Department of Energy, Mines, Industry Regulation and Safety

GOVERNMENT OF WESTERN AUSTRALIA

Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	10694/1
Permit type:	Purpose Permit
Applicant name:	Regis Resources Ltd
Application received:	22 July 2024
Application area:	612 hectares
Purpose of clearing:	Mineral production
Method of clearing:	Mechanical Removal
Tenure:	Mining Leases 38/114, 38/160, 38/262, 38/341, 38/630, 38/1297, 38/1304
	Miscellaneous Licences 38/20, 38/202, 38/203, 38/206, 38/234, 38/364, 38/365
Location (LGA area/s):	Shire of Laverton
Colloquial name:	Duketon Gold Project – Southern Tenements

1.2. Description of clearing activities

Regis Resources Ltd proposes to clear up to 612 hectares of native vegetation within a boundary of approximately 2,629 hectares, for the purpose of mineral production. The project is located approximately 49 kilometres north of Laverton, within the Shire of Laverton.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	17 October 2024
Decision area:	612 hectares of native vegetation

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed, and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) advertised the application for a public comment for a period of 21 days, and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix A), relevant datasets (Appendix D), supporting information provided by the applicant including the results of a flora and vegetation survey (**Error! Reference source not found.**), the clearing principles set out in Schedule 5 of the EP Act (Appendix B), proposed avoidance and minimisation measures (Section 3.1), relevant planning instruments and any other matters considered relevant to the assessment (Section 3.3).

The assessment identified that the proposed clearing may result in:

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values;
- potential land degradation in the form of erosion; and
- potential impacts to riparian vegetation and water flows.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing can be minimised and managed to be unlikely to lead to an unacceptable risk to environmental values.

The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- commence mineral production no later than six months after undertaking clearing to reduce the risk of erosion; and
- avoid clearing riparian vegetation where possible and maintain water flows where watercourses are impacted.

1.5. Site map

A site map of proposed clearing is provided in Figure 1 below.

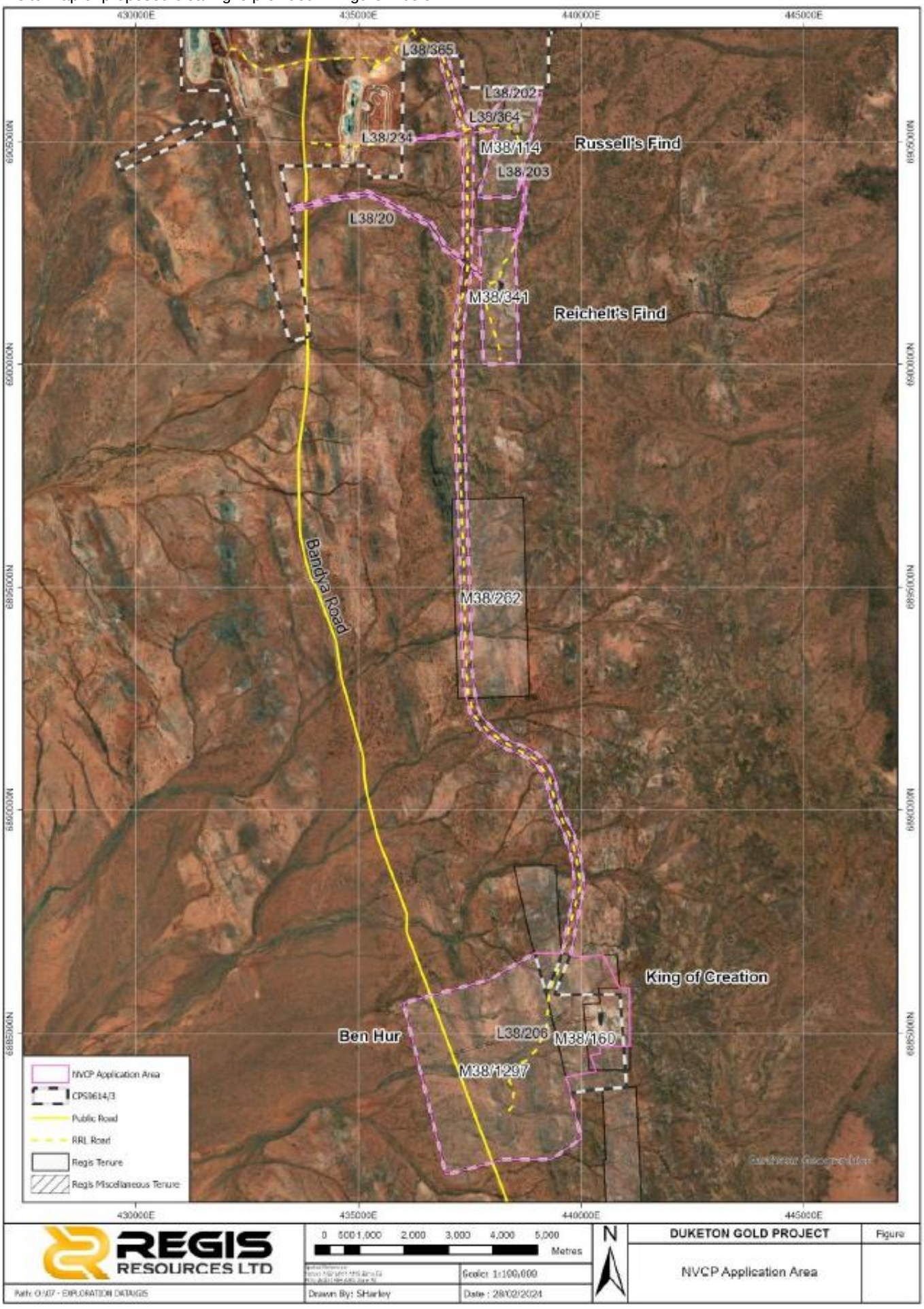


Figure 1. Map of the application area.

2. Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Mining Act 1978* (WA)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2014)
- *Procedure: Native vegetation clearing permits* (DWER, October 2021)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2020)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

To minimise clearing, Regis has undertaken the following actions (Regis 2024a, 2024b):

- Identified an area at Reichelt's Find pit where some backfill can be placed,
- Utilisation of past disturbance areas at King of Creation to establish waste rock dumps,
- Siting of the Ben Hur to Garden Well haul road placed to minimise future haul road development. By running the haul road close to existing known gold targets or past mining operations, future mining operations will be able to utilize this infrastructure,
- Existing legacy impacts have also been considered in project design to address past flooding issues,
- Design infrastructure to minimise disturbance to Priority Flora species wherever possible,
- Rehabilitate disturbance areas as soon as practicable,
- Dust suppression will be regularly undertaken on high traffic roads to minimise potential dust related impacts on adjacent vegetation,
- Prevent and minimise the introduction and spread of weeds within the project area,
- Avoid impacts to the quality of surface water wherever possible,
- Habitats with greater conservation value will be planned for avoidance where possible.

The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix A) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles (see Appendix B) identified the impacts of the proposed clearing are limited and able to be managed to be environmentally acceptable with standard avoid and minimize, hygiene and staged clearing management conditions.

3.2.1. Biological values / Land and water resources

Assessment

The application area is located within the East Murchison subregion of the Murchison Interim Biogeographic Regionalisation for Australia bioregion (GIS Database). The East Murchison subregion is characterised by internal drainage, extensive areas of elevated red desert sandplains with minimal dune development, salt lake systems associated with the occluded paleodrainage system, broad plains of red-brown soils and breakaway complexes, as well as red sandplains (CALM, 2002). Vegetation is dominated by Mulga woodlands which are often rich in ephemerals; hummock grasslands, saltbush shrublands and *Halosarcia tecticornia* shrublands (CALM, 2002).

Various flora and vegetation surveys have been conducted by Mattiske Consulting Pty Ltd over the majority of the application Area (Mattiske, 2016a, 2016b, 2021, 2023; Regis, 2024b). No Threatened flora species were recorded within the application area, although five Priority flora species were identified within the broader survey area. Of the five Priority flora species, three were recorded in the application area (*Calytrix praecipua*, *Eremophila pungens* and *Lysiandra baeckeoides*) (Mattiske, 2016a, 2021; Regis, 2024b). These species were recorded at low densities within the application area and bigger populations occur

outside of the application area, including some records in nature reserves (Western Australian Herbarium, 1998-). The number of records from these flora species are available in Appendix A.2. Based on available survey data and records, large scale impacts to flora species of conservation significance (including Priority flora species) are considered unlikely, therefore it is not anticipated that the proposed clearing will adversely impact on Priority flora species at a population or species level.

The fauna habitats present within the application area are common and widespread in the landscape and bioregion, with vast tracts of similar habitat in adjacent areas (Regis, 2024b; Terrestrial Ecosystems, 2021, 2023a, 2023b, 2023c). The vegetation within the application area is not considered to be providing, or contributing to, important ecological linkages or fauna movement corridors (Terrestrial Ecosystems, 2021, 2023a, 2023b, 2023c; GIS Database).

Fauna surveys conducted by Terrestrial Ecosystems (2021, 2023a, 2023b, 2023c) did not record any conservation significant fauna in the application area. The conservation significant fauna with the greatest likelihood occurring are avifauna including peregrine falcon, southern whiteface, fork-tailed swift and princess parrot (Regis, 2024b). These aerial species are unlikely to be significantly impacted by the proposed clearing.

Numerous non-perennial watercourses have been mapped within the application area (GIS Database) and a number of the vegetation communities identified within the application area are considered to be growing in association with minor drainage lines (Mattiske, 2016a, 2016b, 2021, 2023; Regis, 2024b). Potential impacts to vegetation growing in association with a watercourse or wetland as a result of the proposed clearing may also be minimised by the implementation of a watercourse management condition.

Eight land systems have been mapped within the application area (see Appendix A.1) Some of these land systems are susceptible to erosion in areas where perennial shrub cover is substantially reduced, or the soil surface is disturbed (Pringle et al., 1994). Potential land degradation as a result of the proposed clearing may be minimised by the continued implementation of a staged clearing condition.

Conclusion

Based on the above assessment, the proposed clearing may have on surface water flow, and there is potential for localised impacts associated with weeds and erosion if areas are cleared of vegetation. Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

Conditions

To address the above impacts, the following management measures will be required as conditions on the clearing permit:

- A hygiene condition to minimise the risk of the introduction and spread of weeds;
- A staged clearing condition to ensure that only areas that are needed are cleared at any one time; and
- A watercourse management condition to minimise impacts to surface water flow.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 13 August 2024 by the Department of Energy, Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

There are no native title claims over the area under application (DPLH, 2024). 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, 2024). 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.

Other relevant authorisations required for the proposed land use include:

- A Mining Proposal / Mine Closure Plan approved under the *Mining Act 1978*.

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.

End

Appendix A. Site characteristics

A.1. Site characteristics

Characteristic	Details
Local context	The area proposed to be cleared is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia. It is surrounded by the active Duketon Gold Project and the landscape of the Murchison Bioregion (GIS Database).
Ecological linkage	According to available databases, the application area does not contain any known or mapped ecological linkages (GIS Database).
Conservation areas	The nearest conservation area is De La Poer Range Nature Reserve located approximately 53 kilometres north-east of the application area (GIS Database).
Vegetation description	The vegetation of the application area is broadly mapped as the following Beard vegetation associations: 18: Low woodland; mulga (*Acacia aneura*); and 39: Shrublands; mulga scrub (GIS Database). Various flora and vegetation surveys were conducted over the application area by Mattiske Consulting Pty Ltd throughout multiple years. The following vegetation associations were recorded within the application area (Mattiske, 2016a, 2016b, 2021, 2023): **Vegetation associations present at Russell's Find**

Vegetation Association Code	Description	Mapped Area (ha)
A2	Low open woodland of *Acacia aneura* with *Acacia ayersiana* and *Grevillea berryana* over *Acacia ramulosa* var. *ramulosa*, *Acacia tetragonophylla* and mixed *Eremophila* spp. over *Ptilotus obovatus, Eragrostis eriopoda* and *Eriachne mucronata* on orange sandy/clay-loams on flats.	0.01
A5	Low open woodland to open shrubland of *Acacia aneura* with *Acacia ayersiana*, *Acacia burkittii* and *Acacia tetragonophylla* over *Senna artemisioides* subsp. *filifolia* over mixed annual herbs on orange sandy-loams in minor drainage lines.	0.03
A7	Low open woodland of *Acacia* sect. Juliflorae (*A. aneura, A. incurvaneura* and *A. pteraneura*) over *Acacia craspedocarpa*, *Acacia tetragonophylla, Santalum spicatum, Eremophila georgei* and *Senna artemisioides* subsp. *filifolia* over *Sida calyxhymenia*, *Ptilotus obovatus* and *Eriachne mucronata* on orange sandy-loams in minor drainage lines.	0.77
A8	Low open woodland to open shrubland of *Acacia ayersiana, Acacia aneura* and *Acacia aptaneura* with *Acacia tetragonophylla* over *Eremophila latrobei*	4.14
	subsp. *filiformis, Ptilotus obovatus, Dianella revoluta* and *Eragrostis eriopoda* on orange sandy-loams on flats.	
A13	Semi-closed to open shrubland of *Acacia mulganeura*, *Acacia incurvaneura, Acacia tetragonophylla* and *Acacia craspedocarpa* over *Ptilotus obovatus, Hibiscus burtonii* and *Solanum lasiophyllum* on flats with red clay soil and quartz pebbles.	35.33
A16	Closed to open shrubland of *Acacia incurvaneura, Acacia burkittii, Acacia tetragonophylla* and *Acacia craspedocarpa* over *Senna artemisioides* subsp. x *artemisioides* over *Ptilotus obovatus* and *Hibiscus burtonii* over *Cheilanthes sieberi* subsp. *sieberi* and mixed grasses on minor creek lines with red clay soils.	6.52
A26	Scrub to open scrub of *Acacia* sect. Juliflorae (*A. incurvaneura, A. macraneura* and *A. mulganeura*) over open low shrubland of *Ptilotus obovatus* and *Solanum lasiophyllum* over low chenopod shrubland of *Maireana triptera* and *Sclerolaena cuneata* on red-orange clay loam on flats and slopes (rarely) with quartz pebbles.	1.88
A30	Scrub to open scrub of *Acacia* sect. Juliflorae (*A. ?aneura* and *A. incurvaneura*) and *Acacia quadrimarginea* over low shrubland of *Psydrax suaveolens, Eremophila latrobei* subsp. *latrobei, Eremophila ?punctata* and *Ptilotus schwartzii* var. *georgei* over mixed grasses on red-brown clay loam on flats and slopes with iron pebbles.	147.34
C2	Very open Chenopod shrubland of *Maireana pyramidata* over *Maireana triptera, Sclerolaena eriacantha, Solanum lasiophyllum, Frankenia georgei* and mixed grasses with occasional emergent *Acacia ?cuthbertsonii, Hakea preissii* and *Eremophila oldfieldii* on flats with red clay soil and quartz pebbles.	5.74
C5	Low open Chenopod shrubland of *Maireana pyramidata* and *Eriochiton sclerolaenoides* with emergent *Acacia* sect. Juliflorae (*A. ?aneura* and *A. pteraneura*) and *Acacia tetragonophylla* over *Frankenia setosa* and *Maireana georgei* on red-orange clay-loams on flats with quartz and iron pebbles.	6.52

Characteristic	Details

Vegetation Associations at Reichelt's Find

Vegetation Association Code	Description	Mapped Area (ha)
A7	Low open woodland of *Acacia* sect. Juliflorae (*A. aneura, A. incurvaneura* and *A. pteraneura*) over *Acacia craspedocarpa, Acacia tetragonophylla, Santalum spicatum, Eremophila georgei* and *Senna artemisioides* subsp. *filifolia* over *Sida calyxhymenia, Ptilotus obovatus* and *Eriachne mucronata* on orange sandy-loams in minor drainage lines.	0.93
A13	Semi-closed to open shrubland of *Acacia mulganeura*, Acacia *incurvaneura, Acacia tetragonophylla* and *Acacia craspedocarpa* over *Ptilotus obovatus, Hibiscus burtonii* and *Solanum lasiophyllum* on flats with red clay soil and quartz pebbles.	114.98
A16	Closed to open shrubland of *Acacia incurvaneura, Acacia burkittii, Acacia tetragonophylla* and *Acacia craspedocarpa* over *Senna artemisioides* subsp. x *artemisioides* over *Ptilotus obovatus* and *Hibiscus burtonii* over *Cheilanthes sieberi* subsp. *sieberi* and mixed grasses on minor creek lines with red clay soils.	14.24
A20	Open to semi-closed shrubland of *Acacia incurvaneura* and *Acacia quadrimarginea* over *Ptilotus obovatus*, *Baeckea* sp. Melita Station (H. Pringle 2738) and *Ptilotus schwartzii* over mixed grasses on red clay loams with numerous granitic outcropping on slopes and ridges.	31.62
A22	Thicket of *Acacia* sect. Juliflorae (*Acacia incurvaneura, Acacia mulganeura*) over low shrubland of mixed *Eremophila* spp. with *Psydrax* spp. over tussock grassland with *Cheilanthes sieberi* subsp. *sieberi* on red clay loam flats.	0.15
A27	Open scrub of *Acacia* sect. Juliflorae (*A. ?aneura* and *A. incurvaneura*) over open low shrubland of *Solanum lasiophyllum* and *Maireana convexa* over mixed grasses on red-orange clay loam on flats with quartz and iron pebbles.	27.19
A28	Scrub to open scrub of *Acacia* sect. Juliflorae (*A. ?aneura*, *A. incurvaneura* and *A. ?pteraneura*) over open low shrubland of *Cratystylis subspinescens*, *Ptilotus obovatus, Senna artemisioides* subsp. ×*sturtii*, *Solanum lasiophyllum* over *Maireana pyramidata* on red-orange clay loam on flats and slopes with quartz and iron pebbles.	7.11
C1	Low open Chenopod shrubland of *Maireana pyramidata* and *Cratystylis subspinescens* with emergent *Acacia* sect. Juliflorae (*Acacia incurvaneura* and *Acacia pteraneura*) and *Acacia craspedocarpa* over *Hakea preissii* over *Frankenia fecunda, Maireana georgei, Maireana planifolia, Maireana tomentosa, Sclerolaena cuneata* and *Sclerolaena eriacantha* on orange clay-loams on flats.	6.89
C5	Low open Chenopod shrubland of *Maireana pyramidata* and *Eriochiton sclerolaenoides* with emergent *Acacia* sect. Juliflorae (*A. ?aneura* and *A. pteraneura*) and *Acacia tetragonophylla* over *Frankenia setosa* and *Maireana georgei* on red-orange clay-loams on flats with quartz and iron pebbles.	8.84

Vegetation Associations at Ben Hur/King of Creation

Characteristic	Details

Vegetation Association Code	Description	Mapped Area (ha)
Ash01 Ben Hur / King of Creation	*Acacia aptaneura, Acacia ayersiana* and *Acacia tetragonophylla* tall sparse shrubland	859.48
Ash01 Road Corridor		349.45
Ash02 Ben Hur / King of Creation	*Acacia ayersiana* and *Acacia tetragonophylla* tall sparse shrubland over *Senna* ?sp. Meekatharra mid sparse shrubland on red-brown clay soils with quartz and ironstone pebbles.	394.50
Ash03 Ben Hur / King of Creation	*Allocasuarina* sp., *Acacia ?effusifolia* and *Acacia aneura* tall sparse shrubland over *Acacia tetragonophylla*, *Senna artemisioides* and *Senna* sp. Meekatharra (E. Bailey 1-26) mid sparse shrubland on red-brown clay soils with ironstone and quartz rock on slopes.	16.66
Ash04 Ben Hur / King of Creation	*Acacia aneura* and *Acacia tetragonophylla* tall sparse shrubland over *Ptilotus obovatus* and *Ptilotus schwartzii* low isolated shrubs on red-brown clay soils with ironstone and/or quartz rocks on flats.	237.92
Ash04 Road Corridor		51.58
Ash05 Ben Hur / King of Creation	*Acacia aneura* and *Grevillea berryana* tall sparse shrubland over *Eremophila latrobei*, *Eremophila glutinosa* and *Eremophila ?punctata* mid sparse shrubland over *Ptilotus schwartzii* low isolated shrubs.	30.96
Ash06 Ben Hur / King of Creation	*Acacia aneura* sparse shrubland over *Eremophila latrobei* subsp. *latrobei* and *Dodonaea viscosa* subsp. *mucronata* low sparse shrubland over *Eriachne mucronata* and *Cymbopogon ambiguous* low isolated grasses.	2.17
Ash07 Ben Hur / King of Creation	Acacia burkittii and Acacia tetragonophylla low sparse shrubland on red-brown clay soils with quartz and ironstone rocks on lower slopes.	5.32
Ash08 Ben Hur / King of Creation	*Acacia tetragonophylla*, *Acacia aneura* and *Acacia craspedocarpa* tall sparse shrubland over *Senna artemisioides* subsp. *filifolia* and *Santalum spicatum* mid sparse shrubland over *Dactyloctenium radulans* and *Cheilanthes sieberi* isolated grasses	127.15
Ash08 Road Corridor		13.52
Ash09 Ben Hur / King of Creation	*Acacia craspedocarpa* and *Santalum spicatum* mid isolated shrubs on red-brown clays soils with quartz and ironstone rocks on flats.	5.91
Ash10 Ben Hur / King of Creation	*Hakea preissii, Acacia ayersiana* and *Acacia aneura* tall sparse shrubland over *Maireana triptera* low isolated chenopod shrubs on red-brown clay soils with quartz and ironstone pebbles on flats and slopes.	6.80

Vegetation Association Code	Description	Mapped Area (ha)
Ch01 Road Corridor	Sparse chenopod shrubland of *Maireana georgei*, *Eriochiton sclerolaenoides* and *Frankenia setosa*, with isolated shrubs of *Acacia* section Juliflorae (*A. aneura, A. pteraneura*) and *Hakea preissii* over isolated samphire shrubs of *Tecticornia* sp. on red-orange clay-loams on flats with quartz and ironstone pebbles.	17.39
Ch02 Ben Hur / King of Creation	*Senna artemisioides* subsp. *filifolia* mid sparse shrubland over *Maireana sedifolia* and *Ptilotus obovatus* low sparse chenopod shrubland on red-brown clay soils with quartz and ironstone pebbles on flats.	25.76
Ch02 Road Corridor		19.86
Ch03 Ben Hur / King of Creation	*Hakea preissii* mid sparse shrubland over *Dissocarpus ?paradoxus*, *Rhagodia spinescens* and *Tecticornia ?disarticulata* low sparse chenopod shrubland on orange to red clay soils with scattered quartz rocks on flats.	63.62
Ch03 Road Corridor		0.85
EW01 Road Corridor	*Eucalyptus camaldulensis* mid open woodland over *Acacia ?effusifolia*, *Acacia burkittii* and *Acacia tetragonophylla* tall sparse shrubland over *Senna artemisioides* subsp. *filifolia, Senna cardiosperma* and *Alternanthera nodiflora* low sparse shrubland on orange-brown coarse gravelly clays with rocks in major drainage channels.	2.57

<table>
<tr><th>Characteristic</th><th>Details</th></tr>
<tr><td></td><td><u>Vegetation Associations at King of Creation 2023 Survey Areas</u>
<table>
<tr><th>Vegetation Association Code</th><th>Description</th><th>Mapped Area (ha)</th></tr>
<tr><td>A1</td><td>Tall open shrubland of Acacia section Juliflorae (Acacia anuera, Acacia pteraneura), over mid- sparse shrubland of Acacia tetragonophylla, Senna artemisioides, and Rhagodia eremaea, over low-sparse shrubland of Maireana villosa, Sida ectogama, and Ptilotus obovatus on gently undulating red-orange clay flats with quartz and ironstone pebbling</td><td>136.01</td></tr>
<tr><td>A3</td><td>Tall open shrubland of Acacia section Juliflorae (Acacia aneura, Acacia ceasaneura, Acacia pteraneura) over mid-sparse shrubland of Acacia tetragonophylla, Psydrax suaveolens, over low-sparse shrubland of Solanum lasiophyllum, Eriachne mucronata, and Teucrium teucriiflorum on gently undulating red-orange clay flats with quartz and ironstone pebbling</td><td>26.55</td></tr>
<tr><td>A5</td><td>Tall open shrubland of Acacia section Juliflorae (Acacia aneura, Acacia ceasaneura, Acacia pteraneura), over mid-sparse shrubland of Acacia tetragonophylla, Eremophila galeata, and Psydrax suaveolens, over low-sparse shrubland of Sida ectogama, Ptilotus obovatus, and Cheilanthes seiberi on gently undulating red-orange clay flats with quartz and ironstone pebbling</td><td>100.53</td></tr>
<tr><td>A8</td><td>Tall sparse shrubland of Acacia section Juliflorae (Acacia anuera, Acacia pteraneura), over mid- sparse shrubland of Eremophila platycalyx, Hakea preissii, and Senna artemisioides, over low-sparse shrubland of Maireana villosa, Sida ectogama, and Scaevola spinescens on gently undulating red-orange clay flats with quartz and ironstone pebbling</td><td>41.48</td></tr>
<tr><td>A10</td><td>Tall sparse shrubland of Acacia section Juliflorae (Acacia aneura, Acacia incurvaneura), over mid- sparse shrubland of Acacia tetragonophylla, and Eremophila galeata, and Eremophila platycalyx, over low-sparse shrubland of Ptilotus obovatus and Enneapogon caerulescens on gently undulating red-orange clay flats with quartz and ironstone pebbling</td><td>7.83</td></tr>
<tr><td>C2</td><td>Tall sparse shrubland of Hakea preissii, over mid-sparse shrubland of Eremophila platycalyx, Senna artemisioides, and Rhagodia eremaea, over low-sparse chenopod shrubland of Cratystylis subspinescens, Maireana villosa, and Ptilotus obovatus on clay flats with quartz pebbling</td><td>83.50</td></tr>
<tr><td>D1</td><td>Tall open-shrubland of Acacia section Juliflorae (Acacia aneura, Acacia ceasaneura, Acacia pteraneura), and Acacia craspedocarpa, over mid-open shrubland of Acacia tetragonophylla, Santalum spicatum, and Senna artemisioides, over low-open shrubland of Sida ectogama, Solanum lasiophyllum, and Teucrium teucriiflorum on red clay in minor drainage channels</td><td>21.76</td></tr>
<tr><td>D3</td><td>Mid open shrubland of Acacia tetragonophylla, Santalum spicatum, and Senna artemisioides, over low-sparse shrubland of Cratystylis subspinescens, Sida ectogama, and Sida fibulifera on sandy orange clay in minor drainage lines</td><td>11.57</td></tr>
<tr><td>D4</td><td>Tall woodland of Eucalyptus camaldulensis, over mid-open shrubland of Acacia burkittii, Acacia tetragonophylla, and Grevillea extorris, over low-open shrubland of Indigofera georgei, Ptilotus obovatus, and Senna cardiosperma on red clay in major drainage channels</td><td>8.77</td></tr>
<tr><td>R1</td><td>Tall sparse shrubland of Acacia section Juliflorae (Acacia ceasaneura, Acacia fuscaneura, Acacia pteraneura), over Mid-sparse shrubland of Acacia tetragonophylla, over low sparse chenopod shrubland of Maireana triptera, Maireana villosa, and Eriachne mucronata on red clay on ironstone ridgelines</td><td>0.90</td></tr>
</table></td></tr>
<tr><td>Vegetation condition</td><td>The vegetation surveys (Mattiske, 2016a, 2016b, 2021, 2023) and aerial imagery indicate the vegetation within the proposed clearing area is in Excellent to Completely Degraded (Trudgen, 1991) condition.

The full Trudgen (1991) condition rating scale is provided in Appendix C.</td></tr>
<tr><td>Climate and landform</td><td>The application area is located in an arid zone of Western Australia with a mean annual rainfall (Laverton station) of 234.4 millimetres (BoM, 2024).</td></tr>
<tr><td>Soil description</td><td>The soil mapped within the application area is mapped as soil unit BE8. This soil unit is described as partially dissected pediments extending out from areas of unit Fa7; there may be a surface cover of gravels. Earthy loams are dominant; with red-brown hardpan at shallow depth are also present (Northcote et al., 1960-68).</td></tr>
<tr><td>Land degradation risk</td><td>The application area intersects 8 land systems (DPIRD, 2024). These land systems are described by DPIRD (2024) and Pringle et al. (1994) as:
Bevon land system: Irregular low ironstone hills with stony lower slopes supporting mulga shrublands. Minor areas with texture contrast soils on breakaway footslopes and narrow drainage tracts are susceptible to soil erosion, particularly if perennial shrub cover is substantially reduced or the soil surface is disturbed.
Brooking land system: Prominent ridges of banded iron formation supporting mulga shrublands and occasional minor halophytic communities. Stone mantles provide effective protection against soil erosion. Disturbance or removal of stone mantles may initiate soil erosion.</td></tr>
</table>

<table>
<tr><th>Characteristic</th><th>Details</th></tr>
<tr><td></td><td>
Felix land system: Gently undulating plains with quartz mantles, supporting acacia-eremophila shrublands locally with wanderrie grasses. Stone mantles provide effective protection of the soil against erosion.
Gransal land system: Stony plains and low rises on granite, supporting mainly halophytic shrublands. Breakaway footslopes and alluvial plains are respectively highly and moderately susceptible to water erosion in areas where perennial shrub cover is substantially reduced. Disturbance of soil surface on these units and on saline stony plains is also likely to initiate soil erosion.
Jundee land system: Hardpan plains with variable gravelly mantles and minor sandy banks supporting weakly groved mulga shrublands. Impedance to natural sheet flows can initiate soil erosion. Gravel mantles provide effective protection against soil erosion.
Nubev land system: Gently undulating stony plains, minor limonitic low rises and drainage floors supporting mulga and halophytic shrublands. Drainage zones are moderately susceptible to soil erosion, particularly where perennial shrub cover is substantially reduced or the soil surface is disturbed. Disturbance of the protective stone mantle on saline stony plains is also likely to initiate water erosion.
Sunrise land system: Stony plains supporting mulga shrublands. This land system is generally not susceptible to soil erosion, partly as a consequence of extensive protective stone mantles.
Violet land system: Gently undulating gravelly plains on greenstone, laterite and hardpan, with low stony rises and minor saline plains; supporting groved mulga and bowgada shrublands and occasionally chenopod shrublands. Abundant mantles provide effective protection against soil erosion over most of this land system, except where the soil surface has been disturbed, for example by the construction of tracks and gridlines. In such circumstances, the soil becomes moderately susceptible to water erosion. Narrow drainage tracts are mildly susceptible to water erosion.
</td></tr>
<tr><td>Waterbodies</td><td>The desktop assessment and aerial imagery indicated that several minor, non-perennial watercourses transect the area proposed to be cleared (GIS Database).</td></tr>
<tr><td>Hydrogeography</td><td>The application area is located within the Goldfields Groundwater Area, legislated by the RIWI Act 1914. The mapped groundwater salinity ranges from 1,000-3,000 milligrams per litre total dissolved solids, which is considered to be brackish (GIS Database).</td></tr>
<tr><td>Flora</td><td>Five Priority flora species have been recorded in the survey area, three were located in the application area. No Threatened flora species were recorded in the application area (Regis, 2024; GIS Database).</td></tr>
<tr><td>Ecological communities</td><td>The application area does not for part of any known or mapped Threatened or Priority Ecological Communities. The closest record is 18 kilometres south of the application area (GIS Database).</td></tr>
<tr><td>Fauna</td><td>Various fauna surveys were conducted over the application area by Terrestrial Ecosystems Pty Ltd on multiple occasions. The following fauna species have been assessed to have some potential to be present in the application area (Terrestrial Ecosystems, 2021, 2023a, 2023b, 2023c):
<table>
<tr><th>Species</th><th>Conservation Significance</th><th>Russell's Find</th><th>Reichelt's Find</th><th>Ben Hur/King of Creation</th></tr>
<tr><td>Malleefowl</td><td>BC Act Vulnerable
EPBC Act Vulnerable</td><td>Not present in the project area due to a lack of suitable habitat.</td><td>Very low probability of being present in the project area. Tracks of a single individual recorded ~50 km to the northwest at The Thompson's Bore prospect</td><td>Very low probability of being present in the project area. Tracks of a single individual recorded ~70 km to the northwest at The Thompson's Bore prospect</td></tr>
<tr><td>Princess Parrot</td><td>BC Act Vulnerable
EPBC Act Vulnerable</td><td>May occasionally be seen in the region</td><td>May occasionally be seen in the region</td><td>May infrequently be seen</td></tr>
<tr><td>Southern Whiteface</td><td>BC Act Vulnerable
EPBC Act Vulnerable</td><td>Potentially in the project area, but it will readily move, so any impacts are unlikely to be significant.</td><td>Potentially in the project area, but it will readily move, so any impacts are unlikely to be significant.</td><td>Potentially in the project area, but it will readily move, so any impacts are unlikely to be significant.</td></tr>
<tr><td>Fork-tailed Swift</td><td>BC Act Migratory
EPBC Migratory</td><td>May infrequently be seen</td><td>May infrequently be seen flying in the region</td><td>May infrequently be seen flying</td></tr>
<tr><td>Peregrine Falcon</td><td>BC Act Other Specially Protected</td><td>May infrequently be seen</td><td>May occasionally be seen in the region</td><td>May be present</td></tr>
<tr><td>Long-tailed Dunnart</td><td>DBCA – Priority 4</td><td>Very low probability of being present</td><td>Very low probability of being present in the project area. A single individual was recorded ~50 km to the northwest at The Thompson's Bore prospect.
The rocky outcropping in the project area appear too small to support a population of Long-tailed Dunnarts.</td><td>Rocky outcrops are very small and unlikely to be large enough to support Long-tailed Dunnart, but habitat is suitable thus could be present in rocky habitats</td></tr>
</table>
</td></tr>
</table>

Characteristic	Details
Fauna habitat	Habitat types across these projects include (Terrestrial Ecosystems, 2021; 2023a, 2023b, 2023c): • Flat open Mulga woodlands over scattered shrubs on stony sandy-clay substrate at Reichelt's Find and Ben Hur/King of Creation. • Rocky outcrops at Reichelt's Find and Ben Hur/King of Creation. • Eucalypt creeklines with mature Eucalypts along the Ben Hur to King of Creation Infrastructure Corridor. • Chenopod shrublands – represented at Ben Hur/King of Creation.

A.2. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix D.1), and biological survey information, impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Suitable habitat features? [Y/N]	Number of known records (Western Australian Herbarium)	Number of locations (surveys)	Number of locations (application area)	Are surveys adequate to identify? [Y, N, N/A]
Calytrix praecipua	P3	Y	28	2	1	Y
Einadia nutans subsp. *nutans*	P3	Y	1	Unknown*	0	Y
Eremophila pungens	P4	Y	45	9	2	Y
Frankenia georgei	P1	Y	6	Unknown*	0	Y
Lysiandra baeckeoides	P3	Y	31	3	1	Y

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

*The survey report (Mattiske, 2021) did not go into detail about the number of records of species recorded only outside of the application area.

(Mattiske, 2021; Regis, 2024b; Western Australian Herbarium, 1998-)

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."* Assessment: No vegetation communities mapped within the Duketon tenements are spatially restricted. While some vegetation units occupy a small area within Regis Resources' Duketon tenements, similar vegetation assemblages are known to be regionally abundant. Although habitats for Priority flora and fauna species are present in the application area, they are common and not likely to support a high level of biodiversity (Regis, 2024b).	Not likely to be at variance	Yes *Refer to Section 3.2.1, above.*
Principle (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."* Assessment: Although the proposed clearing areas will comprise habitat that may be suitable for fauna indigenous to Western Australia, from a regional context, the vegetation associations within the project area are well represented within the broader region (Regis, 2024b).	Not likely to be at variance	Yes *Refer to Section 3.2.1, above.*
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: No Threatened flora species have been recorded at the Duketon Gold Project application area (Regis, 2024b; GIS Database)	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (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."* Assessment: No Threatened Ecological Communities have been recorded at the Duketon Gold Project application area (Regis, 2024b; GIS Database).	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
Principle (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."* Assessment: The application area falls within the Murchison Bioregion of the Interim Biogeographic Regionalisation for Australia (GIS Database). Over 99 per cent of the pre-European vegetation still exists in the Murchison Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation associations 18 and 39 (GIS Database). These vegetation associations have not been extensively cleared as over 99 per cent of the pre-European extent of this vegetation association remains uncleared at both the state and bioregional level (Government of Western Australia, 2019).	Not at variance	No
Principle (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."* Assessment: Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of any known or mapped conservation areas (GIS Database).	Not likely to be at variance	No
Environmental value: land and water resources		
Principle (f): *"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."* Assessment: There are several water courses within the application area (GIS Database) and a number of the vegetation communities identified within the application area are considered to be growing in association with minor drainage lines (Regis, 2024b).	At variance	Yes *Refer to Section 3.2.1, above.*
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The mapped soils are moderately susceptible to soil erosion, especially along drainage lines (Pringle et al., 2004). Noting the location of the application area and the amount of the proposed clearing, the proposed clearing is likely to cause appreciable land degradation.	May be at variance	Yes *Refer to Section 3.2.1, above.*
Principle (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."* Assessment: Given no permanent water courses, wetlands, or Public Drinking Water Source Areas are recorded within the application area (GIS Database), the proposed clearing is unlikely to cause deterioration in the quality of surface or underground water.	Not likely to be at variance	No
Principle (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."* Assessment: Given no permanent water courses or wetlands are recorded within the application area (GIS Database), the proposed clearing is unlikely to cause, or exacerbate, the incidence or intensity of flooding.	Not likely to be at variance	No

Appendix C. Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation's ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Trudgen, M.E. (1991) *Vegetation condition scale* in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth.

Measuring vegetation condition for the Eremaean and Northern Botanical Provinces (Trudgen, 1991)

Condition	Description
Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
Good	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.
Poor	Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
Very poor	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
Completely degraded	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e. areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.

Appendix D. Sources of information

D.1. GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- Aboriginal Heritage Places (DPLH-001)
- Clearing Regulations – Schedule One Areas (DWER-057)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Environmentally Sensitive Areas (DWER-046)
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments – Catchments (DWER-028)
- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- IBRA Vegetation Statistics
- Pre-European Vegetation Statistics
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping – Best Available (DPIRD-027)
- Soil Landscape Mapping – Rangelands (DPIRD-064)
- WA Now Aerial Imagery

Restricted GIS Databases used:

- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

D.2. References

Bureau of Meteorology (BoM) (2024) Bureau of Meteorology Website – Climate Data Online, Laverton Station. Bureau of Meteorology. https://reg.bom.gov.au/climate/data/ (Accessed 14 October 2024).

Conservation and Land Management (CALM) (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.

Department of Environment Regulation (DER) (2014) *A guide to the assessment of applications to clear native vegetation*. Perth. https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf

Department of Planning, Lands and Heritage (DPLH) (2024) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS (Accessed 14 October 2024).

Department of Primary Industries and Regional Development (DPIRD) (2024) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. https://dpird.maps.arcgis.com/apps/webappviewer/index.html?id=662e8cbf2def492381fc915aaf3c6a0f (Accessed 14 October 2024).

Department of Water and Environmental Regulation (DWER) (2021) Procedure: Native vegetation clearing permits. Joondalup. https://dwer.wa.gov.au/sites/default/files/Procedure_Native_vegetation_clearing_permits_v1.pdf

Environmental Protection Authority (EPA) (2016) Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment. http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf

Environmental Protection Authority (EPA) (2020) Technical Guidance – Terrestrial Fauna Surveys. https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/2020.09.17%20-%20EPA%20Technical%20Guidance%20-%20Vertebrate%20Fauna%20Surveys%20-%20Final.pdf

Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics

Mattiske Consulting Pty Ltd (2016a) Flora and Vegetation of the Russell's Project Area.

Mattiske Consulting Pty Ltd (2016b) Flora and Vegetation of the Reichelt's Project Area.

Mattiske Consulting Pty Ltd (2021) Assessment of Flora and Vegetation Values – Ben Hur Survey Area and Haul Road Alignment.

Mattiske Consulting Pty Ltd (2023) Detailed Flora and Vegetation Assessment Extension Areas Surrounding Ben Hur and King of Creation Operations.

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68) Atlas of Australian Soils, Sheets 1 to 10, with explanatory data. CSIRO and Melbourne University Press: Melbourne.

Pringle, H J, Gilligan, S A, and van Vreeswyk, A M. (1994), An inventory and condition survey of rangelands in the north-eastern Goldfields, Western Australia. Department of Primary Industries and Regional Development, Western Australia, Perth. Technical Bulletin 87. https://library.dpird.wa.gov.au/tech_bull/5

Regis Resources Ltd (Regis) (2024a) Clearing permit application form, CPS 10694/1, received 22 July 2024.

Regis Resources Ltd (Regis) (2024b) New Purpose Permit Application Duketon Gold Project – Southern Tenements (Russell's Find/Reichelt's Find and Ben Hur/King of Creation).

Terrestrial Ecosystems (2021) Basic Vertebrate Fauna Reconnaissance Survey and Risk Assessment - Ben Hur Project and Haul Road.

Terrestrial Ecosystems (2023a) Basic Vertebrate Fauna Reconnaissance Survey and Risk Assessment - Ben Hur and King of Creation.

Terrestrial Ecosystems (2023b) Basic Vertebrate Fauna Reconnaissance Survey and Risk Assessment – Reichelt's Find Project Area.

Terrestrial Ecosystems (2023c) Basic Vertebrate Fauna Reconnaissance Survey and Risk Assessment – Russell's Find Project Area.

Trudgen, M.E. (1991) Vegetation condition scale in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth.

Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions, Western Australia. https://florabase.dpaw.wa.gov.au/ (Accessed 7 October 2024).

4. Glossary

Acronyms:

BC Act	*Biodiversity Conservation Act 2016,* 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)
DCCEEW	Department of Climate Change, Energy, the Environment and Water, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DEMIRS	Department of Energy, Mines, Industry Regulation and Safety
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia (now DEMIRS)
DMP	Department of Mines and Petroleum, Western Australia (now DEMIRS)
DoEE	Department of the Environment and Energy (now DCCEEW)
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	*Environmental Protection Act 1986*, Western Australia
EPA	Environmental Protection Authority, 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 (2023) 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 the species of fauna that are listed as critically endangered, endangered or vulnerable threatened species.

Threatened flora is the species of flora that are listed as critically endangered, endangered or vulnerable threatened species.

The assessment of the conservation status of threatened species is in accordance with the BC Act listing criteria and the requirements of Ministerial Guideline Number 1 and Ministerial Guideline Number 2 that adopts the use of the International Union for Conservation of Nature (IUCN) Red List of Threatened Species Categories and Criteria, and is based on the national distribution of the species.

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.

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.

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.

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).

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.

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).

Migratory species include birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) or 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.

CD **Species of special conservation interest (conservation dependent fauna)**
Species of special conservation need that are 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).

Currently only fauna are listed as species of special conservation interest.

OS **Other specially protected species**
Species 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).

Currently only fauna are listed as species otherwise in need of special protection.

P **Priority species:**

Priority is not a listing category under the BC Act. The Priority Flora and Fauna lists are maintained by the department and are published on the department's website.

All fauna and flora are protected in WA following the provisions in Part 10 of the BC Act. The protection applies even when a species is not listed as threatened or specially protected, and regardless of land tenure (State managed land (Crown land), private land, or Commonwealth land).

Species that may possibly be threatened species that do not meet the criteria for listing under the BC Act because of insufficient survey 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 prioritisation for survey and evaluation of conservation status so that consideration can be given to potential listing as threatened.

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

Assessment of priority status 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 – known from few locations, none on conservation lands**
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, for example, 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 for threatened listing and appear to be under immediate threat from known threatening processes. These species are in urgent need of further survey.

P2 **Priority Two - Poorly-known species – known from few locations, some on conservation lands**
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, for example, 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 for threatened listing and appear to be under threat from known threatening processes. These species are in urgent need of further survey.

P3 **Priority Three - Poorly-known species – known from several locations**
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. These species need 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 a conservation dependent specially protected species.
(c) Species that have been removed from the list of threatened species or lists of conservation dependent or other specially protected species, during the past five years for reasons other than taxonomy.
(d) Other species in need of monitoring.

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.