



Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	7408/4
Permit type:	Purpose Permit
Applicant name:	Mt Morgans WA Mining Pty Ltd
Application received:	28 March 2022
Application area:	765 hectares
Purpose of clearing:	Mineral Production and Associated Activities
Method of clearing:	Mechanical Removal
Tenure:	Mining Leases 39/18, 39/36, 39/228, 39/236, 39/272, 39/273, 39/282, 39/305, 39/390, 39/395, 39/403, 39/513, 39/1107, 39/1120, 39/1129 Miscellaneous Licences 39/57, 39/244
Location (LGA area/s):	Shire of Laverton
Colloquial name:	Mt Morgans Gold Project

1.2. Description of clearing activities

Mt Morgans WA Mining Pty Ltd proposes to clear up to 765 hectares of native vegetation within a boundary of approximately 5,444 hectares, for the purpose of mineral production and associated activities. The project is located approximately 30 kilometres southwest of Laverton, within the Shire of Laverton.

The amendment application will allow for the expansion of an open pit and waste rock dump (Mt Morgans, 2022).

Clearing permit CPS 7408/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 16 February 2017 and was valid from 11 March 2017 to 31 December 2024. The permit authorised the clearing of up to 633 hectares of native vegetation within a boundary of approximately 2,981 hectares, for the purpose of mineral production and associated activities.

CPS 7408/2 was granted on 10 October 2017, amending the permit to increase the amount of clearing authorised by 107 hectares, increase the permit boundary by 586 hectares, and to include additional tenure.

CPS 7408/3 was granted on 21 May 2020, amending the permit to increase the permit boundary by 1,855 hectares and to add tenure.

On 28 March 2022, the Permit Holder applied to amend CPS 7408/3 to increase the amount of clearing authorised by 25 hectares, and increase the permit boundary by 21.5 hectares.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	23 August 2022
Decision area:	765 hectares of native vegetation

1.4. Reasons for decision

This clearing permit application was made in accordance with section 51KA(1) of the *Environmental Protection Act 1986* (EP Act) and was received by the Department of Mines, Industry Regulation and Safety (DMIRS) on 28 March 2022. DMIRS 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 (Appendix D), 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; and
- potential land degradation from wind, water, and/or soil erosion.

After consideration of the available information, including the reported 540.43 hectares of native vegetation cleared under CPS 7408/3, 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 conditions currently imposed on clearing permit CPS 7408/3 are considered adequate to manage the impacts of clearing:

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds; and
- commence construction no later than six months after undertaking clearing to reduce the risk of erosion.

The assessment has not changed since the assessment of CPS 7408/3. The Delegated Officer determined that the proposed additional clearing of 25 hectares and 21.5 hectare increase to the permit boundary is not likely to lead to an unacceptable risk to environmental values.

1.5. Site map

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

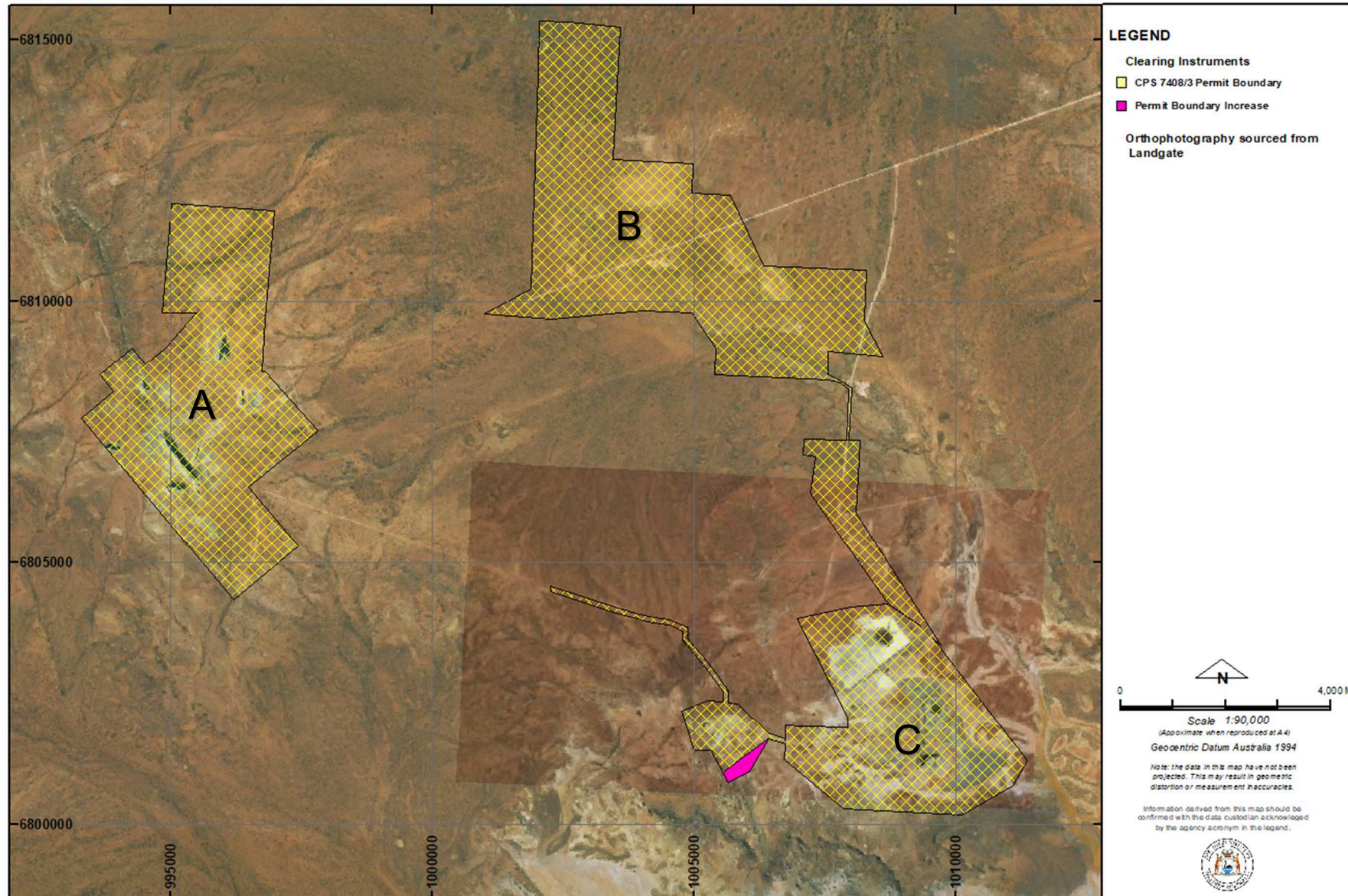


Figure 1. Map of the amendment area. The yellow area indicates the previous version of this amendment (CPS 7408/3). The additional area as part of this amendment is in pink.

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 includes:

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

Relevant agreements (treaties) considered during the assessment include:

- Japan-Australia Migratory Bird Agreement
- China-Australia Migratory Bird Agreement
- Republic of Korea-Australia Migratory Bird Agreement

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2013)
- *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

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.

The applicant has designed the proposed expansion within the area highlighted pink on the site map (Section 1.5) to avoid impacting *Olearia mucronata* (Priority 3) (Mt Morgans, 2022).

3.2. Assessment of impacts on environmental values

No new biological information has been provided in support of this amendment application. The environmental values of the application area are well understood, and are described in the previous versions of the decision report, based on biological studies undertaken over various years by NVS (2016; 2019) and Western Wildlife (2016; 2020). The previous assessment of the clearing did not identify any significant environmental impacts from the clearing of 740 hectares that could not be managed through implementing management conditions. The permit boundary contains a significant amount of area which has been impacted by previous mining activities. The proposed amendment to clear an additional 25 hectares and increase the permit boundary by an additional 21.5 hectares is not likely to have significant environmental impacts that cannot be appropriately managed by implementing management conditions. The conditions currently imposed on clearing permit CPS 7408/3 are considered adequate to manage the impacts of the clearing.

A review of current environmental information (Section 3.2.1; Appendix A; Appendix B) reveals that the assessment against the clearing principles has not changed significantly from the Clearing Permit Decision Report CPS 7408/3.

3.2.1. Biological values (flora and PEC) - Clearing Principles (a)

Assessment

A flora and vegetation survey was conducted by Native Vegetation Solutions in March 2016 over the amendment and surrounding areas, covering a total area of approximately 4,641 hectares (NVS, 2016). A follow up targeted survey was completed by Native Vegetation Solutions on 3 August 2017 covering sections of the bore field that were not covered by the 2016 assessment (Mt Morgans, 2017). A third flora and vegetation survey over an additional 498 hectares was undertaken in September 2019 by Native Vegetation Solutions covering the Mt Marven (part of area C shown in Section 1.5) and Phoenix Ridge (part of area A shown in Section 1.5) areas (NVS, 2019).

The 2016 flora survey did not record any Threatened or Priority flora within the amendment area (NVS, 2016). The 2019 field assessment identified one priority flora species: *Olearia mucronata* (P3) (NVS, 2019). Four individuals were recorded at two different locations within the additional amendment area (Section 1.5) (NVS, 2019). This species has a wide range being distributed over 550 kilometres north-south within the Pilbara and Murchison bioregions (Western Australian Herbarium, 1998-). The Laverton area is at the southern extent of this species range. The potential removal of four individuals is not likely to have a significant impact on this species however, the applicant has stated that these four plants will not be impacted by the proposed amendment (Mt Morgans, 2022).

The amendment area intersects the Mount Morgan calcrete groundwater assemblage type on Carey palaeodrainage on Mt Weld Station Priority 1 Ecological Community (PEC) (GIS Database). There are no additional impacts to this PEC by the proposed permit boundary expansion, as this additional area does not intersect the PEC (Section 1.5). This PEC refers to a CPS 7408/4

stygo fauna community in the groundwater and the proposed clearing of native vegetation in the Mt Marven application area is unlikely to have any significant impact on this PEC. Potential impacts to stygo fauna are being managed through the Mining Proposal under the *Mining Act 1978*, specifically via a Stygo fauna Management Plan (Mt Morgans, 2017).

Conclusion

Based on the above assessment, the proposed clearing is unlikely to impact *Olearia mucronata* or result in a significant reduction to the extent of the Mount Morgan PEC.

Conditions

No management conditions required.

3.3. Relevant planning instruments and other matters

There is one native title claim (WC2019/002) over the area under application (DPLH, 2022). This claim has been registered with the National Native Title Tribunal 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 a number of 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.

Other relevant authorisations that may be 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 project is located approximately 30 kilometres southwest of Laverton, within the Shire of Laverton in the extensive land use zone. The application area is surrounded by vast tracts of uncleared land. The predominant land use in the region is extensive pastoralism and mining.
Conservation areas and ecological linkage	The amendment area is not located within any conservation areas. Goongarrie National Park is located approximately 127 kilometres south-southwest of the amendment area. The proposed clearing area is not representative of an ecological linkage.
Vegetation description	<p>The vegetation of the application area is broadly mapped as the following Beard vegetation associations:</p> <p>18: Low woodland; mulga (<i>Acacia aneura</i>); 39: Shrublands; mulga scrub; and 389: Succulent steppe with open low woodland; mulga over saltbush (GIS Database).</p> <p>A flora and vegetation survey was conducted by Native Vegetation Solutions in March 2016 over the application areas and surrounding areas, covering a total area of approximately 4,641 hectares (NVS, 2016). A follow up targeted survey was completed by Native Vegetation Solutions on 3 August 2017 covering sections of the bore field that were not covered by the 2016 assessment (Mt Morgans, 2017). A third flora and vegetation survey over an additional 498 hectares was undertaken in September 2019 by Native Vegetation Solutions covering the Mt Marven and Phoenix Ridge areas (NVS, 2019).</p> <p>The following vegetation types were recorded over various parts of the amendment area (NVS, 2016; Mt Morgans, 2017; NVS, 2019):</p> <p>Rehabilitation Vegetation - <i>Acacia aneura</i>, <i>Acacia mulganeura</i>, <i>Eucalyptus clendii</i>, <i>Eucalyptus Campaspe</i>, <i>Eucalyptus torquata</i>, <i>Maireana pyramidata</i>, <i>Atriplex vesicaria</i> and <i>Senna artemisioides</i> subsp. <i>filifolia</i>;</p> <p>Acacia aneura shrubland - <i>Acacia aneura</i>, <i>Acacia mulganeura</i>, <i>Acacia pteraneura</i>, <i>Acacia craspedocarpa</i>, <i>Senna cardiosperma</i>, <i>Senna glutinosa</i> subsp. <i>chatelainiana</i>, <i>Eremophila platycalyx</i> subsp. <i>platycalyx</i> and <i>Eremophila compacta</i>;</p> <p>Tecticornia shrubland - <i>Tecticornia</i> species, <i>Maireana glomerifolia</i>, <i>Sclerolaena cuneata</i>, <i>Atriplex vesicaria</i>, <i>elaleuca interioris</i> and <i>Casuarina obesa</i>;</p> <p>Kopai dunes with Tecticornia and Casuarina – <i>Casuarina obesa</i>, <i>Casuarina pauper</i>, <i>Acacia burkittii</i>, <i>Grevillea berryana</i>, <i>Exocarpos aphyllus</i>, <i>Tecticornia indica</i> subsp. <i>bidens</i>, <i>Tecticornia halocnemoides</i> subsp. <i>tenuis</i> and <i>Tecticornia disarticulata</i>;</p> <p>Acacia shrubland on emergent hills - <i>Acacia aneura</i>, <i>Acacia pteraneura</i>, <i>Acacia grasbyi</i>, <i>Acacia tetragonophylla</i>, <i>Cratystylis subspinescens</i>, <i>Scaevola spinescens</i>, <i>Senna cardiosperma</i>, <i>Maireana sedifolia</i>, and <i>Eremophila oppositifolia</i> subsp. <i>angustifolia</i>;</p> <p>Acacia over Chenopod shrubland - <i>Acacia aneura</i>, <i>Acacia mulganeura</i>, <i>Acacia pteraneura</i>, <i>Maireana pyramidata</i>, <i>Sclerolaena diacantha</i>, <i>Tecticornia indica</i> subsp. <i>bidens</i>, <i>Tecticornia peltata</i>, <i>Tecticornia undulata</i>, <i>Cratystylis subspinescens</i>, <i>Atriplex vesicaria</i> and <i>Atriplex bunburyana</i>;</p> <p>Acacia over Eremophila and Sclerophyll shrubland on BIF Ridges - <i>Acacia aneura</i>, <i>Eremophila georgei</i>, <i>Eremophila latrobei</i> subsp. <i>latrobei</i>, <i>Eremophila margarethae</i>, <i>Eremophila platycalyx</i> subsp. <i>platycalyx</i>, <i>Scaevola spinescens</i>, <i>Senna artemisioides</i> subsp. <i>helmsii</i>, <i>Solanum lasiophyllum</i> and <i>Dodonaea rigida</i>;</p> <p>Tecticornia shrubland within Laterite breakaways - <i>Tecticornia disarticulata</i>, <i>Tecticornia indica</i> subsp. <i>bidens</i>, <i>Tecticornia peltata</i>, <i>Frankenia setosa</i>, <i>Dodonaea lobulata</i>, <i>Pittosporum angustifolium</i> and <i>Eremophila pantonii</i>;</p> <p>Acacia mulganeura over Eremophila forrestii and grasslands - <i>Acacia mulganeura</i>, <i>Acacia caesaneura</i>, <i>Acacia aneura</i>, <i>Acacia craspedocarpa</i>, <i>Eremophila forrestii</i> subsp. <i>forrestii</i>, <i>Scaevola spinescens</i>, <i>Eragrostis eriopoda</i>, <i>Eremophila platythamnos</i> subsp. <i>exotrachys</i>, <i>Crenidium spinescens</i> and <i>Triodia basedowii</i>.</p> <p>Acacia aneura creekline vegetation - <i>Acacia aneura</i>, <i>Acacia caesaneura</i>, <i>Acacia mulganeura</i>, <i>Acacia tetragonophylla</i>, <i>Eremophila oppositifolia</i> subsp. <i>angustifolia</i>, <i>Scaevola spinescens</i>,</p>

Characteristic	Details
	<p><i>Ptilotus obovatus</i>, <i>Senna artemisioides</i> subsp. <i>sturtii</i>, <i>Lepidium platypetalum</i>, and <i>Spartothamnella teucriflora</i>;</p> <p>Acacia shrublands on undulating hills - <i>Acacia resinimarginea</i>, <i>Acacia aneura</i>, <i>Calytrix erosipetala</i>, <i>Eremophila georgei</i>, <i>Eremophila forrestii</i> subsp. <i>forrestii</i>, <i>Dodonaea rigida</i>, <i>Chrysocephalum puteale</i>, <i>Eremophila latrobei</i> subsp. <i>filiformis</i> and <i>Senna artemisioides</i> subsp. <i>helmsii</i>;</p> <p>Acacia aneura woodland over Maireana sedifolia and Acacia victoriae mixed shrubland - <i>Acacia aneura</i>, <i>Acacia pteraneura</i>, <i>Maireana sedifolia</i>, <i>Atriplex bunburyana</i>, <i>Maireana tomentosa</i>, <i>Acacia victoriae</i> subsp. <i>victoriae</i>, <i>Cratystylis subspinescens</i>, <i>Eremophila miniata</i>, <i>Solanum plicatile</i>, <i>Solanum austropiceum</i>, <i>Acacia kempeana</i> and <i>Eremophila longifolia</i>;</p> <p>Acacia shrubland on lower breakaways - <i>Acacia kalgoorliensis</i>, <i>Tecticornia peltata</i>, <i>Tecticornia pergranulata</i> subsp. <i>elongata</i>, <i>Frankenia georgei</i> and <i>Sida calyxhymeria</i>;</p> <p>Acacia oswaldii shrubland - <i>Acacia oswaldii</i>, <i>Brachychiton gregorii</i>, <i>Acacia ligulata</i>, <i>Acacia caesaneura</i>, <i>Jacksonia arida</i>, <i>Eragrostis eriopoda</i>, <i>Enneapogon caeruleascens</i>, <i>Gunniiopsis quadrifida</i> and <i>Pimelea microcephala</i>, subsp. <i>microcephala</i>;</p> <p>Acacia burkittii shrubland - <i>Acacia burkittii</i>, <i>Grevillea berryana</i>, <i>Acacia victoriae</i> subsp. <i>victoriae</i>, <i>Acacia tetragonophylla</i>, <i>Senna artemisioides</i> subsp. <i>filifolia</i>, <i>Acacia ayersiana</i>, <i>Acacia caesaneura</i>, <i>Melaleuca interioris</i> and <i>Enneapogon caeruleascens</i>;</p> <p>Open Melaleuca shrubland - <i>Melaleuca hamata</i>, <i>Duma florulenta</i>, <i>Spartothamnella teucriflora</i> and <i>Rhagodia eremaea</i>;</p> <p>Melaleuca sheathiana over Tecticornia shrubland - <i>Melaleuca sheathiana</i> over <i>Tecticornia</i> shrubland;</p> <p>Tecticornia Shrubland and Acacia over Chenopod shrubland - <i>Tecticornia</i> species, <i>Maireana glomerifolia</i>, <i>Sclerolaena cuneate</i>, <i>Atriplex vesicaria</i>, <i>elaleuca interioris</i> and <i>Casuarina obes</i><i>Acacia</i> <i>Acacia aneura</i>, <i>Acacia mulganeura</i>, <i>Acacia pteraneura</i>, <i>Maireana pyramidata</i>, <i>Sclerolaena diacantha</i>, <i>Tecticornia indica</i> subsp. <i>bidens</i>, <i>Tecticornia peltata</i>, <i>Tecticornia undulata</i>, <i>Cratystylis subspinescens</i>, <i>Atriplex vesicaria</i> and <i>Atriplex bunburyana</i>;</p> <p>Acacia over Chenopod shrubland and Open Melaleuca shrubland – <i>Melaleuca hamata</i>, <i>Duma florulenta</i>, <i>Spartothamnella teucriflora</i> and <i>Rhagodia eremaea</i><i>Acacia</i> <i>Acacia aneura</i>, <i>Acacia mulganeura</i>, <i>Acacia pteraneura</i>, <i>Maireana pyramidata</i>, <i>Sclerolaena diacantha</i>, <i>Tecticornia indica</i> subsp. <i>bidens</i>, <i>Tecticornia peltata</i>, <i>Tecticornia undulata</i>, <i>Cratystylis subspinescens</i>, <i>Atriplex vesicaria</i> and <i>Atriplex bunburyana</i>;</p> <p>Melaleuca pauper over Tecticornia shrubland - <i>Melaleuca pauper</i> over <i>Tecticornia</i> shrubland;</p> <p>Bare Salt Lakes - no vegetation;</p> <p>Acacia shrublands on Greenstone rocky hills - <i>Acacia pteraneura</i>, <i>Acacia ligulata</i>, <i>Acacia prainii</i>, <i>Senna artemisioides</i> subsp. <i>filifolia</i>, <i>Eremophila pantonii</i>, <i>Hakea recurva</i> subsp. <i>recurva</i>, <i>Maireana sedifolia</i>, <i>Senna rtemisioides</i> subsp. <i>sturtii</i>, <i>Scaevola spinescens</i> and <i>Hakea preissii</i>;</p> <p>Acacia over Maireana sedifolia and other mixed shrublands - <i>Acacia aneura</i>, <i>Acacia pteraneura</i>, <i>Maireana sedifolia</i>, <i>Atriplex bunburyana</i>, <i>Maireana tomentosa</i>, <i>Cratystylis subspinescens</i> <i>Eremophila miniata</i>, <i>Solanum plicatile</i>, <i>Solanum austropiceum</i>, <i>Acacia kempeana</i> and <i>Eremophila longifolia</i>;</p> <p>Tecticornia shrubland on lower breakways - <i>Tecticornia disarticulata</i>, <i>Tecticornia indica</i> subsp. <i>bidens</i>, <i>Tecticornia peltata</i> and <i>Maireana triptera</i>;</p> <p>Acacia aneura shrubland over Banded Ironstone Hills - <i>Acacia aneura</i>, <i>Acacia craspedocarpa</i>, <i>Acacia mulganeura</i>, <i>Acacia tetragonophylla</i>, <i>Psydrax suaveolens</i>, <i>Senna artemisioides</i> subsp. <i>filifolia</i>, <i>Dodonaea petiolaris</i>, <i>Dodonaea rigida</i> and <i>Eremophila platycalyx</i> subsp. <i>Platycalyx</i>; and</p> <p>Acacia aneura and Acacia ramulosa shrubland - <i>Acacia aneura</i>, <i>Acacia mulganeura</i>, <i>Acacia ramulosa</i> subsp. <i>ramulosa</i>, <i>Acacia grasbyi</i>, <i>Senna artemisioides</i> subsp. <i>artemisioides</i>, <i>Senna artemisioides</i> subsp. <i>helmsii</i>, <i>Eremophila platycalyx</i> subsp. <i>platycalyx</i>, <i>Dodonaea rigida</i> and <i>Scaevola spinescens</i>.</p>
Vegetation condition	Vegetation surveys (NVS, 2016; NVS, 2019) indicate the vegetation within the proposed clearing area is in very good, good, degraded, and completely degraded (Keighery, 1994) condition, described as:

Characteristic	Details
	<ul style="list-style-type: none"> - Very good: Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing. - Good: Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing. - Degraded: Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing. - Completely degraded: The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs. <p>The full Keighery (1994) condition rating scale is provided in Appendix C.</p>
Climate and landform	The application area is mapped within elevations of 120.5-123 metres AHD. The climate of the region is arid, with an average rainfall of approximately 281.3 millimetres per year (BoM, 2022; CALM, 2002).
Land degradation risk and soil description	The amendment area is located within the Brooking, Carnegie, Cyclops, Gundockerta, Hootanui, Jundee, Laverton, Leonora, Melaleuca, Mileura, Monk, Nubev, Sunrise, and Yilgangi land systems. Most of these land systems are relatively resistant to erosion provided their stony mantles are not disturbed, however disturbance activities may cause wind, water, and/or soil erosion.
Waterbodies	There are multiple ephemeral drainage lines that intersect the amendment area. Lake Carey, a large ephemeral salt lake system intersects the most southeast corner of the amendment area.
Hydrogeography	The application area is not within any legislated surface water area. The application area is located within the Goldfields Ground Water Area proclaimed under <i>the Rights in Water and Irrigation Act 1914</i> . The mapped groundwater salinity is 1000 to >35,000 milligrams per litre total dissolved solids which is described as brackish to hypersaline water quality.
Flora	No previous surveys in the amendment area recorded any Threatened or Priority flora species. One Priority 3 flora species was recorded within the amendment area in 2019: <i>Olearia mucronata</i> .
Ecological communities	The amendment area intersects the Mount Morgan calcrete groundwater assemblage type on Carey palaeodrainage on Mt Weld Station Priority 1 Ecological Community.
Fauna	A desktop assessment identified 10 conservation significant fauna species that may occur within the application area due to prior records within 40 kilometres of the amendment area.

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<p><u>Principle (a):</u> "Native vegetation should not be cleared if it comprises a high level of biodiversity."</p> <p><u>Assessment:</u> The amendment area contains habitat for one Priority flora species and intersects a Priority 1 Ecological Community.</p>	Not likely to be at variance as per CPS 7408/3	Yes <i>Refer to Section 3.2.1, above.</i>

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Principle (b):</u> <i>“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.”</i></p> <p><u>Assessment:</u> The amendment area may provide suitable habitat for several conservation significant water and migratory birds due to the number of drainage lines and the salt lake drainage system present (Mt Morgans, 2022; Western Wildlife, 2020; GIS Database). Given the highly mobile nature of these species and infrequent rain events, it is unlikely that any birds are reliant upon the habitats present within amendment area (Mt Morgans, 2022; Western Wildlife, 2020). Lake Carey extends further outside the amendment area and would likely provide suitable habitat for these species (GIS Database).</p> <p>The only conservation significant species that was considered to be likely to occur within the amendment area is the long-tailed dunnart (<i>Sminthopsis longicaudata</i>, P4) (Western Wildlife, 2020). This species may utilise low rocky hills and Banded Ironstone Formation (BIF) ridges within the amendment area, however these habitats are not restricted to the amendment area and long-tailed dunnart is unlikely to be reliant upon these habitats (Western Wildlife, 2020).</p> <p>The majority of fauna habitats found within the amendment area are relatively common and widespread in the region (Western Wildlife, 2016; Western Wildlife, 2020). Western Wildlife (2016; 2020) concluded that potential impacts to fauna are generally likely to be minor, and the most restricted habitats being lock rocky hills and BIF ridges. These two habitat types aren't restricted to the amendment area, and are found within the surrounds (Western Wildlife, 2016; Western Wildlife, 2020). The expansion to the existing mine landforms in the new amendment area will have a minor impact to these habitats (Western Wildlife, 2016; Western Wildlife, 2020).</p>	Not likely to be at variance as per CPS 7408/3	No
<p><u>Principle (c):</u> <i>“Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</i></p> <p><u>Assessment:</u> There are no known records of Threatened flora within the amendment area (GIS Database). Flora surveys of the amendment area did not record any species of Threatened flora (NVS; 2016; NVS, 2019).</p> <p>None of the vegetation types recorded within the amendment area are known habitat for any species of Threatened flora, and the vegetation proposed to be cleared is unlikely to be necessary for the continued existence of any species of Threatened flora (NVS; 2016; NVS, 2019).</p>	Not likely to be at variance as per CPS 7408/3	No
<p><u>Principle (d):</u> <i>“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.”</i></p> <p><u>Assessment:</u> There are no known Threatened Ecological Communities (TECs) located within or in close proximity to the amendment area (GIS Database). Flora and vegetation surveys of the amendment area did not identify any vegetation representative of a TEC (NVS; 2016; NVS, 2019).</p>	Not likely to be at variance as per CPS 7408/3	No
Environmental value: significant remnant vegetation and conservation areas		
<p><u>Principle (e):</u> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u> The application area falls within the Murchison Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 99% of the pre-European vegetation still exists in the IBRA Murchison Bioregion (Government of Western Australia, 2019).</p> <p>The application area is broadly mapped as Beard vegetation associations 18: Low woodland; mulga (<i>Acacia aneura</i>); 39: Shrublands; mulga scrub; and 389: Succulent steppe with open low woodland; mulga over saltbush (GIS Database). Approximately 99% of the pre-European extent of these vegetation associations remain uncleared at both the state and bioregional level (Government of Western Australia, 2019).</p> <p>The vegetation proposed to clear is not a remnant in an area that has been extensively cleared.</p>	Not at variance as per CPS 7408/3	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Principle (h):</u> <i>“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></p> <p><u>Assessment:</u> The amendment area is not located within any conservation areas. Goongarrie National Park is located approximately 127 kilometres south-southwest of the amendment area. The proposed clearing is unlikely have an impact on the environmental values of any conservation areas.</p>	<p>Not likely to be at variance</p> <p>as per CPS 7408/3</p>	<p>No</p>
Environmental value: land and water resources		
<p><u>Principle (f):</u> <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p> <p><u>Assessment:</u> There are no permanent watercourses or wetlands within the amendment area (GIS Database). Part of the application area intersects with the edge of Lake Carey, at the northern edge of the lake. Lake Carey is a large salt lake approximately 90 kilometres long, and is part of a larger chain of salt lakes (GIS Database). Lake Carey is dry for most of the year, only filling briefly following significant rainfall events (Mt Morgans, 2022).</p> <p>Minor drainage lines in the area drain towards Lake Carey and only flow briefly, immediately following significant rainfall (CALM, 2002). One of the vegetation types recorded within the amendment area, <i>‘Tecticornia shrubland’</i>, is considered to be riparian vegetation (NVS, 2016; Mt Morgans, 2022). This vegetation type represents a small part of the amendment area, and is widespread and abundant outside of the amendment area (NVS, 2016). Due to the size of the lake and the abundance of ephemeral drainage channels in the region, the proposed clearing is unlikely to have any significant impact on vegetation associated with watercourses or wetlands, including Lake Carey.</p>	<p>At variance</p> <p>as per CPS 7408/3</p>	<p>No</p>
<p><u>Principle (g):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</i></p> <p><u>Assessment:</u> The amendment area is mapped within the Brooking, Carnegie, Cyclops, Gundockerta, Hootanui, Jundee, Laverton, Leonora, Melaleuca, Mileura, Monk, Nubev, Sunrise, and Yilgangi land systems (Pringle et al., 1994; GIS Database).</p> <p>The majority of these land systems are protected from erosion by their stony mantles (Pringle et al., 1994). Removal of these stony mantles may result in wind, soil, or water erosion along drainage lines (Pringle et al., 1994). The continued implementation of a staged clearing condition will help mitigate potential land degradation impacts.</p>	<p>May be at variance</p> <p>as per CPS 7408/3</p>	<p>No</p>
<p><u>Principle (i):</u> <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.”</i></p> <p><u>Assessment:</u> There are no Public Drinking Water Source Areas (PDWSA) within or in close proximity to the amendment area (GIS Database). The nearest PDWSA is the Laverton Water Reserve, located approximately 19 kilometres northwest of the amendment area (GIS Database). Much of the groundwater throughout the amendment area is considered hypersaline (GIS Database). The proposed clearing is unlikely to cause any further deterioration in the groundwater quality.</p> <p>The amendment area partially intersects Lake Carey, a large ephemeral salt lake system, and several ephemeral drainage lines (GIS Database). Runoff from large rainfall events drains in a south-east direction towards Lake Carey from a combination of surface and shallow baseflow along the salt lake drainage system (Mt Morgans, 2022). Drainage lines and Lake Carey are dry for most of the year, only flowing following significant rainfall events. The proposed clearing is unlikely to cause further deterioration of surface water quality.</p>	<p>Not likely to be at variance</p> <p>as per CPS 7408/3</p>	<p>No</p>
<p><u>Principle (j):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.”</i></p> <p><u>Assessment:</u> The climate of the region is arid, with an average rainfall of approximately 281.3 millimetres per year (BoM, 2022; CALM, 2002). Drainage lines in the area are dry for most of the year, only flowing briefly immediately following significant rainfall (CALM, 2002).</p>	<p>Not likely to be at variance</p> <p>as per CPS 7408/3</p>	<p>No</p>

Assessment against the clearing principles	Variance level	Is further consideration required?
There are no permanent water courses or waterbodies within the application area (GIS Database). Part of the application area intersects with the edge of Lake Carey, a large ephemeral salt lake system (GIS Database). Temporary localised flooding may occur during heavy rainfall events, however the proposed clearing is unlikely to increase the incidence or intensity of natural flooding events.		

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 Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Measuring vegetation condition for the South West and Interzone Botanical Province (Keighery, 1994)

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the 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):

- Contours (DPIRD-073)
- 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

- BoM (2022) Bureau of Meteorology Website – Climate Data Online, Laverton Aero. Bureau of Meteorology. <http://www.bom.gov.au/climate/data/> (Accessed 27 July 2022).
- 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) (2013) *A guide to the assessment of applications to clear native vegetation*. Perth. Available from: 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) (2022) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 22 July 2022).
- Department of Water and Environmental Regulation (DWER) (2021) Procedure: Native vegetation clearing permits. Joondalup. Available from: 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. Available from: 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. Available from: 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>
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mt Morgans (2017) Purpose Permit Application Amendment to CPS 7408-1 - Assessment of Clearing Principles Mt Morgans Gold Project. Report prepared by Mt Morgans WA Mining Pty Ltd, August 2017.
- Mt Morgans (2022) Purpose Permit Application. Amendment to CPS 7408-3. Assessment of Clearing Principles Mt Morgans Gold Project. Report prepared by Mt Morgans WA Mining Pty Ltd, March 2022.
- NVS (2016) Level 1 Flora and Vegetation Survey Dacian Gold Ltd Mt Morgans Gold Project. Report prepared for Dacian Gold Limited, by Native Vegetation Solutions, July 2016.
- NVS (2019) Reconnaissance Flora and Vegetation Survey of BIF Ridge and Mount Marven Dacian Gold Ltd Mt Morgans Gold Project. Report prepared for Dacian Gold Limited, by Native Vegetation Solutions, November 2019.
- 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 Agriculture and Food, Western Australia, Perth. Technical Bulletin 87.
- Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions, Western Australia. <https://florabase.dpaw.wa.gov.au/> (Accessed 23 August 2022).
- Western Wildlife (2016) Dacian Gold Limited Mt Morgans Gold Project: Level 1 Vertebrate Fauna Survey March 2016. Report prepared for Dacian Gold Limited, by Western Wildlife, July 2016.
- Western Wildlife (2020) Dacian Gold Limited Mt Morgans Gold Project: Phoenix Ridge and Mt Marven Report Level 1 Vertebrate Fauna Survey July 2019. Report prepared for Dacian Gold Limited, by Western Wildlife, February 2020.

4. 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.