



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8891/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Fenix Resources Ltd

1.3. Property details

Property: Mining Lease 20/118
General Purpose Leases 20/28, 20/29
Miscellaneous Licences 20/83, 20/84, 20/85
Local Government Area: Shire of Cue
Colloquial name: Iron Ridge Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
140.1		Mechanical Removal	Mineral Production and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 1 July 2021

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The vegetation of the application area is broadly mapped as the following Beard vegetation associations:
18: Low woodland; mulga (*Acacia aneura*); and
202: Shrublands; mulga & *Acacia quadrimarginea* scrub (GIS Database).

Several flora and vegetation surveys have been conducted over the application area and the Weld Range area. The following vegetation associations were recorded within the application area (Fenix, 2020):

SH01 - *Acacia* sparse shrubland: *Acacia ramulosa* var. *ramulosa*, *Acacia tetragonophylla* tall sparse shrubland; *Ptilotus obovatus*, *Scaevola spinescens*, *Senna artemisioides* subsp. *artemisioides* low sparse shrubland.

SH02 - *Acacia* sparse shrubland: *Acacia* sp. Weld Range (A. Markey & S. Dillon 2004), *Acacia speckii* (P4), *Acacia pteraneura* tall sparse shrubland; *Eremophila glutinosa*, *Eremophila mackinlayi* subsp. *spathulata*, *Senna artemisioides* subsp. *sturtii* low sparse shrubland.

SH03 - *Acacia* open shrubland: *Acacia* sp. Weld Range (A. Markey & S. Dillon 2004), *Acacia incurvaneura*, *Acacia ramulosa* var. *linophylla* tall open shrubland; *Eremophila forrestii* subsp. *forrestii*, *Harnieria kempeana* subsp. *muelleri*, *Ptilotus obovatus* low sparse shrubland.

SH04 - *Acacia* sparse shrubland: *Acacia* sp. Weld Range (A. Markey & S. Dillon 2004), *Acacia ramulosa* var. *linophylla* tall sparse shrubland; *Eremophila mackinlayi* subsp. *spathulata*, *Ptilotus obovatus*, *Senna artemisioides* subsp. *helmsii* low sparse shrubland.

SH05 - *Acacia* sparse shrubland: *Acacia rhodophloia*, *Acacia incurvaneura*, *Thryptomene decussata* tall sparse shrubland; *Ptilotus obovatus*, *Dodonaea pachyneura*, *Eremophila latrobei* subsp. *latrobei* low sparse shrubland.

SH06 - *Acacia* sparse shrubland: *Acacia incurvaneura*, *Acacia fuscaneura*, *Acacia incurvaneura* x *mulganeura* tall sparse shrubland; *Eremophila georgei*, *Eremophila forrestii* subsp. *forrestii*, *Psyrax latifolia* low sparse shrubland.

SH07 - *Acacia* sparse shrubland: *Acacia incurvaneura*, *Acacia mulganeura*, *Acacia ramulosa* var. *linophylla* tall sparse shrubland; *Eremophila glutinosa*, *Eremophila latrobei* subsp. *latrobei*, *Micromyrtus placoides* (P3) low sparse shrubland.

SH08 - *Acacia* sparse shrubland: *Acacia ramulosa* var. *linophylla*, *Acacia incurvaneura*, *Acacia incurvaneura* x *mulganeura* tall sparse shrubland; *Eremophila forrestii* subsp. *forrestii*, *Eremophila jucunda* subsp. *jucunda*, *Ptilotus schwartzii* low sparse shrubland.

W01 - *Acacia* open woodland: *Acacia pruinocarpa* low open woodland; *Acacia pteraneura*, *Acacia ramulosa* var. *linophylla* tall open shrubland; *Eremophila forrestii* subsp. *forrestii*, *Harnieria kempeana* subsp. *muelleri*, *Ptilotus obovatus* low sparse shrubland.

W02 - *Acacia* open woodland: *Acacia pruinocarpa* low open woodland; *Acacia incurvaneura*, *Acacia fusca*, *Acacia ramulosa* var. *linophylla* tall open shrubland; *Eremophila forrestii* subsp. *forrestii*, *Eremophila georgei*, *Ptilotus obovatus* low sparse shrubland.

Clearing Description	Iron Ridge Project. Fenix Resources Ltd proposes to clear up to 140.1 hectares of native vegetation within a boundary of approximately 440.308 hectares, for the purpose of mineral production and associated activities. The project is located approximately 53 kilometres north north-west of Cue, within the Shire of Cue.
Vegetation Condition	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994); To Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).
Comment	The vegetation condition was derived from a vegetation survey conducted by Ecologia (2020). Clearing permit CPS 8891/1 was granted by the Department of Mines, Industry Regulation and Safety on 20 August 2020 and is valid from 12 September 2020 to 31 December 2025. The permit authorised the clearing of up to 98.6 hectares of native vegetation within a boundary of approximately 462.341 hectares, for the purpose of mineral production. On 20 April 2021, the Permit Holder applied to amend CPS 8891/1 to include additional tenure, increase the amount of approved clearing and amend the permit boundary.

3. Assessment of application against Clearing Principles

Comments

The permit holder has applied to increase the amount of clearing authorised by 41.5 hectares, include additional tenure and reduce the permit boundary by approximately 22.033 hectares, to allow for stage 2 development of the Iron Ridge Project open pit and waste dump (Ecotec, 2021).

The clearing permit amendment application area is located within the Western Murchison subregion of the Interim Biogeographic Regionalisation for Australia (IBRA) Murchison Bioregion (GIS Database). The Western Murchison subregion is characterised by Mulga low woodlands, often rich in ephemerals (usually with bunch grasses), on outcrop and fine textured Quaternary alluvial and eluvial surfaces (extensive hardpan washplains that dominate and characterise the subregion) mantling granitic and greenstone strata of the northern part of the Yilgarn Craton. Surfaces associated with the occluded drainage occur throughout with hummock grasslands on Quaternary sandplains, saltbush shrublands on calcareous soils and *Tecticornia* low shrublands on saline alluvia (CALM, 2002).

No Threatened flora or Threatened Ecological Communities were identified within the application area or its surrounds (Ecotec, 2021).

Six Priority flora species have been identified within the application area:

- *Acacia dilloniorum* - (Priority 1)
- *Stenanthemum patens* - (Priority 1)
- *Micromyrtus placoides* - (Priority 3)
- *Prostanthera petrophila* - (Priority 3)
- *Acacia speckii* - (Priority 4)
- *Dodonaea amplisemina* - (Priority 4)

For each of the Priority flora species above, apart from *Micromyrtus placoides*, the proposed local impacts are considered to be negligible, with both Priority 1 species having less than 0.4% impact, and for the other Priority species (excluding *Micromyrtus placoides*), the local impact being less than 6% (Fenix, 2020). The proposed local impact to *Micromyrtus placoides* remains at 10.57%, which is consistent with a recent approval granted (17 September, 2020) to Fenix Resources pursuant to permit condition four of CPS 8891/1. The Stage 2 expansion of the Iron Ridge Project involves a southerly expansion of the waste dump onto General Purpose Lease 20/29, which has been designed to avoid impacting additional populations of *Micromyrtus placoides* which are located to the east of the application area.

The amendment area partly coincides with the Priority 1 Priority Ecological Community (PEC) "Weld Range vegetation complexes (banded ironstone formation)" and the 500 metre administrative buffer that surrounds it. Rather than being defined by a specific plant community, the extent of the Weld Range PEC has been determined on the basis of its extent over the banded iron formation of the Weld Range. Approximately 91.274 hectares (0.45%) of the Weld Range vegetation assemblages (banded ironstone formation) Priority 1

ecological community lies within the amended application area (DBCA, 2020; GIS Database). This is a reduction of 27.726 hectares from clearing permit CPS 8891/1 (GIS Database). Boundaries of the PEC are approximate only, and the total area covered appears to be an under estimation (DBCA, 2020). Based on a recent survey of the application area (Fenix 2020), the boundary of the PEC is likely to extend beyond the mapped boundary as currently recorded in online databases (DBCA, 2020). It is considered unlikely that the clearing permit amendment will significantly impact the PEC, noting the potential impacts are estimated to have been reduced in comparison to CPS 8891/1.

There are no permanent watercourses or wetlands within the amendment area, however two seasonal creek lines pass through the amendment area (GIS Database). Creek lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall (BoM, 2021). Potential impacts to vegetation growing in association with watercourses may be minimised by maintaining the watercourse management condition.

Four fauna habitats were identified within the amended application area (Ecotec, 2021). The fauna habitats to be impacted by the proposed clearing are consistent with those assessed under CPS 8891/1 and are well represented in the surrounding area (Ecotec, 2021).

The amendment area lies within the Jundee, Violet, Weld and Yarrameedie land systems. These land systems are generally not susceptible to erosion.

The reduction in the size of the permit boundary, with an increase in the area applied to clear, may result in increased environmental impacts at a local scale. However, the vegetation associations recorded within the permit area are typical of the region and well represented in surrounding areas (Ecotec, 2021; GIS Database). The proposed amendment is unlikely to result in any significant change to the environmental impacts of the proposed clearing in a regional context.

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 decision report CPS 8891/1.

Methodology

BoM (2021)
CALM (2002)
DBCA (2020)
Ecotec (2021)
Fenix (2020)

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, 2021). This claim has been determined by the Federal Court on behalf of the claimant group. 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, 2021). 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 24 May 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 (2021)

4. References

- BoM (2021) Bureau of Meteorology Website – Climate Data Online, Cue. Bureau of Meteorology.
http://www.bom.gov.au/climate/averages/tables/cw_007017.shtml (Accessed 21 June 2021).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DBCA (2020) Advice to Assessing Officer in Regards to Clearing Permit Application CPS 8891/1. Advice received 20 July, 2020.
- DPLH (2021) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage.
<https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 21 June 2021).
- Ecologia (2020) Iron Ridge Biological Survey 2019. Unpublished report prepared for Fenix Resources by Ecologia, March 2020.
- Ecotec (2021) Iron Ridge Project – Clearing Permit CPS 8891/1 Amendment Supporting Information. Tenements: M20/118, G20/28, G20/29, L20/83, L20/84, L20/85. Unpublished report prepared for Fenix Resources by Ecotec (WA) Pty Ltd, April 2021.
- Fenix (2020) Iron Ridge Clearing Permit Application, Supporting Information. Unpublished report prepared by Fenix Resources, April 2020.
- 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:

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 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.