



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7553/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Rose Dam Resources NL

1.3. Property details

Property: Mining Lease 24/451

Local Government Area: City of Kalgoorlie-Boulder
Colloquial name: Rose Dam South West Pit Project

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 8 June 2017

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 has been mapped within the application area (GIS Database):

468: Medium woodland; salmon gum & goldfields blackbutt.

A flora survey of the application area was undertaken in 2003 by Minesite Rehabilitation Services (Rose Dam Resources, 2017). The vegetation was described by Minesite Rehabilitation Services as predominantly Open Eucalypt Woodland, with broad drainage tracts of saltbush in the northeast and *Halosarcia* and *Frankenia* in the more saline lower south-southeast (Rose Dam Resources, 2017).

Clearing Description Rose Dam South West Pit Project.
Rose Dam Resources NL proposes to clear up to 26.94 hectares of native vegetation within a total boundary of approximately 237.64 hectares, for the purpose of mineral production and associated infrastructure. The project is located approximately 30 kilometres north-northwest of Kalgoorlie, in the City of Kalgoorlie-Boulder.

Vegetation Condition Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).

To:

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

Comment Vegetation condition was inferred by the assessing officer based on aerial imagery and information provided by the proponent (Rose Dam Resources, 2017)

3. Assessment of application against clearing principles

Comments

Rose Dam Resources NL has applied to clear up to 26.94 hectares of native vegetation for the purpose of development of the Rose Dam South West Pit Project. The development includes an open pit, waste rock dump, run of mine pad, and supporting facilities (Rose Dam Resources, 2017). The application area has previously been subjected to extensive mining and exploration activities (Rose Dam Resources, 2017).

The application area occurs within the Eastern Goldfields (COO3) subregion of the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). The vegetation of the bioregion is characterised by Mallees, Acacia thickets and shrub heaths on sandplains. Diverse Eucalyptus woodlands occur around salt lakes, on ranges and in valleys (CALM, 2002).

A flora and fauna survey was undertaken over M 24/451 in 2003 by Minesite Rehabilitation Services which comprised of a desktop and field assessment. These surveys were later reviewed alongside new information as part of an additional desktop assessment in 2017 (Rose Dam Resources, 2017). The 2017 desktop assessment recorded a number of conservation significant flora that have the possibility of occurring within the application area however no Threatened or Priority flora was recorded during the 2003 field survey (Rose Dam Resources, 2017). Given the age of the 2003 flora survey, lack of more recent field based surveys, and the results of the 2017 desktop assessment, a flora management condition is recommended. Potential impacts to Priority and Threatened flora as a result of the proposed clearing may be minimised by the implementation of a flora management condition.

No Priority or Threatened Ecological Communities are known to occur within the application area and none were recorded during a flora and vegetation survey (Rose Dam Resources, 2017; GIS Database). One beard vegetation association (486) exists over the application area (GIS Database). Vegetation association 486 has greater than 97% of pre-European vegetation remaining at a state and bioregional level (Government of Western Australia, 2016). As such, the vegetation within the application area does not represent a remnant within an extensively cleared area. The application area is not located on DPaW managed land (GIS Database).

The fauna survey determined the habitats within the application area to be widespread (Rose Dam Resources, 2017). The majority of the application area is open Eucalypt woodland which has the possibility of providing habitat to a number of conservation significant bird species (Rose Dam Resources, 2017). The bird species identified have large habitat ranges and the proposed clearing is unlikely to impact on populations at a local or regional scale (DPaW, 2017; Rose Dam Resources, 2017). No conservation significant fauna species were recorded during the field survey (Rose Dam Resources, 2017).

Nearby surveys have confirmed sightings of Malleefowl (*Leipoa ocellata*) within 20 kilometres of the application area and based on the availability of suitable habitat, it is considered likely that the species may be recorded within the application area on occasion (360 Environmental, 2011; DPaW, 2017). Potential impacts to Malleefowl as a result of the proposed clearing may be minimised by the implementation of a Malleefowl management condition.

According to available databases the application area is not located within a Public Drinking Water Source Area (GIS Database). There are no permanent water bodies or watercourses within the application area (Rose Dam Resources, 2017; GIS Database).

The climate of the area is arid to semi-arid and the application area receives an average annual rainfall of approximately 300 millimetres with an average annual evaporation rate of 2,800 - 3,000 millimetres (GIS Database). Any surface flows are therefore likely to be short lived. According to available databases, groundwater salinity within the application area is between 14,000 and 35,000 milligrams/Litre Total Dissolved Solids (TDS) (GIS Database). This is considered to be saline. Given the high TDS, the proposed clearing is not likely to cause further deterioration in ground water quality.

The application area is located within the Raeside-Ponton catchment area (GIS Database). Given the size of the area to be cleared (26.94 hectares) in relation to the size of the catchment area (11,589,533 hectares) (GIS Database), the proposed clearing is not likely to increase the potential of flooding on a local or catchment scale.

Weeds have the potential to occur within the application area (Rose Dam Resources, 2017). Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

The application area 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 to Principles (c), (d), (g), (h), (i), and (j) and is not at variance to Principles (e) and (f).

Methodology CALM (2002)
DPaW (2017)
Government of Western Australia (2015)
Rose Dam Resources (2017)
360 Environmental (2011)

GIS Database:
- DPaW Tenure
- Groundwater Salinity, Statewide
- Hydrography, linear
- Hydrographic Catchments – Catchments
- IBRA Australia
- Pre-European Vegetation
- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Flora

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

Comments: There are no native title claims over the area under application (DAA 2017). 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 that intersect with the application area (DAA, 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.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, the Department of Water, and the Department of Parks and Wildlife, 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: DAA (2017)

4. References

- 360 Environmental (2011) Bullant Gold Mine, Level 1 Vertebrate Fauna Survey. Report prepared for Kalgoorlie Mining Company (Bullant) by 360 Environmental, October 2011.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management, Western Australia
- DAA (2017) Aboriginal Heritage Inquiry System, Department of Aboriginal Affairs. < <http://maps.dia.wa.gov.au/AHIS2/>> (Accessed 19 January 2017).
- DPaW (2017) Nature Map, Department of Parks and Wildlife. <<https://naturemap.dpaw.wa.gov.au/>>
- Government of Western Australia (2016). 2016 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 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.
- Rose Dam Resources (2017) Purpose Permit Application Assessment of Clearing Principals, Rose Dam South West Pit Project, Clearing on M 24/451. Rose Dam Resources, Western Australia, April 2017.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DPaW and DER)
DEE	Department of the Environment and Energy, Australian Government
DER	Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DEE)
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
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 <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.