, particularly reptiles (EPA, 1999).

The proposed clearing area is situated on red sand dunes and plains, with no limestone ridges and minimal exposed limestone (Exmouth Sands Supply, 2017; GIS Database). The vegetation of the application area consists of mulga shrublands and hummock grasslands which have comparatively low biodiversity compared to other parts of the Cape Range Province (Exmouth Sands Supply, 2017).

A Level 1 flora and vegetation survey of the application area recorded a total of 35 native flora species (Exmouth Sands Supply, 2017). The vegetation and landform types occurring within the application area are considered to be typical of the region and are well represented in surrounding areas (Exmouth Sands Supply, 2017; GIS Database). The level of biodiversity within the application area is considered to be similar to surrounding areas, and the small area of proposed clearing is unlikely to have any significant impact on flora or fauna diversity at either a local or regional scale.

The application area has suffered some previous disturbance from grazing, vehicle tracks, and fire, however the vegetation was generally considered to be in Very Good condition on the Keighery scale (Exmouth Sands Supply, 2017). One weed species was recorded during the survey, *Cenchrus ciliaris* (Buffel Grass), and was particularly prevalent within an area which had been recently burnt (Exmouth Sands Supply, 2017). Weeds have the potential to out-compete native species 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.

No Threatened flora, Threatened Ecological Communities or Priority Ecological Communities have been recorded within the application area (GIS Database), and none were found during the flora and vegetation survey (Exmouth Sands Supply, 2017). One possible Priority flora species was recorded during the survey, *Verticordia serotina* (P2), however the identification was uncertain due to insufficient flowering material (Exmouth Sands Supply, 2017). *Verticordia serotina* is well represented in the area, including within the Cape Range National Park (Exmouth Sands Supply, 2017), and the proposed clearing is unlikely to affect the conservation status of this species (if present).

A fauna survey was previously conducted by the Department of Conservation and Land Management (CALM) (now DBCA) approximately 1 – 4 kilometres west of the clearing permit application area, within similar vegetation and landforms (Exmouth Sands Supply, 2017). The results of the CALM survey were reviewed and when combined with opportunistic fauna observations made during the flora survey, Exmouth Sands Supply (2017) concluded that 26 reptile species, 24 bird species, five native and four introduced mammal species had the potential to occur within the area proposed to be cleared. The fauna habitats within the application area are common and widespread in surrounding areas (Exmouth Sands Supply, 2017; GIS Database), and no fauna species are expected to be specifically dependant on the habitats found within the application area.

One fauna species of conservation significance, Rainbow Bee-eater, *Merops ornatus*, was considered to have the potential to visit the application area, based on known distributions (Exmouth Sands Supply, 2017). However, no suitable nesting habitat was found within the application area (Exmouth Sands Supply, 2017), and the species is not expected to be impacted by the proposed clearing.

The application area is broadly mapped as Beard vegetation association 662: Hummock grassland; shrub steppe; mixed acacia scrub and dwarf scrub with soft spinifex and *Triodia basedowii* (GIS Database). Approximately 99% of the pre-European extent of this vegetation association remains uncleared at both the state and bioregional level (Government of Western Australia, 2016). Hence, the vegetation proposed to be cleared does not represent a significant remnant of native vegetation in an area that has been extensively cleared.

There are no DBCA managed lands within the application area (GIS Database). The nearest DBCA managed land is the Bundegi Coastal Reserve, which runs along approximately 5 kilometres of the eastern coast of Cape Range and is located approximately 800 metres east of the application area, at its nearest point (Exmouth Sands Supply, 2017; GIS Database).

The application area falls wholly within an Environmentally Sensitive Area, known as “Cape Range and Adjacent Coastal Plains”, which is listed on the Register of National Estate for its natural values (GIS Database). The “Cape Range and Adjacent Coastal Plains” area covers a total area of approximately 183,000 hectares (GIS Database), and the proposed clearing of 6.9 hectares of native vegetation is unlikely to have any significant impacts on the natural values of this area or any other conservation area.

The vegetation proposed to be cleared is situated on low dunes and sandy plains (Exmouth Sands Supply, 2017; GIS Database). The highly permeable sandy soils of the application area reduce the likelihood of erosion due to surface water runoff. However, the sand dune areas are likely to be naturally subject to wind erosion, and removal of vegetation cover from the dunes may result in increased rates of wind erosion. Potential wind erosion as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition which restricts the timing of vegetation clearing to less than three months prior to the commencement of sand extraction activities.

There are no Public Drinking Water Source Areas, watercourses, or wetlands within or in close proximity to the application area (GIS Database). The climate of the region is arid (CALM, 2002) and rainfall is likely to be rapidly absorbed by the sandy soils (Exmouth Sands Supply, 2017). Groundwater in the area is at an average depth of approximately seven metres (Exmouth Sands Supply, 2017). The proposed clearing is unlikely to have

any significant impact on surface or groundwater quality, or on the incidence or intensity of flooding.

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*. The proposed clearing is not likely to be at variance to Principles (a), (b), (c), (d), (g), (h), (i) and (j) and is not at variance to Principles (e) and (f).

Methodology CALM (2002)
EPA (1999)
Exmouth Sands Supply (2017)
Government of Western Australia (2016)

GIS Database:
- DPaW Tenure
- Hydrography, Lakes
- Hydrography, Linear
- IBRA Australia
- Imagery
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Register of National Estate
- Soils, Statewide
- Threatened and Priority Flora
- Threatened and Priority Ecological Communities boundaries
- Threatened and Priority Ecological Communities buffered
- Threatened Fauna

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

Comments

The clearing permit application was advertised on 20 November 2017 by the Department of Mines, Industry Regulation and Safety (DMIRS) inviting submissions from the public. One submission was received, raising no concerns in relation to this application.

There are no registered Aboriginal Sites of Significance located within the application area (DPLH, 2017). 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.

There is one native title claim (WC1997/028) over the area under application (DPLH, 2017). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the mining tenement 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*.

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

Methodology DPLH (2017)

4. References

- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DPLH (2017) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage.
<http://maps.daa.wa.gov.au/AHIS/> (Accessed 19 December 2017).
- EPA (1999) Environmental protection of Cape Range province. Position Statement No. 1. Environmental Protection Authority, Western Australia.
- Exmouth Sands Supply (2017) M08/510 Clearing Permit Application.
- Government of Western Australia (2016) 2016 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2016. WA Department of Parks and Wildlife, 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.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DBCA	Department of Biodiversity Conservation and Attractions, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DBCA and DWER)
DEE	Department of the Environment and Energy, Australian Government
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia
DMP	Department of Mines and Petroleum, Western Australia (now DMIRS)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DEE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
DWER	Department of Water and Environmental Regulation, Western Australia
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
TEC	Threatened Ecological Community

Definitions:

{DPaW (2017) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T	Threatened species: 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). Threatened fauna is that subset of ‘Specially Protected Fauna’ declared to be ‘likely to become extinct’ pursuant to section 14(4) of the Wildlife Conservation Act. Threatened flora 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.
CR	Critically endangered species 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.
EN	Endangered species 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.
VU	Vulnerable species 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.

- EX Presumed extinct species**
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 *Wildlife Conservation Act 1950*, 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.