



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 6137/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Paddington Gold Pty Ltd

### 1.3. Property details

Property: Mining Lease 16/44  
Mining Lease 16/45  
Local Government Authority: Shire of Coolgardie  
Colloquial name: Bullant and Wattlebird Project

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 31 July 2014

## 2. Background

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

<b>Vegetation Description</b>	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 level 1 flora survey of the application area was undertaken by Botanica Consulting on 9 <sup>th</sup> and 16 <sup>th</sup> August 2011. The survey identified seven vegetation communities within the application area:  - Mixed Eucalyptus woodland over <i>Eromophila scoparia</i> and <i>Olearia muelleri</i> ; - <i>Eucalyptus clelandii</i> woodland over <i>Maireana sedifolia</i> ; - <i>Eucalyptus salubris</i> woodland over mixed shrubs; - <i>Casuarina pauper</i> woodland over <i>Acacia colletioides</i> ; - <i>Eucalyptus salmonophloia</i> woodland over <i>Eromophila alternifolia</i> ; - <i>Eucalyptus clelandii</i> woodland over <i>Triodia scariosa</i> ; and - <i>Eucalyptus ravidia</i> thicket.
<b>Clearing Description</b>	Bullant and Wattlebird Project. Paddington Gold Pty Ltd proposes to clear up to 50 hectares within an application area of approximately 1200 hectares for the purpose mineral production. The application area is located approximately 15 kilometres southwest of Ora Banda in the Shire of Coolgardie.
<b>Vegetation Condition</b>	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994);
<b>Comment</b>	The vegetation condition was assessed by botanists from Botanica Consulting (2011).

## 3. Assessment of application against Clearing Principles

### (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

#### Comments **Proposal is not likely to be at variance to this Principle**

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 survey conducted by Botanica Consulting (2011) (Botanica) identified seven vegetation communities within the application area. These communities were represented by a total of 23 families, 43 genera and 83 species

(including subspecies and variants) (Botanica, 2011). A search conducted on Naturemap of the associated mining tenements identified 3 Priority Flora species which have been recorded within a 20 kilometre radius of the application area (DPaW, 2014). Vegetation types suitable to provide habitat for these Priority Flora species were targeted within the survey area during the 2011 Botanica flora survey and no Priority Flora species were identified (Botanica, 2011). In addition, no Threatened Flora species were identified during the 2011 survey.

According to available databases, no Threatened Ecological Communities or Priority Ecological Communities are located within 80 kilometres of the application area (GIS Database). The survey conducted by Botanica (2011) did not identify any Threatened or Priority Ecological Communities.

The vegetation of the application area is predominantly in 'very good' condition (Botanica, 2011; Keighery, 1994), however, 150 hectares of the 1,200 hectare survey area has been impacted by existing mining operations. Four weed species were identified within the survey area, however, none of these are listed as Declared Pests under the *Biosecurity and Agriculture Management Act 2007*. Potential impacts from weeds as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

The proposed clearing is for 50 hectares within an approximately 1200 hectare boundary. The proposed activities are located adjacent to existing mining areas. A fauna survey conducted by 360 Environmental in July 2011 identified four broad fauna habitat types during the survey which are all well represented outside of the application area. No species of conservation significance were recorded during the survey (360 Environmental, 2011).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** 360 Environmental (2011)  
Botanica (2011)  
CALM (2002)  
DPaW (2014)  
Keighery (1994)  
GIS Database:  
- Kalgoorlie 50cm Orthomosaic  
- Threatened Ecological Sites Buffered

**(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.**

**Comments Proposal is not likely to be at variance to this Principle**

A Level 1 fauna survey was undertaken by 360 Environmental in July 2011. The survey identified four fauna habitat types:

- Open Eucalyptus woodland (e.g. *Eucalyptus salmonophloia*) over mixed tall and medium shrubs (e.g. *Eremophila scoparia* and *Olearia muelleri*);
- Open Eucalyptus woodland (e.g. *Eucalyptus salmonophloia*) over mixed low shrubs (e.g. *Maireana sedifolia* and *Tecticomia* sp.);
- Closed Eucalyptus woodland (e.g. *Eucalyptus salmonophloia*) – little or no understorey; and
- Open sandy plains with mixed low scrubland.

The fauna habitat types identified in the survey area are well represented outside of the application area and the proposed clearing of 50 hectares within the larger 1,200 hectare application area is unlikely to impact upon any significant habitat for fauna.

360 Environmental (2011) identified twenty six bird species and one native mammal species during the survey. No frogs or reptiles were recorded. A search of Naturemap within a 20 kilometre radius of the application area identified two records of conservation significant fauna: Malleefowl (*Leipoa ocellata*) (WC Act – Schedule 1; EPBC Vulnerable) and the Rainbow Bee-eater (*Merops ornatus*) (EPBC – Migratory). The Rainbow Bee-eater is highly mobile and has a large home range. No nesting activity was observed during the survey for this species. It is therefore unlikely that the application area is significant for this species.

360 Environmental (2011) have confirmed sightings of Malleefowl within 10 kilometres of the Project area and based on the availability of suitable habitat, it is considered likely that the species may be recorded within the project area on occasion (360 Environmental; DPaW, 2014). A condition to undertake a targeted fauna survey for Malleefowl mounds and Malleefowl critical habitat will minimise any potential impacts upon this species.

Based on the above, the proposed clearing may be at variance to this Principle.

**Methodology** 360 Environmental (2011)  
DPaW (2014)  
GIS Database:  
- Kalgoorlie 50cm Orthomosaic  
- Threatened Fauna

**(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.**

**Comments Proposal is not likely to be at variance to this Principle**

According to available databases, there are no records of Threatened Flora within the application area (GIS Database). A search of the NatureMap database identified no Threatened Flora species as occurring within a 20 kilometre radius of the application area (DPaW, 2014).

No Threatened Flora was recorded during the vegetation survey undertaken in 2011 (Botanica, 2011).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** DPaW (2014)  
Botanica (2011)  
GIS Database:  
- Threatened and Priority 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.**

**Comments Proposal is not likely to be at variance to this Principle**

According to available databases, there are no known Threatened Ecological Communities (TECs) within the application area (GIS Database) and the closest TEC is located 283 kilometres northwest of the application area.

According to Botanica (2011), no TECs were identified in the application area.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** Botanica (2011)  
GIS Database:  
- Threatened Ecological Sites Buffered

**(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.**

**Comments Proposal is not at variance to this Principle**

The application area falls within the Coolgardie Biogeographic Regionalisation of Australia (IBRA) bioregion in which over 98% of the pre-European vegetation remains (see table) (GIS Database, Government of Western Australia, 2013).

The vegetation of the application area has been mapped as Beard vegetation association 468 (GIS Database). Over 98% of this Beard vegetation association remains at both a state and bioregional level (Government of Western Australia, 2013). The vegetation within the application area is not significant as a remnant of native vegetation in an area that has been extensively cleared (GIS Database).

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DPaW Managed Lands
IBRA Bioregion – Yalgoo	12,912,204	12,648,491	~97.96	Least Concern	15.53
Beard veg assoc. – State					
468	592,022	583,902	~98.63	Least Concern	22.85
Beard veg assoc. – Bioregion					
468	583,357	575,360	~98.63	Least Concern	22.43

\* Government of Western Australia (2013)

\*\* Department of Natural Resources and Environment (2002)

Based on the above, the proposed clearing is not at variance to this Principle.

**Methodology** Department of Natural Resources and Environment (2002)  
Government of Western Australia (2013)  
GIS Database:  
- IBRA WA (Regions - Sub Regions)

**(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.**

**Comments Proposal is not at variance to this Principle**

There are two minor non-perennial drainage lines mapped within the application area (GIS Database), however, no distinctive vegetation growing in association with a watercourse was observed during a survey conducted by Botanica (2011). The vegetation within the application area is not considered to be growing in association with any watercourse or wetland.

Based on the above, the proposed clearing is not at variance to this Principle.

**Methodology** Botanica (2011)  
GIS Database:  
- Hydrography, linear

**(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.**

**Comments Proposal is not likely to be at variance to this Principle**

The application area lies within the Coolgardie bioregion (GIS Database). The geology of the South-western interzone is comprised of Archaean granites with interfolded metamorphic rock of the Yilgarn Block. The dominant soil group is calcareous earth which covers much of the plains and greenstone areas (Botanica, 2011).

The majority of the application area is relatively flat (GIS Database) ranging from 380 – 410 metres (AHD) and the Coolgardie region receives low annual rainfall of approximately 300 millimetres (GIS Database). The proposal requires the clearing of 50 hectares within a clearing permit boundary of 1,200 hectares with the majority of clearing located adjacent to existing areas of mining infrastructure (Paddington Gold Pty Ltd, 2014). It is therefore unlikely that the proposed clearing will generate any significant additional land degradation issues.

Additionally, the average annual evaporation rate is approximately ten times the average annual rainfall, so recharge to the groundwater would be expected to be minimal (GIS Database). Based on this there is a low likelihood of raised saline water tables occurring as a result of the proposed clearing.

Based on the above the proposed clearing is not likely to be at variance to this Principle.

**Methodology** Botanica (2011)  
Paddington Gold Pty Ltd (2014)  
GIS Database:  
- Evaporation Isopleths  
- Rainfall, Mean Annual  
- Topographic contours

**(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.**

**Comments Proposal is not likely to be at variance to this Principle**

The application area does not lie within any conservation areas or Department of Parks and Wildlife (DPaW) managed lands (GIS Database). The nearest conservation area is the former Credo pastoral lease located approximately 20 kilometres north west of the application area (GIS Database).

This former lease is proposed for conservation and managed by DPaW. Based on the distance between the application area and the former pastoral lease, the proposed clearing is not likely to impact the environmental values of any conservation area.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** GIS Database:  
- DPaW Tenure

**(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.**

**Comments Proposal is not likely to be at variance to this Principle**

According to available databases the application area is not located within a Public Drinking Water Source Area (GIS Database). There are no permanent waterbodies or watercourses within the application area.

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 salinity levels within the application area to alter.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

- Methodology** GIS Database:
- Evaporation Isopleths
  - Groundwater Salinity, Statewide
  - Hydrography, Linear
  - Public Drinking Water Source Areas
  - Rainfall, Mean Annual

**(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.**

**Comments Proposal is not likely to be at variance to this Principle**

The application area is located within the Raeside-Ponton catchment area. Given the size of the area to be cleared (50 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.

The average annual evaporation rate is approximately ten times the average annual rainfall and there is therefore likely to be little surface flow during normal seasonal rains (GIS Database). Given the likelihood of little surface flow, the proposed clearing is not likely to cause or increase the incidence or intensity of flooding.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

- Methodology** GIS Database:
- Evaporation Isopleths
  - Rainfall, Mean Annual

**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 in the application area (GIS Database). This claim (WAD420/2013) has been Filed at the Federal Court on behalf of the claimant group (GIS Database). 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 (GIS Database). 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 Environment Regulation, the 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 12 May 2014 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

- Methodology** GIS Database:
- Aboriginal Sites of Significance
  - Native Title Claims – Registered with the NNTT
  - Native Title Claims – Filed at the Federal Court

#### 4. References

- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management, Western Australia.
- 360 Environmental – Bullant Gold Mine, Level 1 Vertebrate Fauna Survey prepared for Kalgoorlie Mining Company (Bullant) Pty Ltd, October 2011.
- Botanica Consulting – Level 1 Flora and Vegetation Survey: Bullant, Final Report tenements M16/44, M16/45 prepared for Kalgoorlie Mining Company Ltd.
- DPaW (2014) NatureMap - Mapping Western Australia Biodiversity, Department of Parks and Wildlife, viewed 10 July 2014, <<http://naturemap.dec.wa.gov.au>>.
- 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.
- Government of Western Australia (2013) Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.

## 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
DotE	Department of the Environment, 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
RIMI Act	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
s.17	Section 17 of the <i>Environment Protection Act 1986</i> , Western Australia
TEC	Threatened Ecological Community

### Definitions:

{DPaW (2013) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

- T**      **Threatened species:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna or the Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).  
Threatened Fauna and Flora are further recognised by the Department according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorhynchus latirostris* is specially protected under the *Wildlife Conservation Act 1950* as a threatened species with a ranking of Endangered.  
Rankings:  
CR: Critically Endangered - considered to be facing an extremely high risk of extinction in the wild.  
EN: Endangered - considered to be facing a very high risk of extinction in the wild.  
VU: Vulnerable - considered to be facing a high risk of extinction in the wild.
- X**      **Presumed Extinct species:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora (which may also be referred to as Declared Rare Flora).
- IA**     **Migratory birds protected under an international agreement:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice.  
Birds that are subject to an agreement between governments of Australia and Japan, China and The Republic of Korea relating to the protection of migratory birds and birds in danger of extinction.
- S**      **Other specially protected fauna:**  
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- P1**     **Priority One - Poorly-known species:**  
Species that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, rail reserves and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.
- P2**     **Priority Two - Poorly-known species:**  
Species that are known from one or a few collections or sight records, some of which are on lands not under

imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.

P3

**Priority Three - Poorly-known species:**

Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities 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 localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.

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 do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
- (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

P5

**Priority Five - Conservation Dependent species:**

Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

**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.

