



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8051/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Silver Lake Resources Limited

1.3. Property details

Property: Mining Lease 25/125
Local Government Area: City of Kalgoorlie-Boulder
Colloquial name: Anomaly A Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
150		Mechanical Removal	Mineral Production

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 14 June 2018

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. Three Beard vegetation associations have been located within the application area (GIS Database):

Beard vegetation association 468: Medium woodland; salmon gum & goldfields blackbutt;
Beard vegetation association 501: Medium woodland; goldfields blackbutt; and
Beard vegetation association 506: Succulent steppe with woodland; salmon gum & bluebush.

A level 1 flora and vegetation survey of the application area and surrounding area conducted by Outback Ecology (2009) during 16 to 21 October 2008 identified two vegetation types within the application area:

1. Eucalypt open forest/woodland over Chenopod heath
EsIMs - *Eucalyptus salmonophloia*, *Eucalyptus lesouefii* Open Forest over *Maireana sedifolia*, *Tecticornia* sp. Low Shrubland; and

2. Acacia tall shrubs/low trees over low shrubland
Ab - *Acacia burkittii* Tall Open Scrub over mixed Open Shrubland over scattered herbs.

Clearing Description Anomaly A Project.
Silver Lake Resources Limited proposes to clear up to 150 hectares of native vegetation within a boundary of approximately 672 hectares, for the purpose of mineral production. The project is located approximately 50 kilometres east of Kambalda, within the City of Kalgoorlie-Boulder.

Vegetation Condition Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994);
To
Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).

Comment The vegetation condition was derived from a vegetation survey conducted by Outback Ecology (2009).

3. Assessment of application against Clearing Principles

Comments

The application area occurs within the Eastern Goldfields (COO3) subregion of the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). This subregion is characterised by Mallees, Acacia thickets and shrubheaths on sandplains. Diverse *Eucalyptus* woodlands occur around salt lakes, on ranges, and in valleys. Salt lakes support dwarf shrublands of samphire and Woodlands and

Dodonaea shrubland occur on basic granulites of the Fraser Range. The area is rich in endemic Acacias (CALM, 2002).

A flora and vegetation survey by Outback Ecology (2009) identified two vegetation types within the application area. Vegetation surveyed within the application area appeared typical of Goldfields vegetation and well represented within the local and regional area (Outback Ecology, 2009; GIS Database). The condition of the vegetation was classified as 'degraded' to 'very good' (Outback Ecology, 2009, Keighery, 1994). The basic vegetation structure around existing pits and exploration areas has been severely impacted by mining and drilling activity, and consistent heavy grazing from goats and sheep has altered mid- and understorey vegetation composition and structure (Outback Ecology, 2009). No Threatened Ecological Communities or Priority Ecological Communities were recorded within the application area (Outback Ecology, 2009; GIS Database).

A total of 65 flora taxa from 34 genera and 17 families were recorded within the larger survey area (Outback Ecology, 2009). No species of Threatened flora or Priority Flora species have been recorded within the application area (Outback Ecology, 2009; GIS Database).

There was no fauna survey conducted over the application area. Based on the flora and vegetation survey conducted by Outback Ecology (2009), the application area does not contain significant fauna habitat and the survey did not identify critical feeding or breeding habitat for any conservation significant fauna species (DPaW, 2018; GIS Database).

There are no permanent watercourses or water bodies mapped within the area under application (GIS Database). There was no riparian vegetation mapped within the application area (Outback Ecology, 2009).

The land system associated with the application area is not susceptible to erosion (Tille, 2006) and the proposed clearing is not likely to cause deterioration in the quality of surface or underground water or increase the incidence or intensity of flooding (Outback Ecology, 2009; GIS Database).

The application area is partly located within the Randalls Timber Reserve (GIS Database). The condition of the vegetation in Randalls Timber Reserve has been previously degraded by stock and feral animals (Outback Ecology, 2009), and historical mineral production has occurred within the application area (GIS Database). Previous advice from DPaW (2014) indicates that the proposed clearing will not significantly impact on the flora or vegetation values of the reserve. Given the application area within the Randell Timber Reserve has been previously degraded by mining and grazing, the proposed clearing is not likely to have an impact on the environmental values of Randalls Timber Reserve.

There were two weed species identified within the application area; Wild Clary (*Salvia verbenaca*) and Calomba Daisy (*Oncosiphon suffruticosum*) (Outback Ecology, 2009). 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 a 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 (h), is not likely to be at variance to Principles (a), (b), (c), (d), (f), (g), (i), and (j), and is not at variance to Principle (e).

Methodology

CALM (2002)
DPaW (2014)
DPaW (2018)
Keighery (1994)
Outback Ecology (2009)
Tille (2006)

GIS Database:

- DEC Tenure
- Evaporation Isopleths
- Groundwater Salinity
- Hydrography, linear
- IBRA WA (Regions - Sub Regions)
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Rangeland Land System Mapping
- Rainfall, Mean Annual
- Threatened and Priority Flora
- Threatened Ecological Sites Buffered

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

Comments

There are no Native Title claims over the area under application (DPLH, 2018). 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 7 May 2018 by the 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 Biogeographical Subregions. Coolgardie3 (COO3 - Eastern Goldfields subregion) Department of Conservation and Land Management, Western Australia.
- DPaW (2014) Advice regarding Randells Timber Reserve for CPS 6329/1. Department of Parks and Wildlife, Environmental Management Branch, December 2014.
- DPaW (2018) NatureMap, Department of Parks and Wildlife <https://naturemap.dpaw.wa.gov.au/> (Accessed 11 June 2018)
- DPLH (2018) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (11 June 2018).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Outback Ecology (2009) Salt Creek Level 2 and Maxwells/Cock-Eyed Bob Level 1 Vegetation and Flora Surveys. Prepared for Integra Mining Limited, April 2009.
- Tille, P (2006) Soil-landscapes of Western Australia's Rangelands and Arid Interior. Technical Report 313. Department of Agriculture and Food, Western Australia. ISSN 1039-7205.

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	<p>Priority One - Poorly-known species:</p>

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.