



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6794/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Barradale Sands Pty Ltd

1.3. Property details

Property: Mining Lease 08/497
Miscellaneous Licence 08/108
Local Government Area: Shire of Ashburton
Colloquial name: Barradale Sands

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
48.025		Mechanical Removal	Sand Mining and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 13 December 2018

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	The vegetation of the application area is broadly mapped as the following Beard vegetation associations: 641: Medium woodland; coolabah & river gum; and 1601: Mosaic: Shrublands; snakewood & <i>Acacia victoriae</i> scrub / Hummock grasslands; grass steppe, hard spinifex, <i>Triodia basedowii</i> .
Clearing Description	Barradale Sands Project. Barradale Sands Pty Ltd proposes to clear up to 48.025 hectares of native vegetation within a total boundary of approximately 48.3 hectares, for the purposes of sand mining and associated activities. The project is located approximately 137 kilometres south of Onslow, in the Shire of Ashburton.
Vegetation Condition	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994). To Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).
Comment	There have been no flora or fauna surveys undertaken over the application area. The vegetation condition was inferred from aerial photography (GIS Database). Clearing permit CPS 6794/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 19 November 2015 and was valid from 12 December 2015 to 31 October 2020. The permit authorised the clearing of up to 27.195 hectares of native vegetation within a boundary of approximately 27.195 hectares, for the purpose of sand mining and associated activities. On 18 October 2018, the Permit Holder applied to amend CPS 6794/1 to increase the permit boundary, increase the amount of clearing by 20.83 hectares and to extend the permit duration to 2023.

3. Assessment of application against Clearing Principles

Comments

Barradale Sands Pty Ltd has applied to amend CPS 6794/1 to increase the permit boundary by approximately 21.105 hectares, increase the amount of clearing by 20.83 hectares, and extend the permit duration by three years, to 2023. The additional area of clearing is for additional mining areas within the Yanarrie River, laydown and access areas.

The proposal to clear an additional 20.83 hectares of sparse native vegetation for the purpose of sand mining and associated activities is unlikely to have any significant environmental impacts. The application area occurs within the Ashburton subregion of the Gascoyne Interim Biogeographic Regionalisation of Australia bioregion (GIS Database). The native vegetation within the application area is broadly mapped as Beard vegetation associations 641 and 1601, of which greater than 99% remains at a state and bioregional level (Government of Western Australia, 2018).

A search of the Department of Biodiversity, Conservation and Attraction's (DCBA) database within a 10 kilometre radius of the application area revealed no records of Threatened or Priority flora species (DBCA, 2018). According to aerial imagery, the vegetation types identified within the application area appear to be well represented within the region, and the vegetation within the application area does not form a part of a significant remnant (GIS Database). No Threatened or Priority Ecological Communities have been recorded within the application area (GIS Database).

There have been no fauna surveys conducted over the application area. The riparian vegetation within the application area may provide important habitat for fauna as the vegetation may contain a range of microhabitats including logs, leaf litter, tree hollows and important foraging habitat. The DBCA records the Peregrine Falcon (*Falco peregrinus*; Schedule 7) and the Red-necked Stint (*Calidris ruficollis*; listed Marine and Migratory) as potentially occurring within the application area (DBCA, 2018). However given the sparse nature of the native vegetation, the proposed clearing is unlikely to significantly impact the significance of these faunal habitats or impact on any conservation significant fauna. Current conditions on the permit restrict the clearing of larger trees, which are likely to provide significant habitat.

The application area is not located within any conservation area (GIS Database). The nearest DBCA (formerly DPaW) managed land is the former Giralia Pastoral Lease, which is located approximately 28 kilometres west of the application area (GIS Database). The application area is not located within a Public Drinking Water Source Area (GIS Database).

According to available databases, the majority of the application area sits within the non-perennial Yanarrie River (GIS Database). Provided disturbance to riparian habitats is avoided or minimised where possible, and strict weed hygiene procedures are followed, the proposed works are not expected to substantially impact this vegetation association. Potential impacts to riparian vegetation may be minimised through the implementation of the existing vegetation management condition.

The application area sits within the banks of the Yanarrie River, which could potentially be moderately susceptible to erosion if vegetation cover is lost (GIS Database). There is some risk of soil erosion if natural drainage regime is disturbed or slopes are cleared and exposed to high intensity rainfall. Potential impacts from land degradation as a result of the proposed clearing may be minimised by the implementation of the existing staged clearing condition.

The Yanarrie River is subject to inundation (GIS Database) but remains dry for large periods of the year and only flows and hold surface water following significant rainfall events (CALM, 2002). Therefore it is considered unlikely that the proposed clearing will result in any significant impact to surface water quality. The proposed clearing is not likely to cause a deterioration in the quality of surface or underground water or increase the incidence or intensity of flooding (GIS Database).

Given the movement of vehicles in the area and the proximity to a watercourse, there is potential for weed species to be transported or spread through the local area. Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of the existing weed management condition.

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

Methodology CALM (2002)
DBCA (2018)
Government of Western Australia (2018)

GIS Database:
- DBCA Interested Lands and Waters
- IBRA Australia
- Imagery
- Hydrography, Lakes
- Hydrography, linear
- Pre-European Vegetation
- Public Drinking Water Source Areas

- Threatened and Priority Flora
- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers
- Threatened Fauna

Planning Instrument, Native Title, previous EPA decision or other matter.

Comments

There is one native title determination (WC1999/045) over the area under application (DPLH, 2018). This was determined on 11 November 1999. 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 no registered Aboriginal Sites of Significance within the application area (DPLH, 2018). 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 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.

The amendment application was advertised on 29 October 2018 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

Methodology DPLH (2018)

4. References

- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DBCA (2018) NatureMap. Department of Biodiversity, Conservation and Attractions. <https://naturemap.dpaw.wa.gov.au/> (Accessed 6 December 2018).
- DPLH (2018) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (Accessed 6 December 2018).
- Government of Western Australia (2018) 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of December 2017. WA Department of Biodiversity, Conservation and Attractions. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>.
- 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	<p>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).</p> <p>Threatened fauna is that subset of ‘Specially Protected Fauna’ declared to be ‘likely to become extinct’ pursuant to section 14(4) of the <i>Wildlife Conservation Act 1950</i>.</p> <p>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 <i>Wildlife Conservation Act 1950</i>.</p> <p>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.</p>
CR	<p>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.</p>
EN	<p>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.</p>
VU	<p>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.</p>
EX	<p>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 <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.</p>
IA	<p>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 <i>Wildlife Conservation Act 1950</i>, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>
CD	<p>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 <i>Wildlife Conservation Act 1950</i>, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>
OS	<p>Other specially protected fauna Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>
P	<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.</p>

- 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.