

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6675/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Carbone Bros Pty Ltd

1.3. Property details

Property: Mining Lease 70/1339
Miscellaneous Licence 70/175
Local Government Area: Shire of Waroona and Shire of Harvey
Colloquial name: McLarty Site Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
18.13		Mechanical Removal	Road Construction and Mineral Production

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 19 October 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 and are useful to look at vegetation in a regional context. One Beard vegetation association has been mapped within the application area (Government of Western Australia, 2015; GIS Database): - 6: Medium woodland; tuart & jarrah. A vegetation survey has not been undertaken over the application area, however based upon aerial imagery and observations made by Accendo Australia (2015)(GIS Database), one vegetation group is present within the application area: - Pine Plantation
Clearing Description	McLarty Site Project Avoca Mining Pty Ltd (Avoca) proposes to clear 18.13 hectares of native vegetation within a total boundary of approximately 18.138 hectares for the purpose of road construction and mineral production. The project is located approximately 10 kilometres east of Preston Beach, in the Shire Waroona and the Shire of Harvey.
Vegetation Condition	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).
Comment	The vegetation condition was determined from aerial imagery and descriptions made by Accendo Australia (2015).

3. Assessment of application against clearing principles

Comments

The application area is located within the Perth subregion of the Swan Coastal Plain Interim Biogeographic Regionalisation of Australia (IBRA) (GIS Database). The Perth subregion is characterised by Heath and/or Tuart woodlands on limestone, *Banksia* and Jarrah-*Banksia* woodlands on Quaternary marine dunes of various ages, and Marri on colluvial and alluvials. The Perth subregion forms part of the South West Botanical Province which has a very high degree of species diversity (Mitchell *et al.* 2002).

A vegetation survey has not been undertaken over the application area, however it has been identified that the proposed clearing area was historically cleared of native vegetation approximately 30 years ago, and has since been planted with pine plantation species on a regular rotational basis (Accendo Australia, 2015). Given the regular rotational clearing of the application area, it is considered unlikely to contain any Threatened or Priority flora, or Priority Ecological Communities within the application area (Accendo Australia, 2015; GIS Database). It is also considered unlikely that any conservation significant fauna species would utilise the proposed clearing area as core habitat.

According to available databases, the application area is within the buffer zone for the Threatened Ecological Community (TEC) Stromatolite like freshwater microbialite community of coastal brackish lakes, however the proposed clearing is outside of the actual TEC boundary. According to Accendo Australia (2015), the McLarty site was historically cleared of native vegetation approximately 30 years ago and has since been planted with pine plantation species on a regular rotational basis. Due to this, it is considered unlikely that the proposed clearing area contains any flora related TECs, and it is considered unlikely that the proposed clearing will impact upon the Stromatolite like freshwater microbialite community of coastal brackish lakes (Accendo Australia, 2015).

The application area is present within a Dieback (*Phytophthora cinnamomi*) risk zone. The spread of dieback and weeds has the potential to significantly change the dynamics of a natural ecosystem and lower 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 and dieback management condition.

The application area falls within the Swan Coastal Plain Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database) in which approximately 38.53% of pre-European vegetation remains (Government of Western Australia, 2016). This gives it a conservation status of 'Depleted' according to the Bioregional Conservation Status of Ecological Vegetation Classes (Department of Natural Resources and Environment, 2002).

The vegetation within the application area is recorded as Beard vegetation association:

- 6: Medium woodland; tuart & jarrah.

Beard vegetation association 6 retains approximately 23.7% of pre-European extent at the state and bio-region level (Government of Western Australia, 2016).

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DPaW Managed Land
IBRA Bioregion - Swan Coastal Plain	1,502,222	578,432	~38.53	Depleted	~17.7
Beard vegetation associations - State					
6	56,343,	13,353	~23.7	Vulnerable	~21.38
Beard vegetation associations - Bioregion					
6	56,343	13,353	~23.7	Vulnerable	~21.38

* Government of Western Australia (2016)

** Department of Natural Resources and Environment (2002)

Although Beard vegetation association 6 is considered Vulnerable at the State and Bioregional level, it is noted that the vegetation present within the application area is made up of a juvenile pine plantation with potential for scattered native vegetation regrowth and does not represent the remnant native vegetation.

According to available databases, there are no wetlands or watercourses within the application area (GIS Database). The vegetation growing within the application area is not considered to be growing in association with an environment associated with a watercourse or wetland.

The application area is not located within a Public Drinking Water Source Area (GIS Database). The application area is located within the proclaimed South West Coastal groundwater area under the *Rights in Water and Irrigation Act 1914* (GIS Database). Any groundwater extraction and/or taking or diversion of surface water for the purpose other than domestic and/or stock watering is subject to Licence by the Department of Water and Environment Regulation.

The application area has a groundwater salinity that ranges from marginal to brackish (500 - 1,000 milligrams/Litre Total Dissolved solids (TDS) (GIS Database). The proposed clearing of 18.13 hectares of native vegetation is unlikely to further deteriorate the quality of underground water (GIS Database).

With an average annual rainfall of 966 millimetres and an average annual evaporation rate of between 1,800 and 2,000 millimetres there is likely to be little surface flow during normal seasonal rains (BoM, 2017; GIS Database). Whilst large 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.

Given the size of the area to be cleared (18.13 hectares) compared to the size of the Harvey Diversion catchment area (7,124,960 hectares) and Harvey Estuary catchment area (10,422,850 hectares) (GIS Database) it is not likely that the proposed clearing will lead to an appreciable increase in run off, and subsequently cause or exacerbate the incidence or intensity of flooding.

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

Methodology Accendo Australia (2015)
BoM (2017)
DPaW (2017)
Mitchell et al (2002)
Native Vegetation Solutions (2017)

GIS Database:

- Clearing Regulations – Environmentally Sensitive Areas
- Clearing Regulations Schedule One Areas
- DPaW Tenure
- Geomorphic Wetlands
- Groundwater Salinity, Statewide
- Hydrographic Catchments – Catchments
- Hydrography, Linear
- IBRA Australia
- Imagery
- Pre-European Vegetation
- Reserves
- Threatened and Priority Ecological Communities (TECPEC) – Boundaries
- Threatened and Priority Ecological Communities (TECPEC) – Buffers
- Threatened and Priority Fauna
- Threatened and Priority Flora

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

Comments

There are two native title claims (WC1998/058 and WC2003/006) over the application area (Department of Planning, Lands and Heritage, 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 Sites of Aboriginal Significance located in the area applied to clear (Department of Planning, Lands and Heritage, 2017). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Sites of Aboriginal Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Biodiversity Conservation and Attractions and the Department of Water and Environmental Regulation, 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 17 August 2015 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. Two submissions were received raising no objections to the proposed clearing.

Methodology Department of Planning, Lands and Heritage (2017)

4. References

- Accendo Australia (2015) Supporting information for clearing permit application CPS 6675/1, July 2015.
- BoM (2017) Climate Statistics for Australian Locations. A Search for Climate Statistics for Harvey, Australian Government Bureau of Meteorology. <http://www.bom.gov.au> (Accessed 16 October 2017).
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- Department of Planning, Lands and Heritage (2017) Aboriginal Heritage Enquiry System. Government of Western Australia. <https://maps.daa.wa.gov.au/AHIS/> (Accessed 16 October 2017).
- DPaW (2017) NatureMap - Mapping Western Australia Biodiversity. Department of Parks and Wildlife. Western Australia. <http://naturemap.dec.wa.gov.au/default.aspx>. (Accessed 28 August 2017).
- Government of Western Australia (2016) 2015 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, 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 *Wildlife Conservation Act 1950*, 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.