

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7440/3

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Beatons Creek Gold Pty Ltd

1.3. Property details

Property: Mining Lease 46/9

Mining Lease 46/10 Mining Lease 46/11 Mining Lease 46/532 Shire of East Pilbara

Local Government Area: Colloquial name:

Paleoplacer Gold Project

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing For the purpose of:

270 Mechanical Removal Mineral Production and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 23 January 2020

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 and *Triodia wiseana* on basalt; and 190: Hummock grasslands, sparse shrub steppe; *Acacia bivenosa* and *Acacia 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 the following eleven vegetation units within the application area:

Drainage Habitat

- EcTsp: Low open woodland of Eucalyptus camaldulensis subsp. refulgens over sedgeland of Typha domingensis;
- EIAtGwAmTe: 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 epactia;
- 4. EIEvAtTeCi: 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;
- 5. EIMgAtTe: Scattered low trees of Éucalyptus 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

 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;
- **10. 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
- 11. ElAoAsAhTbTe: 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 brizoides and Triodia epactia.

The majority of the amendment area is described as vegetation unit ElAoAsAhTbTe, dissected by ElAtGwAmTe and ElEvAtTeCi.

Clearing Description

Paleoplacer Gold Project.

Beatons Creek Gold Pty Ltd (BCG) proposes to clear up to 270 hectares of native vegetation within an application area of approximately 558 hectares for the purposes of mineral production and associated activities. The project is located approximately one 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

The vegetation condition was derived from a vegetation survey conducted by MMWC Environmental (2015). The majority of the application area exists in Excellent to Very Good condition (MMWC Environmental, 2015).

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.

CPS 7440/2 was granted on 24 May 2018, amending the permit to increase the amount of clearing authorised to 195 hectares, to increase the permit boundary to approximately 483 hectares and to add Prospecting Licence 46/1806 to the tenure.

On 8 November 2019, the Permit Holder applied to amend CPS 7440/2 to increase the permit boundary to approximately 558 hectares and the amount of clearing authorised to 270 hectares.

3. Assessment of application against Clearing Principles

Comments

The Permit Holder has applied to amend the clearing permit to increase the permit boundary by approximately 75 hectares from approximately 483 hectares to approximately 558 hectares and to increase the size of the area approved to clear by 75 hectares to 270 hectares.

The flora and vegetation survey identified no new vegetation associations within the amendment area (360 Environmental, 2019; MMWC Environmental, 2015). A search of the available databases showed that there are no known Threatened Ecological Communities within proximity to the application area (GIS Database). The amendment area intersects the Priority 3 Ecological Community (PEC) "Stony Saline Plains of the Mosquito Land System" (360 Environmental, 2019; MMWC Environmental, 2015; GIS Database). However, as the majority of the amendment area exists outside the PEC boundaries and only 2.9 hectares of pre-disturbed areas intersect the PEC, the proposed clearing is unlikely to significantly impact the PEC (GIS Database).

There are no Threatened flora species known to occur within the permit area and none were recorded during field surveys of the area (360 Environmental, 2019; MMWC Environmental, 2015; GIS Database). A number of Priority flora have the potential to occur within the amendment area and have previously been recorded within the broader application area or surrounding areas (360 Environmental, 2019; MMWC Environmental, 2015). Acacia aphanoclada (P1), Acacia cyperophylla var. omearana (P1) and Ptilotus wilsonii (P1) were previously recorded within the application area and surrounding area, however none were recorded within the amendment areas (360 Environmental, 2019; MMWC Environmental, 2015). The proposed amendment is unlikely to have a significant effect on conservation significant flora species, and the vegetation communities extend beyond the application area and are not locally restricted.

A number of weed species have been recorded within the amendment area (360 Environmental, 2019; MMWC Environmental, 2015). Potential impacts to biodiversity as a result of the proposed clearing may be minimised through the existing weed management condition.

A number of conservation significant fauna species have been recorded within the amendement area or adjacent areas including: Black-lined Ctenotus, *Ctenotus nigrilineatus* (P1); Northern Quoll, *Dasyurus hallucatus* (EN); Pilbara Leaf-nosed Bat, *Rhinonicteris aurantia* (VU); Western Pebble- mound Mouse, *Pseudomys chapmani* (P4) (360 Environmental, 2015; 2019). A number of other conservation significant fauna species were also determined as being likely to occur (360 Environmental, 2015). However, the proposed amendment is unlikely to significantly impact conservation significant species due to extensive areas of foraging and dispersal habitat being well represented in the surrounding area (GIS Database).

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 were 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 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 no permanent watercourses or wetlands within the amendment areas, however a number of seasonal drainage lines intersect the area (GIS Database). Seasonal drainage lines in the region only flow briefly following significant rainfall events (Van Vreeswyk et al., 2004). Potential impacts to drainage lines and their associated vegetation may be minimised through the existing watercourse management condition.

There are no conservation areas or DBCA (formerly DPaW) managed land in the vicinity of the application area (GIS Database).

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 reports CPS 7440/1 and 7440/2.

Methodology

360 Environmental (2015) 360 Environmental (2019) Bennelongia (2018) DWER (2018) Klohn Crippen Berger (2017) MMWC Environmental (2015) Van Vreeswyk et al. (2004)

GIS Database:

- DPaW Tenure
- Hydrography, Lakes
- Hydrography, Linear
- IBRA Australia
- Imagery
- Landsystem Rangelands
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Threatened and Priority Ecological Communities boundaries
- Threatened and Priority Ecological Communities buffers
- Threatened and Priority Flora
- Threatened Fauna

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

Comments

There are two native title claims (WC1999/008 and WC1999/016) over the area under application (DPLH, 2019). 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 Site of Significance within the application area (DPLH, 2019). 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 25 November 2019 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

Methodology DPLH (2019)

4. References

- 360 Environmental (2015) Beatons Creek Baseline Vertebrate Fauna Survey. Report prepared for Novo Resources by 360 Environmental Pty Ltd, March 2015.
- 360 Environmental (2019) Beatons Creek Paleoplacer Gold Project; M46/9, M46/10 and M46/11 and M46/532 Application for a Native Vegetation Clearing Permit Amendment Purpose Permit (CPS 7440/2). Report prepared for Beatons Creek Gold Pty Ltd by 360 Environmental Pty Ltd, November 2019.
- Bennelongia (2018) Beatons Creek Additional Tenement: Short-Range Endemic Invertebrate Desktop. Report prepared for Novo Resources Corporation by Bennelongia Environmental Consultants, March 2018.
- DPLH (2019) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. http://maps.daa.wa.gov.au/AHIS/ (Accessed 23 December 2019).
- 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 Environmental (2015) Beatons Creek Gold Project Flora and Vegetation Assessment. Report prepared for Novo Resources by MMWC Environmental Pty Ltd, March 2015.
- Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A. and Hennig, P. (2004) An inventory and condition survey of the Pilbara Region, Western Australia. Technical Bulletin No. 92. Department of Agriculture, South Perth, 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)

DoEEDepartment of the Environment and Energy, Australian GovernmentDERDepartment of Environment Regulation, Western Australia (now DWER)DMIRSDepartment of Mines, Industry Regulation and Safety, Western AustraliaDMPDepartment 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 DoEE)

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 DoEE)

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 Priority Ecological Community, Western Australia

RIWI Act Rights in Water and Irrigation Act 1914, Western Australia

TEC Threatened Ecological Community

Definitions:

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

T Threatened species:

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

Threatened fauna is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

Threatened flora is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

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 in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines".

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

EN Endangered species

Threatened species considered to be "facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines".

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation* (Specially Protected Fauna) Notice 2018 for endangered fauna or the *Wildlife Conservation* (Rare Flora) Notice 2018 for endangered flora.

VU Vulnerable species

Threatened species considered to be "facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines".

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation* (Specially Protected Fauna) Notice 2018 for vulnerable fauna or the *Wildlife Conservation* (Rare Flora) Notice 2018 for vulnerable flora.

Extinct Species:

EX Extinct species

Species where "there is no reasonable doubt that the last member of the species has died", and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018 for extinct fauna or the Wildlife Conservation (Rare Flora) Notice 2018 for extinct flora.

EW Extinct in the wild species

Species that "is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to

its life cycle and form", and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species:

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes 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 fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018.

CD Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation* (Specially Protected Fauna) Notice 2018.

OS Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018.

P <u>Priority species:</u>

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species 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.