

Clearing Permit Decision Report

1. Application details

1.1. Permit application details				
Permit application No.:	7440/2			
Permit type:	Purpose	Permit		
1.2. Proponent details				
Proponent's name:	Beatons Creek Gold Pty Ltd			
1.3. Property details				
Property:	Mining L Mining L Mining L Prospec	ease 46/9 ease 46/10 ease 46/11 ting Licence 46/1806		
Local Government Area:	Shire of	East Pilbara		
Colloquial name:	Paleopla	acer Gold Project		
1.4. Application				
Clearing Area (ha) No. 195	Trees	Method of Clearing Mechanical Removal	For the purpose of: Mineral Production	
1.5. Decision on application Decision on Permit Application: Decision Date:	on			

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 two Beard vegetation associations (GIS Database):

173: Hummock grasslands, shrub steppe; kanji over soft spinifex & *Triodia wiseana* on basalt; and **190**: Hummock grasslands, sparse shrub steppe; *Acacia bivenosa* & *A. trachycarpa* over hard spinifex, *Triodia wiseana*, Very poor rocky country on gneiss.

A level 2 flora and vegetation survey of the application area was undertaken by MMWC Environmental Pty Ltd during 2 to 9 September 2014 (MMWC, 2014). The flora survey identified eleven vegetation units within the application area:

Drainage Habitat

- 1. EcTsp: Low open woodland of *Eucalyptus camaldulensis* subsp. *refulgens* over sedgeland of *Typha domingensis;*
- 2. ElAtGwAmTe: Scattered low trees of *Eucalyptus leucophloia* subsp. *leucophloia* over high open shrubland open shrubland of *Acacia tumida* var. *pilbarensis, Grevillea wickhamii* subsp. *hispidula* and *Acacia monticola* over open hummock grassland of *Triodia epactia;*
- 3. EIChAtGwImAsTe: Low open woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia* hamersleyana over closed scrub of Acacia tumida var. pilbarensis and *Grevillea wickhamii* subsp. hispidula over scattered shrubs of *Indigofera monophylla* over scattered low shrubs of Acacia spondylophylla over open hummock grassland of *Triodia epacta;*
- ElEvAtTeCi: Scattered Eucalyptus leucophloia subsp. leucophloia and Eucalyptus victrix over open shrubland of Acacia tumida var. pilbarensis over very open hummock grassland of Triodia epactia over scattered sedges of Cyperus ixiocarpus;
- EIMgAtTe: Scattered low trees of Eucalyptus leucophloia subsp. leucophloia over high open shrubland of Melaleuca glomerata over open shrubland of Acacia tumida var. pilbarensis over very open hummock grassland of Triodia epactia; and
- 6. EIMgTeGICa: Low open woodland of *Eucalyptus camaldulensis* subsp. *refulgens* over high open shrubland of *Melaleuca glomerata* over very open herbland of *Goodenia lamprosperma* and *Chrysocephalum apiculatum.*

Flood Plain Habitat

7. EIChAtGwImWvTe: Scattered low trees of *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia* hamersleyana over high open shrubland of *Acacia tumida* var. *pilbarensis* and *Grevillea wickhamii*

subsp. *hispidula* over open shrubland of *Indigofera monophylla* and *Waltheria virgata* over open hummock grassland of *Triodia epactia*.

Stony Plain Habitat

8. AsyAbTITe: Scattered shrubs of Acacia synchronicia (broad leaf form) and Acacia bivenosa over open hummock grassland of Triodia longiceps and Triodia epactia.

Hills Habitat:

	 EIAaAoAhTbTe: Scattered low trees of Eucalyptus leucophloia subsp. leucophloia over scattered tall shrubs of Acacia aphanoclada over scattered low shrubs of Acacia orthocarpa and Acacia hilliana over open hummock grassland of Triodia brizoides and Triodia epactia; EIAbTeTb: Scattered low trees of Eucalyptus leucophloia subsp. leucophloia over scattered shrubs of Acacia bivenosa over hummock grassland of Triodia epactia and Triodia brizoides; and EIAoAsAhTbTe: Scattered low trees of Eucalyptus leucophloia subsp. leucophloia over scattered shrubs of Acacia bivenosa over hummock grassland of Triodia epactia and Triodia brizoides; and EIAoAsAhTbTe: Scattered low trees of Eucalyptus leucophloia subsp. leucophloia over low open shrubland of Acacia orthocarpa, Acacia spondylophylla and Acacia hilliana over open hummock grassland of Triodia epactia. 				
Clearing Description	Paleoplacer Gold Project. Beatons Creek Gold Pty Ltd (BCG) proposes to clear up to 195 hectares of native vegetation within an application area of approximately 483 hectares for the purposes of mineral production. The project is located approximately 1 kilometre north-west of Nullagine within the Shire of East Pilbara.				
Vegetation Condition	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994); to: Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).				
Comment	Clearing permit CPS 7440/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 9 March 2017 and was valid from 1 April 2017 to 1 April 2022. The permit authorised the clearing of up to 100 hectares of native vegetation within a boundary of approximately 389.5 hectares, for the purposes of mineral production.				
	On 29 March 2018, the Permit Holder applied to amend CPS 7440/1 to increase the amount of clearing authorised to 195 hectares, and to increase the permit boundary to approximately 483 hectares. The Permit Holder has also applied to add Prospecting Licence 46/1806 to the tenure.				

3. Assessment of application against Clearing Principles

Comments

Beatons Creek Gold Pty Ltd has applied to increase the area permitted to clear from 100 hectares to 195 hectares, to increase the permit boundary from 389 hectares to approximately 483 hectares. The amendment also includes adding Prospecting Licence 46/1806 to the tenure.

The flora and vegetation survey identified no new vegetation associations within the amendment area. The vegetation within the amended boundary is similar to the vegetation within the previous permit area (MMWC, 2014). None of the vegetation associations were listed as a Threatened or Priority Ecological Community, and no Threatened or Priority flora species were identified within the amendment area (MMWC, 2014).

The amendment area falls within the Priority 1 Public Drinking Water Source Area, Nullagine Water Reserve (GIS Database). The permit holder states that mining activities will not intercept groundwater, and Klohn Crippen Berger (2017) indicates potential impacts of seepage from mining activities would be negligible. To ensure the protection of water resources, the Department of Water and Environment Regulation (DWER) advised all activities within the water reserve should be conducted in accordance with the Nullagine Water Reserve Water Source Protection Plan (DWER, 2018). DWER also advised that all clearing activities associated with the proposal including infrastructure, laydown areas, refuelling and topsoil storage should be compatible with the DWER's Land Use Compatibility Tables. Mining activities should also be managed using current best practice and comply with the DWER's Water Quality Protection Notes and Guidance (DWER, 2018).

There are minor ephemeral drainage lines that intersect the amended boundary and two vegetation associations were identified as occurring in association with minor creeks and drainage lines (360 Environmental, 2018). Riparian vegetation within the minor drainage lines may provide important habitat for fauna (GIS Database). Provided disturbance to riparian habitats is avoided or minimised where possible, and strict weed hygiene procedures are followed, the proposed works are not expected to substantially impact these vegetation associations. Potential impacts to riparian vegetation may be minimised through the existing watercourse management condition.

A Level 2 fauna survey identified one conservation significant species within the amendment area; the Blacklined Ctenotus *(Ctenotus nigrilineatus)* (Priority 1) (360 Environmental, 2015). This species was recorded at the top of Prospecting Licence 46/1806, outside the expected clearing footprint by the permit holder (360 Environmental, 2018). The Black-lined Ctenotus was recorded in the hill habitat within the amended boundary, and this habitat type is widespread within the local and broader region (360 Environmental, 2015). The proposed clearing is not expected to have a significant impact on core habitat for this species.

MMWC (2014) surveyed three weed species within the amendment area. Potential impacts from weeds will be managed by the current weed management condition on the permit.

Local flooding occurs seasonally in the Pilbara as a result of cyclonic activities and thunderstorms. It is unlikely that the increase in the clearing permit boundary will exacerbate the incidence or intensity of flooding in the area. The clearing is unlikely to have a significant impact on the quality of surface or groundwater.

Bennelongia (2018) advise that the amendment area lacks short-range endemic (SRE) habitats given the highly exposed, widespread and uniform nature of the amendment area. Given the low richness of species in SRE groups in the vicinity and that no listed invertebrates, confirmed or potential SRE's was recorded within the application area, the proposed clearing is unlikely to impact the conservation significance of any SRE species that may occur within the amendment area.

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.510 of the *Environmental Protection Act 1986*. Environmental information has been reviewed, and the assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in decision report CPS 7440/1.

Methodology 360 Environmental (2015) 360 Environmental (2018) Bennelongia (2018) DWER (2018) Klohn Crippen Berger (2017) MMWC (2014)

GIS Database:

- Hydrography, Linear
- Imagery
- Landsystem Rangelands
- Pre-European Vegetation
- Threatened and Priority Flora
- Threatened and Priority Ecological Communities boundaries
- Threatened and Priority Ecological Communities buffered
- Threatened Fauna

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

Comments

There are two Native Title claims over the area under application (DPLH, 2018). These claims have been registered with the National Native Title Tribunal on behalf of the claimant groups. 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 is one 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 9 April 2018 by the Department of Mines, Industry Regulation and Safety, inviting submissions from the public. One submission was received in relation to this application stating no objection to the proposed amendments.

Methodology DPLH (2018)

4. References

360 Environmental (2015) Beatons Creek – Baseline Vertebrate Fauna Survey. Report prepared for Novo Resources Corporation by 360 Environmental, March 2015.

360 Environmental (2018) Beatons Creek Paleoplacer Gold Project – Application for a Native Vegetation Clearing Permit Amendment. Report prepared for Beatons Creek Gold Pty Ltd by 360 Environmental, March 2018.

Bennelongia (2018) Beatons Creek Additional Tenement: Short-Range Endemic Invertebrate Desktop. Report prepared for Novo Resources Corporation by Bennelongia Environmental Consultants, March, 2018.

DPLH (2018) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage.

http://maps.daa.wa.gov.au/AHIS/ (Accessed 12 April 2018).

DWER (2018) Advice received in relation to Clearing Permit Application CPS 7440/2. Department of Water and Environmental Regulation, Western Australia, May 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.

Klohn Crippen Berger (2017) H2 Hydrogeological Assessment Beatons Creek Gold Project, v3. Report prepared for Novo Resources Corporation by Klohn Crippen Berger, 2017.

MMWC (2015) Beatons Creek Gold Project Flora and Vegetation Assessment. Report prepared for Novo Resources Corporation by MMWC Environmental Pty Ltd, March, 2015.

5. Glossary

Acronyms:

BoM DAA DAFWA DBCA DEC DEE DER DMIRS DMP	Bureau of Meteorology, Australian Government Department of Aboriginal Affairs, Western Australia (now DPLH) Department of Agriculture and Food, Western Australia (now DPIRD) Department of Biodiversity Conservation and Attractions, Western Australia Department of Environment and Conservation, Western Australia (now DBCA and DWER) Department of the Environment and Energy, Australian Government Department of Environment Regulation, Western Australia (now DWER) Department of Mines, Industry Regulation and Safety, Western Australia 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	Environmental Protection Act 1986, Western Australia
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (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 RIWLAct	Priority Ecological Community, Western Australia
TEC	Threatened Ecological Community

Definitions:

{DPaW (2017) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

- Т
- Threatened species:

Published as Specially Protected under the *Wildlife Conservation Act 1950*, 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 1950*.

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 1950*.

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 *Wildlife Conservation Act 1950,* 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 *Wildlife Conservation Act 1950*, 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 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.