



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4706/3
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Northern Star (Carosue Dam) Pty Ltd

1.3. Property details

Property: Mining Lease 39/165
Mining Lease 39/166
Mining Lease 39/230
Local Government Area: Shire of Leonora
Colloquial name: Butcher Well Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
200		Mechanical Removal	Mineral production and mineral exploration

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 25 January 2022

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. The following four Beard vegetation associations have been broadly mapped within the application area (GIS Database):

18: Low woodland; Mulga (*Acacia aneura*);
109: Hummock grasslands, shrub steppe; *Eucalyptus youngiana* over hard Spinifex;
389: Succulent steppe with open low woodland; mulga over saltbush; and
400: Succulent steppe with open low woodland; Mulga over Bluebush.

A Level 1 flora and vegetation survey was conducted of the Butcher Well clearing permit area in September 2011 (Alexander Holm and Associates, 2011). The following ten vegetation communities were recorded within the application area, associated with different landform types:

1: Rises and breakaways associated with banded ironstone ridges

Scattered (Projected Foliage Cover (PFC) 15 - 20%) mixed height shrublands (2 - 4 metres) dominated by Acacias including *Acacia pteraneura*, *A. quadrimarginea*, *A. oswaldii*, *A. inceana* subsp. *conformis* and *Grevillea berryana* with low shrubs including *Eremophila compacta*, *Ptilotus obovatus* and *P. swartzii*;

2: Lower footslopes on basalt or metamorphic rocks

Scattered (PFC 10-15%) mixed height (2 - 5 metres) shrublands dominated by *Acacia incurvaneura*, *A. caesaneura*, *Hakea preissii* or *Eremophila caperata*, with low shrubs including *Ptilotus obovatus*, *Maireana georgei*, *M. triptera* and *Frankenia* spp.;

3: Low rises on metamorphic rocks

Very scattered to scattered (PFC 5 - 15%) tall shrublands to 4 metres dominated by *Acacia quadrimarginea*, *Hakea preissii* with undershrubs *Ptilotus obovatus*, *Maireana* spp., *Atriplex bunburyana* and *Frankenia setosa*;

4: Low breakaways and associated footslopes

Crests - very scattered (PFC about 5%) mixed shrublands to 4 metres of *Acacia erinacea*, *Dodonaea lobulata*, *Eremophila scoparia*, *E. oppositifolia* and *Tecticornia* spp. With occasional small trees of *Eucalyptus celastroides* ssp. *celastroides* and *E. lesouefii*. Lower slopes - only isolated shrubs (PFC < 2.5%), much bare ground;

11a: Saline stony plains with myall

Very scattered (PFC 5 - 10%) low (<1 metre) shrublands frequently dominated by *Frankenia setosa* with a prominent overstorey of *Acacia papyrocarpa* (myall) trees to about 8 metres; other common shrubs are *Maireana pyramidata*, *M. georgei*, *M. triptera*, *M. sedifolia*, *Atriplex vesicaria*, *Cratystylis subspinescens* and *Eremophila caperata*;

11b: Saline stony plains

Very scattered to scattered (PFC 5 - 25%) low (<1 metre) shrublands dominated by *Maireana pyramidata*, *M. georgei* and *M. triptera*; others include *Frankenia* spp., *Atriplex* spp., *Ptilotus obovatus* and *Cratystylis subspinescens*. Occasionally, scattered *Hakea preissii*, *Eremophila caperata*, *Acacia kalgoorliensis* and *A. oswaldii*;

12: Highly saline stony plains

Very scattered to scattered (PFC 5 - 25%) low (<1 metre) shrublands dominated by *Tecticornia halocnemoides*, *T. disarticulata*, *T. indica* subsp. *bidens* (samphires); minor components of numerous other, mostly halophytic shrubs, including *Maireana platycarpa*, *M. atkinsiana*, *M. glomerifolia*, *M. tomentosa*, *Atriplex vesicaria*, *Disphyma crassifolium* and *Eremophila caperata*;

14: Sandy banks

Scattered (PFC about 15%) woodlands of *Acacia caesaneura* to 8 metres over low shrubs, *Maireana pyramidata*, *M. triptera*, *Gunnopsis quadrifida*, *Rhagodia drummondii* and *Enchylaena tomentosa*, or low shrublands of same species with occasional *Acacia caesaneura*, *Hakea preissii* and *Eremophila miniata*;

16: Saline drainage tracts

Very scattered to moderately close (PFC 5 - 40%) low (<1 metre) shrublands dominated by *Atriplex*, *Maireana*, *Frankenia* and *Tecticornia* spp.; and

17: Creeklines

Moderately close (PFC about 30%) tall shrublands (4 - 5 metres) dominated by *Acacia burkittii*, *A. oswaldii*, *Exocarpos aphylla*, *Eremophila alternifolia*, *E. oldfieldii* subsp. *angustifolia*, *E. youngii* subsp. *youngii* with undershrubs such as *Ptilotus obovatus*, *Maireana pyramidata*, *M. georgei* and *Atriplex bunburyana*.

Clearing Description	Butcher Well project. Northern Star (Carosue Dam) Pty Ltd proposes to clear up to 200 hectares of native vegetation within a total boundary of approximately 542 hectares, for the purposes of mineral exploration and mineral production. The project is located approximately 185 kilometres north-east of Kalgoorlie, in the Shire of Leonora.
Vegetation Condition	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994); To: Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).
Comment	The vegetation condition is derived from a flora and vegetation survey conducted by Alexander Holm and Associates in September 2011. Previous disturbance is primarily the result of pastoral activities and mineral exploration activities (Alexander Holm and Associates, 2011). The proposed clearing is for mineral exploration and mineral production activities, including mine pits, potential cutbacks of existing pits and mining-related infrastructure. Topsoil and vegetation will be stockpiled for rehabilitation purposes. Clearing permit CPS 4706/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 5 January 2012 and was valid from 28 January 2012 to 28 January 2017. The permit authorised the clearing of up to 200 hectares of native vegetation within a boundary of approximately 541.63 hectares, for the purpose of mineral production and mineral exploration. CPS 4706/2 was granted on 20 December 2016, amending the permit to extend the permit duration by 5 years. On 24 November 2021, the Permit Holder applied to amend CPS 4706/2 to extend the duration of the permit by 10 years and change the company name. The amount of clearing authorised and the permit boundaries are to remain unchanged.

3. Assessment of application against Clearing Principles

Comments

The permit holder has applied to extend the duration of the permit to 28 January 2032, and change the Permit Holder name from Saracen Gold Mines Pty Ltd to Northern Star (Carosue Dam) Pty Ltd. The amendment is to allow for current works to continue.

Based on information provided by the permit holder, no clearing has occurred since clearing permit CPS 4706/1 became live on 28 January 2012.

As noted in the original decision report, the flora and vegetation survey of the application area was undertaken in September 2011 (Alexander Holm and Associates, 2011) and a fauna survey over part of the application area in November 2010 (Coffey Environments, 2011). DMIRS notes that the Alexander Holm and Associates (2011) and Coffey Environments (2011) surveys are becoming dated, therefore it is recommended the permit duration only be extended by five years, instead of the requested ten years. The permit holder may apply for future duration extensions, if required.

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O 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 previous decision reports.

Methodology Alexander Holm and Associates (2011)
Coffey Environments (2011)

GIS Database:

- DPaW Tenure
- Hydrography, Lakes
- Hydrography, Linear
- IBRA Australia
- Imagery
- Landsystem Rangelands
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Soils, Statewide
- 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 is one native title claim over the area under application (DPLH, 2022). This claim has 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 are no registered Aboriginal Sites of Significance within the application area (DPLH, 2022). 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 17 December 2021 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 (2022)

4. References

- Alexander Holm and Associates (2011) Environmental Assessment: Butcher Well Development, Saracen Gold Mines. Report prepared for Saracen Gold Mines Pty Ltd, by Alexander Holm and Associates Natural Resource Management Services, October 2011.
- Coffey Environments (2011) Level 1 Fauna Survey, Safari to Red October Haul Road, Saracen Gold. Prepared for Saracen Gold Mines Pty Ltd, by Coffey Environments Australia Pty Ltd, Western Australia.
- DPLH (2022) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 18 January 2022).
- 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:

BC Act	<i>Biodiversity Conservation Act 2016</i> , Western Australia
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)
DAWE	Department of Agriculture, Water and the Environment, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
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)
DoEE	Department of the Environment and Energy (now DAWE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora (now known as Threatened Flora)
DWER	Department of Water and Environmental Regulation, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPA	Environmental Protection Authority, 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:

{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

Priority species:

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.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened 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 the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.