



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7211/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: J.S.W. Holdings Pty Ltd

1.3. Property details

Property: Mining Lease 80/630
Local Government Area: Shire of East-Kimberley
Colloquial name: Weero Road Shingle Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
4.37		Mechanical Removal	Sand and shingle mining

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 22 September 2016

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The application area has been mapped as the following Beard vegetation association:

59: Grasslands, high grass savanna sparse tree; bauhinia & coolabah over mitchell, blue & tall upland grasses.

Clearing Description Weero Road Shingle Project

J.S.W Holdings Pty Ltd (J.S.W. Holdings) proposes to clear up to 4.37 hectares within an application area of approximately 4.37 hectares for the purposes of mineral production. The project is located approximately 6 kilometres north-west of Kununurra within the Shire of Wyndham-East Kimberley.

Vegetation Condition Comment Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).

The proposed clearing is required for the purpose of sand and shingle mining of approximately 5,000 to 10,000 tonnes of material per year from the alluvial material deposited on the inside of a meander of the Ord River (Austwide, 2016). The quantity of material to be extracted will be dependent upon demand (Austwide, 2016). Sand or shingle material will be extracted from M80/630 and transported off-site to be processed. Minimal native vegetation is located in the application area (Austwide, 2016; GIS Database). The application area contains large areas devoid of vegetation and the majority of the application area has been previously cleared. A small central area of M80/630 contains small shrubs which will be retained. The condition of the vegetation under application was determined via interpretation of aerial imagery and representative photographs provided in the Mining Proposal (Austwide, 2016; GIS Database).

3. Assessment of application against Clearing Principles

Comments The application area occurs within the Victoria Bonaparte Interim Biogeographical Regionalisation for Australia (IBRA) bioregion (GIS Database). The Victoria Bonaparte IBRA region comprises a diverse range of landform features and has not been extensively cleared as approximately 87% of the pre-European vegetation remains (Government of Western Australia, 2015; GIS Database). The vegetation of the application area has been mapped as Beard vegetation association 59 (GIS Database). However, the application area has been previously cleared and is not representative of this vegetation association (Austwide, 2016; GIS Database). The application area is neither a remnant nor does it form part of any remnants within the local area (GIS Database).

No on-ground flora or vegetation surveys have been undertaken over the application area. According to available databases, there are no Threatened Ecological Communities (TEC's) or Priority Ecological Communities (PEC's) occurring within or near the application area (GIS Database). There are also no records of Threatened or Priority flora recorded within the application area (GIS Database).

A search of DPaW's NatureMap database revealed records of 1,157 flora species within a 10 kilometre radius of the application area (DPaW, 2016). Acacia, Corymbia, Eucalyptus, Euphorbia and Tephrosia species are well represented in the surrounding area (DPaW, 2016). Cyperus (Sedge), Eragrostis (Grass) and Fimbristylus (Sedges) species are also well represented in the surrounding area (DPaW, 2016). A small number of Priority flora species are identified in the NatureMap database search of the surrounding area. However, it is unlikely

that individuals of Priority flora would occur in the application area as the area is small and has been previously cleared.

Several weeds species are known from the local area and region (DPaW, 2016). Weed invasion has the potential to alter 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 fauna surveys have been undertaken over the application area. A search of DPaW's NatureMap database revealed records of 27 amphibians, 21 fish, 343 birds, 36 mammals and 95 reptile species within a 10 kilometre radius of the application area (DPaW, 2016). Given the application area is small (4.37 hectares) and contains areas of previously cleared and disturbed vegetation, the area is not expected to contain a high level of faunal diversity. For these reasons, it is unlikely the proposal will result in the clearing of native vegetation that comprises a high level of biodiversity.

The search of available biological databases confirmed no Threatened fauna were located in the application area (GIS Database). A search of DPaW's NatureMap database revealed records of 21 conservation significant fauna within 10 kilometres of the application area (DPaW, 2016). The majority of these conservation significant fauna were migratory bird species (19 migratory species and two additional Priority bird species). The application area is located near Lake Kununurra and the Ord River which accounts for the large numbers of bird species occurring in the desktop search. It is unlikely that any of the bird species would rely solely on the application area as very little vegetation remains and large areas of suitable habitat exist in surrounding areas. The application area does not contain suitable habitat for bird species as no permanent water exists in the application area. Given the existing disturbance, minimal areas of vegetation existing in the application area and the small amount of clearing proposed, the application area is not likely to contain significant habitat for fauna species indigenous to Western Australia.

The buffer of the Lake Kununurra (ANCA wetland) is located within the application area (Austwide, 2016; GIS Database). The Ord River is situated near the application area. However, no vegetation will be cleared from the river, or riverbank. Based on a vegetation survey undertaken at the adjacent tenement M80/77 and the database searches, riparian vegetation may occur in the application area (Brolga's Environment, 2008; DPaW, 2016). However, the majority of the vegetation has been previously cleared and the vegetation remaining in the application area is completely degraded in condition. Based on the above, the proposed clearing may be at variance to clearing Principle f. However, the amount of vegetation to be cleared is small and clearing activities are of low impact and unlikely to adversely impact the watercourse.

The application area falls within the Ivanhoe Land System (GIS Database). The Ivanhoe land system consists of alluvial plains with tussock grasslands (Payne et al., 2011). The floodplains of the Ord and Victoria Rivers are characterised by deep, broadly meandering channels (Payne et al., 2011). Minor parts of the Ivanhoe Land System may be flooded and inaccessible for some periods of time (Payne et al., 2011). However, the majority of the Ivanhoe Land System has low susceptibility to erosion with the exception of the levees which are moderately susceptible to erosion (Payne et al., 2011). The application area has been previously cleared and only a small amount of vegetation remains. The proposed clearing of up to 4.37 hectares of vegetation is unlikely to cause large scale land degradation.

The Department of Water (DoW) provided comment on the Weero Road Shingle Project Mining Proposal (MP) and Mine Closure Plan (MCP). The DoW were not concerned with the clearing associated with the proposal. However, the DoW were concerned with material extraction and the depth to groundwater (DoW, 2016). The DoW also requested that post mining landforms be re-contoured for stability, to minimise erosion and to provide for a natural landform which would reduce potential impacts to the Ord River foreshore (DoW, 2016). Information regarding environmental management of mining activities at the site are further detailed in the mining proposal.

No Public Drinking Water Source Areas are located within or in the vicinity of the application area (GIS Database). Although, the Ord River is located adjacent to the application area it is unlikely that clearing required for the proposal will cause deterioration in the quality of surface water, including sedimentation, erosion, turbidity or eutrophication of water bodies on-site or off-site (GIS Database).

The application area receives a mean annual rainfall of 835 millimetres and high average annual evaporation rate (approximately 2,800 millimetres) (BoM, 2016). The proposal is located adjacent to the Ord River which is subject to seasonal flooding. Whilst large, annual rainfall events may result in flooding of the area, the proposed clearing is not likely to lead to an increase in 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, and the proposed clearing may be at variance to Principle (f), is not likely to be at variance to Principles (a), (b), (c), (g), (h), (i), and (j), and is not at variance to Principles (d) and (e).

Methodology Austwide (2016)
Brolga's Environment (2008)
BoM (2016)
CALM (2002)
DPaW (2016)

DoW (2016)
Government of Western Australia (2015)
Payne, et al. (2011)

GIS Database:
- DPaW Tenure
- Hydrography, linear
- IBRA WA (Regions - Sub Regions)
- Imagery
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Rangeland Land System Mapping
- TEC/PEC – Boundaries
- TEC/PEC – Buffer
- Threatened Fauna
- Threatened and Priority Flora

Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments There is one native title claim (WC1994/002) over the application area (GIS Database). This claim has been determined by the National Native Title Tribunal on behalf of the claimant groups (GIS Database). 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 two registered Aboriginal sites of significance within the application area (DAA, 2016). 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, 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.

The clearing permit application was advertised on 22 August 2016 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

Methodology DAA (2016)

4. References

- Austwide (2016) JSW Holdings Pty Ltd, ID 57896, Mining Proposal M80/630, Weero Road Shingle, Kununurra Kimberley Mineral Field Western Australia, (Version 2), Prepared by Austwide Mining Title Management Pty Ltd, August 2016.
- Brolga's Environment (2008) Additional Documentation for Clearing Permit Application for M80/77, Prepared for JSW Holdings Pty Ltd by Brolga's Environment, Kununurra, Western Australia, January 2008.
- BoM (2016) Bureau of Meteorology Website - Climate Data Online, Kununurra Aero. Bureau of Meteorology. http://www.bom.gov.au/climate/averages/tables/cw_007091.shtml (Accessed 30 August 2016).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Victoria Bonaparte (VB1 – Victoria Bonaparte 1 subregion) Department of Conservation and Land Management, Perth, Western Australia.
- DAA (2016) Aboriginal Heritage Inquiry System. Department of Aboriginal Affairs. <http://maps.dia.wa.gov.au/AHIS2> (Accessed 30 August 2016).
- DPaW (2016) NatureMap - Mapping Western Australia's Biodiversity, Department of Parks and Wildlife. <https://naturemap.dpaw.wa.gov.au/> (Accessed 29 August 2016).
- DoW (2016) Advice received in relation to Mining Proposal Reg ID 57896, M80/630, Weero Road Shingle, Kununurra, Kimberley Mineral Field, Western Australia, Department of Water (Northern Region), Western Australia, 14 September 2016.
- Government of Western Australia (2015) 2015 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Western Australian Department of Parks and Wildlife, Perth, Western Australia.
- Payne A. L., and Schoknecht, N (2011) Land Systems of the Kimberley Region, Western Australia, Technical Bulletin No. 98. Department of Agriculture and Food, Government of Western Australia, Perth, Western Australia.

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)
DER	Department of Environment Regulation, Western Australia

DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DotEE	Department of the Environment and Energy, 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
TEC	Threatened Ecological Community

Definitions:

{DPaW (2015) 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 Wildlife Conservation Act.</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 Wildlife Conservation Act.</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 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.