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:	10767/1
Permit type:	Purpose Permit
Applicant name:	Cavalier Resources Limited
Application received:	17 September 2024
Application area:	49.5 hectares
Purpose of clearing:	Mineral Production and Associated Activities
Method of clearing:	Mechanical Removal
Tenure:	Mining Lease 37/1202
Location (LGA area):	Shire of Leonora
Colloquial name:	Crawford Project

1.2. Description of clearing activities

Cavalier Resources Limited proposes to clear up to 49.5 hectares of native vegetation within a boundary of approximately 198 hectares, for the purpose of mineral production and associated activities (Cavalier Resources, 2024). The project is located approximately 23.1 kilometres east of Leonora, within the Shire of Leonora.

The application is to allow for the development of the Crawford Project, which includes an open pit mine, a heap leach facility, a waste rock landform, and other supporting infrastructure (Cavalier Resources, 2024).

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	20 March 2025
Decision area:	49.5 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 E), supporting information provided by the applicant including the results of a flora and vegetation survey, 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 Delegated Officer also took into consideration the purpose of the clearing to allow for the development of the Crawford Project.

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 impacts to conservation significant flora;
- the loss of native vegetation that is suitable habitat for malleefowl (*Leipoa ocellata*); and
- potential land degradation in the form of water erosion.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (Section 3.1), the Delegated Officer determined the proposed clearing can be managed by conditions and is not likely 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 construction no later than three months after undertaking clearing to reduce the risk of erosion;
- where practicable, avoid clearing riparian vegetation;
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity;
- identify active (in use) malleefowl mounds and avoid clearing within 200 metres of any mounds from September to January; and
- engage a botanist to conduct a targeted flora survey for the presence of threatened and priority flora prior to clearing and maintain a 50 metre buffer of identified threatened flora and a 10 metre buffer of identified priority flora.

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 (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)
- *Biosecurity and Agriculture Management Act 2007* (BAM 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 2014)
- *Procedure: Native vegetation clearing permits* (DWER, October 2021)
- Guidance for the Assessment of Environmental Factors – *Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia* (EPA, 2004)
- Guidance for the Assessment of Environmental Factors – *Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia* (EPA, 2004)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016)
- Technical guidance – *Terrestrial Fauna 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

Evidence was submitted by the applicant, demonstrating that efforts have been made to avoid clearing native vegetation, by minimising clearing required within the development envelope, utilising existing cleared areas where possible, and only clearing where necessary for the operation or progression of the project (Talis Consultants, 2024).

Furthermore, the applicant outlined the following management measures, which will be included in an Environmental Management Plan to be implemented:

- All clearing activities proposed will be undertaken in accordance with the site clearing permitting processes and in compliance with NVCP conditions;
- Areas to be cleared will be pegged and demarcated, then inspected to ensure the clearing boundary is within approved areas;
- All personnel working on site will be inducted on the need to minimise clearing of native vegetation where possible;
- Directional clearing will be implemented to ensure any fauna have an opportunity to relocate;
- No clearing will be conducted during windy conditions to reduce dust deposition on adjacent native vegetation; and
- Induction will address that there is no driving on unauthorised areas and off pre-cleared tracks (Talis Consultants, 2024).

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

The assessment against the clearing principles identified that the impacts of the proposed clearing present a potential risk to biological values (fauna and flora). The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

3.2.1. Biological values (flora) - Clearing Principle (a)

Assessment

A reconnaissance flora and vegetation survey was undertaken by Native Vegetation Solutions (2021) over the application and adjacent areas on 9 November 2020. The survey did not record any species of threatened or priority flora.

The desktop study by Native Vegetation Solutions (2021) used a 20 kilometre radius from the application area as a search parameter, which did not capture an additional ten priority flora species that were identified in a subsequent desktop study utilising a 50 kilometre search radius (GIS Database). Of the additional ten priority flora species, the following four species were identified as having the potential to occur within the application area based on the presence of suitable habitat features and soil types:

- *Acacia websteri*, Priority 1
- *Eremophila annosicaulis*, Priority 3
- *Ptilotus tetrandrus*, Priority 1
- *Stenanthemum patens*, Priority 1

Given these four species were not identified in the Native Vegetation Solutions (2021) desktop study it is unlikely they were specifically searched for during the flora survey.

The subsequent desktop assessment also identified the following priority flora species with the potential to occur within the application area:

- *Acacia* sp. Marshall Pool, Priority 3
- *Cratystylis centralis*, Priority 3
- *Eremophila simulans* subsp. *megacalyx*, Priority 3
- *Hemigenia exilis*, Priority 4
- *Pigea* sp. *Chloroxantha*, Priority 3

The likelihood of occurrence for these species were determined by potentially suitable habitat within the application area and proximity to known regional records (Native Vegetation Solutions, 2021; Obbens, 2018; Western Australian Herbarium, 1998-; Wilson & Albrecht, 2002; GIS Database).

Acacia sp. Marshall Pool, Priority 3, is a large shrub, growing 1-5 metres tall and inhabiting clayey sand or clay on hills, slopes or ridges (Western Australian Herbarium, 1998-). The species is known from ten specimens at the WA Herbarium and is restricted to the Murchison Interim Biogeographic Regionalisation for Australia (IBRA) region (Western Australian Herbarium, 1998-). *Eremophila annosicaulis*, Priority 3, is a small, erect shrub, growing 0.4-0.8 metres tall and inhabiting stony loams or sandy soils on rocky plains and hills (Western Australian Herbarium, 1998-). The species is known from five specimens at the WA Herbarium and is restricted to the Murchison IBRA region (Western Australian Herbarium, 1998-). *Hemigenia exilis*, Priority 4, is an erect, multi-stemmed shrub, 0.5-2 metres high which can be found inhabiting laterite on breakaways or slopes (Western Australian Herbarium, 1998-). The species has been recorded only within the Murchison IBRA region (Western Australian Herbarium,1998-). As suitable habitat for the above species is present within the application area, it is considered that these species have to potential to be present. As these species are restricted to the Murchison IBRA region and do not have any known populations located within conservation reserves (Western Australian Herbarium, 1998-), the proposed clearing may cause a significant impact to these species at a local and regional level if located within the clearing area.

Eremophila simulans subsp. *megacalyx*, Priority 3, is a 0.9-2 metre high shrub, that inhabits breakaways and plains in association with mulga or halophytic shrublands (Western Australian Herbarium, 1998-; GIS Database). The nearest record of this species is 37 kilometres northwest of the application area (GIS Database). If a new population was discovered within the application area, the extent of occurrence of the species would be increased (IUCN, 2024; Western Australian Herbarium, 1998- ; GIS Database). *Stenanthemum patens*, Priority 1, is an approximately 0.5 metre high shrub which inhabits rocky hillsides (Western Australian Herbarium, 1998-). The species is known from 11 specimens at the WA Herbarium and is restricted to the Murchison IBRA region (Western Australian Herbarium, 1998-). The nearest record of this species is 45 kilometres northwest of the application area (GIS Database). If a new population was discovered within the application area, the extent of occurrence of the species would be increased (IUCN, 2024; Western Australian Herbarium, 1998-; GIS Database). As suitable habitat for the above species is present within the application area, it is considered that these species have the potential to occur. The proposed clearing may result in a significant impact to these species at a local level if located within the clearing area.

Acacia websteri, Priority 1, is a 1.2-5 metre high shrub which can be found inhabiting red sand, clay or loam on low-lying areas or flats (Western Australian Herbarium, 1998-). *Cratystylis centralis*, Priority 3, is a much-branched, brittle, greyish shrub growing to 1 metre tall and can be found inhabiting flat plains and breakaway country in red sandy loam soils with ironstone gravel (Western Australian Herbarium, 1998-). *Ptilotus tetrandrus*, Priority 1, is a 0.15-0.3 metre high herb which can be found inhabiting loamy sands (Western Australian Herbarium, 1998-). The species is known from three specimens at the WA Herbarium (Western Australian Herbarium, 1998-). As suitable habitat for the above species is present within the application area, it is considered that these species may be present. The proposed clearing may cause an impact to these species at a local and regional level if located within the clearing area.

Pigea sp. *Chloroxantha* (formerly known as *Hybanthus floribundus* subsp. *chloroxanthus*), Priority 3, is a multi-stemmed shrub growing to 0.7 metres tall and can be found inhabiting rocky areas, creek banks, and along drainage lines in dark red-brown soils (Western Australian Herbarium, 1998-). The species is known from 26 specimens at the WA Herbarium and is restricted to the Murchison IBRA region (Western Australian Herbarium, 1998-). As suitable habitat (drainage lines) is present within the application area, it is considered that this species may be present. Impacts to this species may be managed through a

vegetation management condition for riparian vegetation and therefore the clearing is unlikely to lead to significant impacts to this species.

Conclusion

While the reconnaissance flora and vegetation survey undertaken by Native Vegetation Solutions (2021) over the application and adjacent areas recorded no species of priority flora, no targeted surveys have been conducted within suitable vegetation types for individuals. The reconnaissance flora and vegetation survey by Native Vegetation Solutions (2021) was undertaken in November which is outside of the recommended survey timing for the Eremaean Botanical Province, being six to eight weeks post wet season (March to June) (EPA, 2016). Additionally, Native Vegetation Solutions (2021) spent a total of six hours over an area of 1,090 hectares on the site investigation, which is low survey effort for the detection of priority flora.

Due to the survey timing, survey effort, and the lack of a targeted flora survey, the survey is deemed inadequate to detect the above priority flora species.

Based on the above assessment, the proposed clearing may result in the removal of priority flora. For the reasons set out above, it is considered that the impacts of the proposed clearing on flora can be managed through flora management conditions.

Conditions

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

- Vegetation management condition to where practicable, avoid clearing riparian vegetation.
- Prior to any clearing, a botanist shall be engaged to conduct a targeted flora survey for the presence of threatened and priority flora. The species will be flagged and an appropriate buffer will be erected to ensure the preservation of identified individuals.

3.2.2. Biological values (fauna) - Clearing Principles (a) and (b)

Assessment

Terrestrial Ecosystems (2021) identified the following three habitat types within the application area:

- Mulga woodland;
- Open Mulga woodland; and
- Shrubland.

The following conservation significant fauna species has been identified as possible to occur within the application area:

- *Leipoa ocellata* (malleefowl) – Vulnerable (EPBC Act, BC Act)

No evidence of malleefowl presence was observed during the fauna or botanical surveys, however there is a high likelihood of the species being present but undetected in remote areas, such as the project area (ABS, 2023; DCCEEW, 2024b; Talis Consultants, 2024). The nearest records of Malleefowl, identified in the desktop assessment, were approximately 25 and 40 kilometres away, recorded in 2011 and 2009 respectively (GIS Database). The application area is within the known malleefowl range, and the habitat types identified within the application area could support malleefowl (DCCEEW, 2024b).

Critical malleefowl habitat is poorly researched, and therefore, all areas occupied by malleefowl are considered to be of equal importance for species protection (DCCEEW, 2024b).

Conclusion

Based on the above, the proposed clearing may result in impacts to suitable malleefowl habitat. Although there is no current evidence of malleefowl presence or breeding, it is possible that malleefowl mounds could be constructed in areas of suitable habitat in future breeding seasons, over the duration of the clearing permit. As such, searches should be conducted in areas of suitable habitat as a precaution if clearing during the breeding season (1 September – 31 January).

The applicant may have notification responsibilities under the EPBC Act for impacts to malleefowl and their habitats, as set out in the EPBC Act. The applicant has been advised to contact the federal Department of Climate Change, Energy, the Environment and Water (DCCEEW) to discuss EPBC Act referral requirements.

Conditions

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

- Fauna Management – malleefowl
    - Undertake fauna inspection(s) for active malleefowl mounds prior to clearing between 1 September and 31 January;
    - No clearing within 200 metres of an identified active mound; and
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 3 December 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 two native title claims (WCD2023/002 - Nyalpa Pirniku and WCD2022/002 – Darlot) over the area under application (DPLH, 2025). These claims have been determined by the Federal Court on behalf of the claimant groups. However, the mining

tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (DPLH, 2025). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is noted that the proposed clearing may impact on malleefowl (*Leipoa ocellata*), which is a protected matter under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). The proponent may be required to refer the project to the (Federal) Department of Climate Change, Environment and Water for environmental impact assessment under the EPBC Act. The proponent is advised to contact the Department of Climate Change, Energy, the Environment and Water and the Environment for further information regarding notification and referral responsibilities under the EPBC Act.

Other relevant authorisations required for the proposed land use include:

- A Programme of Work approved under the *Mining Act 1978*.
- 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

<table>
<tr><th>Characteristic</th><th>Details</th></tr>
<tr><td>Local context</td><td>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 located within the Eastern Murchison subregion of the Murchison bioregion (GIS Database).

The proposed clearing area is within the Minara Pastoral Lease. It is also surrounded by predominantly nickel and goldmining operations. Approximately 99% of the local area (50 kilometre radius from the application area) remains uncleared (GIS Database).</td></tr>
<tr><td>Ecological linkage</td><td>The application area is not considered a significant ecological linkage. The vegetation immediately surrounding the application area and the majority of the region remains uncleared (GIS Database).

The application area is intersected on the western side by an ephemeral creek that flows north to south (Talis Consultants, 2024; GIS Database). This creek is likely to represent a minor ecological linkage for surface water flows.</td></tr>
<tr><td>Conservation areas</td><td>The application area is not located within any DBCA legislated conservation areas (GIS Database). The nearest legislated conservation area is an unnamed nature reserve approximately 57.8 kilometres south-southwest of the application area (GIS Database).</td></tr>
<tr><td>Vegetation description</td><td>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).

A reconnaissance flora and vegetation survey was conducted over an area of 1,090 hectares, inclusive of the application area, on 9 November 2020 by Native Vegetation Solutions (2021). The vegetation within the application area can be described as one of the following:
Hakea preissii over Eremophila pantonii shrubland;
Mulga shrubland – Drainage; and
Open Mulga shrubland (Native Vegetation Solutions, 2021).
Detailed descriptions of vegetation types are provided in Appendix D.</td></tr>
<tr><td>Vegetation condition</td><td>The vegetation survey (Native Vegetation Solutions, 2021) indicates the vegetation within the proposed clearing area is in very good to degraded condition (Keighery, 1994).

As the proposed clearing is located within the Eremaean Botanical Province, these condition ratings have been converted to the Trudgen (1991) condition rating scale (GIS Database). Therefore, the vegetation within the proposed clearing area ranges from very good to very poor condition (Trudgen, 1991).

The full Trudgen (1991) condition rating scale is provided in Appendix C.</td></tr>
<tr><td>Climate and landform</td><td>The climate of the Murchison bioregion is described as arid, with the nearest weather station (Leonora) recording an average rainfall of approximately 236.8 millimetres per year (BoM, 2024; CALM, 2002).

The application area is mapped at elevations of 380-400 metres Australian height datum (Talis Consultants, 2024; GIS Database). Land system mapping broadly describes the application area as gently undulating plains (DPIRD, 2024b; GIS database).</td></tr>
<tr><td>Soil description</td><td>The soils within the application area are broadly mapped as the following (DPIRD, 2024a; DPIRD, 2024b; Talis Consultants, 2024; GIS database):
<table>
<tr><th>SYSTEM</th><th>DESCRIPTION</th></tr>
<tr><td>279Ju (146 ha)</td><td>Hardpan plains with variable gravelly mantles and minor sandy banks supporting weakly groved mulga shrublands.</td></tr>
<tr><td>279Mr (51 ha)</td><td>Distributary alluvial fans and wash plains supporting mulga - chenopod shrublands.</td></tr>
<tr><td>279Nu (2 ha)</td><td>Gently undulating stony plains, minor limonitic low rises and drainage floors supporting mulga and halophytic shrublands.</td></tr>
</table></td></tr>
<tr><td>Land degradation risk</td><td>Soil mapping indicates that the Jundee, Monitor and Nubev land systems are susceptible to soil erosion when sheetflow is interrupted, perennial shrub cover is substantially reduced or the soil</td></tr>
</table>

Characteristic	Details
	surface disturbed (DPIRD, 2024a). As the application area is intercepted by watercourses, water erosion may occur (GIS Database).
Waterbodies	The application area intersects an ephemeral creek which is part of the approximately 120 square kilometre Raeside-Ponton surface water catchment (Talis Consultants, 2024). The application area is located near the middle of the catchment, 25 to 30 kilometres from the regional catchment divide to the north and 17 to 20 kilometres upstream from the Lake Raeside internal drainage system (Talis Consultants, 2024). There is also a smaller ephemeral creek that passes through the application area with a catchment of approximately 5 square kilometres which joins the larger creek south of the site (Talis Consultants, 2024).
Hydrogeography	The application area is not within any mapped Public Drinking Water Source Areas (PDWSA) or legislated surface water areas. The nearest PDWSA is the Leonora Water Reserve located approximately 15.9 kilometres to the northwest of the application area (GIS Database). The application area is located within the Goldfields Groundwater Area proclaimed under the *Rights in Water and Irrigation Act 1914* (GIS Database). Two levels of groundwater salinity are mapped across the application area, being: • 1,000-3,000 total dissolved solids milligrams per litre, which is described as brackish water quality; and • 3,000-7,000 total dissolved solids milligrams per litre, which is described as brackish water quality (NWGA, 2023; GIS Database).
Flora	There are records of 16 priority flora species within a 50 kilometre radius of the application area, with six of these species occurring on soils present within the application area (GIS Database). The nearest record is approximately six kilometres from the application area (GIS Database).
Ecological communities	There is one PEC mapped within a 50 kilometre radius of the application area (GIS Database). This is the Melita calcrete groundwater assemblage type on Raeside palaeodrainage on Melita (Sons of Gwalia) Station, Priority 1 PEC (GIS Database). This PEC is located approximately 26.3 kilometres from the application area. One TEC occurs in the Murchison bioregion, being the Depot Springs stygofauna community (DBCA, 2023). These ecological communities are unlikely to occur within the application area, as the application area lies primarily in granitic geology, opposed to the calcrete required to support these communities (Humphreys, 2001; Talis Consultants, 2024).
Fauna	There are records of 13 conservation significant fauna species recorded within a 50 kilometre radius of the application area (GIS Database). The nearest record is located approximately 12 kilometres from the application area (GIS Database).
Fauna habitat	A fauna habitat field assessment was conducted on 9 November 2020 by Terrestrial Ecosystems (2021). Three broad habitat types were identified: • Mulga woodland; • Open mulga woodland; and • Shrubland (Terrestrial Ecosystems, 2021). There is also a small rocky ridge located on the eastern side of M 37/1202, which is approximately one kilometre from the project site (Talis Consultants, 2024). Vegetation at the site tended to be sparse and patchy with limited cover (Talis Consultants, 2024).

A.2. Vegetation extent

	Pre-European area (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current extent in all DBCA Managed Land (proportion of pre-European extent) (%)
IBRA Bioregion - Murchison	28,120,587	28,044,823	~100	293,505	1.04
Beard vegetation associations - State					
18	19,892,306	19,843,148	~99	1,317,179	6.62
39	6,613,418	424,642.41	~100	479,206	7.25
Beard vegetation associations					

- Murchison					
18	12,403,172	12,363,253	~100	45,094	0.36
39	1,148,400	1,138,064	~99	N/A	N/A

Government of Western Australia (2019)

A.3. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix E.1), and biological survey information, impacts to the following conservation significant flora required further consideration (Native Vegetation Solutions, 2021).

The likelihood of occurrence for these species were determined by potentially suitable habitat within the application area and known regional records (Native Vegetation Solutions, 2021; Obbens, 2018; Western Australian Herbarium, 1998-; Wilson & Albrecht, 2002; GIS Database).

Species name	**Conservation status**	**Suitable habitat? [Y/N]**	**Distance of closest record to application area (km)**	**Are surveys adequate to identify? [Y, N, N/A]**	**Likelihood of occurrence**
Acacia sp. Marshall Pool (G. Cockerton 3024)	P3	Y	<6	N – inappropriate season for the botanical province	Possible – Suitable habitat – discussed in Section 3.2.1
Acacia websteri	P1	Y	<26	N – inappropriate season for the botanical province	Possible – Suitable habitat – discussed in Section 3.2.1
Angianthus prostratus	P3	Y	<18	N – out of flowering season	Unlikely – Limited suitable habitat
Calandrinia quartzitica	P1	N	<50	N – inappropriate season for the botanical province	Unlikely – Lack of suitable habitat
Calytrix hislopii	P3	N	<42	N – inappropriate season for the botanical province	Unlikely – Lack of suitable habitat
Calytrix praecipua	P3	N	<23	Y	Unlikely – Lack of suitable habitat
Conospermum toddii (Victoria Desert smokebush)	P4	N	<34	N – out of flowering season	Unlikely – Lack of suitable habitat
Cratystylis centralis	P3	Y	<20	N – inappropriate season for the botanical province	Possible – Suitable habitat – discussed in Section 3.2.1
Eremophila annosicaulis	P3	Y	<46	N – inappropriate season for the botanical province	Possible – Suitable habitat – discussed in Section 3.2.1
Eremophila simulans subsp. *megacalyx*	P3	Y	<38	N – out of flowering season	Possible – Suitable habitat – discussed in Section 3.2.1
Hemigenia exilis	P4	Y	<17	Y	Possible – Some suitable habitat – discussed in Section 3.2.1
Nicotiana salina	P1	N	<18	N – inappropriate season for the botanical province	Unlikely – Lack of suitable habitat
Pigea sp. *Chloroxantha (E. Bennett & D. Bright EUC 1810)*	P3	Y	<20	N – out of flowering season	Possible – Some suitable habitat – discussed in Section 3.2.1
Ptilotus tetrandrus	P1	Y	<31	N – out of flowering season	Possible – Suitable habitat – discussed in Section 3.2.1

Species name	Conservation status	Suitable habitat? [Y/N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N, N/A]	Likelihood of occurrence
Stenanthemum patens	P1	Y	<46	N – inappropriate season for the botanical province	Possible – Suitable habitat – discussed in Section 3.2.1
Triglochin protuberans	P3	N	<10	N – inappropriate season for the botanical province	Unlikely – Lack of suitable habitat

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

A.4. Fauna analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix E.1), and biological survey information, impacts to the following conservation significant flora required further consideration (Talis Consultants, 2024).

The likelihood of occurrence for these species were determined by potentially suitable habitat within the application area, species distribution, and known regional records (Bamford et al., 2008; Benshemesh, 2007; Birdlife Australia, 2017; Birdlife International, 2019; CSIRO, n.d.; DAWE, 2008; DCCEEW, 2024a; DOTE, 2025a, 2025b, 2025c, 2025d, 2025e; Garnet & Crowley, 2000; Talis Consultants, 2024; WAM, 2024; GIS Database).

Species name	Conservation status		Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N, N/A]	Likelihood of occurrence
	WA	EPBC				
Actitis hypoleucos (common sandpiper)	MI	MI	N	12.1	N	Unlikely
Apus pacificus (fork-tailed swift)	MI	MI	N	*	N	Unlikely
Bettongia lesueur subsp. (Barrow and Boodie Islands)	CD	VU	N	16.3	N	Unlikely
Branchinella apophysata	P1	-	N	*	Y	Unlikely
Calidris acuminata (sharp-tailed sandpiper)	MI	MI	N	15.7	N	Unlikely
Calidris canutus (red knot)	EN	EN	N	40.3	N	Unlikely
Charadrius veredus (oriental plover)	MI	MI	N	*	N	Unlikely
Falco hypoleucos (grey falcon)	VU	-	N	35.8	N	Unlikely
Falco peregrinus (peregrine falcon)	OS	-	N	11.6	N	Unlikely
Leipoa ocellata (malleefowl)	VU	VU	Y	25.9	Y	Possible – discussed in Section 3.2.2
Leporillus conditor (greater stick-nest rat)	CD	VU	Y	20.9	N	Unlikely
Motacilla cinereal (grey wagtail)	MI	MI	N	*	N	Unlikely
Motacilla flava (yellow wagtail)	MI	MI	N	*	N	Unlikely
Pezoporus occidentalis (night parrot)	CR	EN	N	*	N	Unlikely
Pluvialis fulva (Pacific golden plover)	MI	MI	N	15.7	N	Unlikely
Sminthopsis longicaudata (long-tailed dunnart)	P4	-	N	19.6	Y	Unlikely
Thinornis rubricollis (Hooded plover)	P4	-	N	12.3	N	Unlikely
Tringa glareola (wood sandpiper)	MI	MI	N	24.0	N	Unlikely
Tringa nebularia (common greenshank)	MI	MI	N	11.6	N	Unlikely

Species name	Conservation status		Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N, N/A]	Likelihood of occurrence
	WA	EPBC				

CR: critically endangered, EN: endangered, VU: vulnerable, P: priority, MI: migratory, CD: conservation dependent, OS: other specially protected, *Terrestrial Ecosystems (2021) record only

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: The area proposed to be cleared contains potential habitat for priority flora species and potential habitat for threatened fauna.	May 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: The area proposed to be cleared contains potential habitat for threatened fauna.	May be at variance	Yes *Refer to Section 3.2.2, above.*
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: There are no known records of threatened flora within a 50 kilometre radius of the application area (GIS Database). The flora survey of the application area did not record any species of threatened flora (Native Vegetation Solutions, 2021).	Not likely to be at variance	No
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: There are no known threatened ecological communities (TECs) located within or in close proximity to the application area (GIS Database). The geology of the application area is unlikely to support the Depot Springs stygofauna community, known to the Murchison bioregion (DBCA, 2023; Humphreys, 2001; Talis Consultants, 2024).	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 (IBRA) (GIS Database). Approximately 100% of the pre-European vegetation still exists in the IBRA Murchison Bioregion (Government of Western Australia, 2019). 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). Approximately 99-100% of the pre-European extent of these vegetation associations remain 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:	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
The application area is not located within any DBCA legislated conservation areas (GIS Database). The nearest legislated conservation area is an unnamed nature reserve approximately 57.8 kilometres south-southwest of the application area (GIS Database). Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.		
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: The application area lies across two ephemeral creeks (Talis Consultants, 2024; GIS Database). The 'Mulga shrubland – Drainage' vegetation type is associated with these watercourses (Native Vegetation Solutions, 2021; GIS Database). A description of this vegetation type is provided in Appendix D. Therefore, the proposed clearing may impact on vegetation associated with a watercourse, and/or disrupt surface water flows. Condition To address the above impact, the following management measure will be required as a condition on the clearing permit: • A watercourse management condition requiring that surface water flows are not impacted by the proposed clearing.	At variance	No
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The application area is broadly mapped within the Jundee, Monitor and Nubev land systems (DPIRD, 2024a; GIS Database). These land systems are susceptible to erosion when sheetflow is interrupted, the perennial shrub cover is significantly reduced, or the soil surface disturbed (DPIRD, 2024a). The proposed clearing may, therefore, increase soil erosion, particularly in drainage areas. Condition To address the above impact, the following management measure will be required as a condition on the clearing permit: • A watercourse management condition requiring that surface water flows are not impacted by the proposed clearing; and • A staged clearing condition to minimise erosion.	May be at variance	No
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: There are no Public Drinking Water Source Areas within the application area (GIS Database). There are no permanent watercourses or wetlands within the area proposed to clear, however, there are two ephemeral watercourses within the application area. These watercourses flow southwards to Lake Raeside, located outside the amendment area (Talis Consultants, 2024; GIS Database). Creek lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall (Talis Consultants, 2024). The proposed clearing is unlikely to result in significant changes to surface water flows. The groundwater salinity of the permit area has been broadly mapped as being 1,000-7,000 milligrams per litre total dissolved solids (GIS Database). The depth of the groundwater in the area is 12.4 – 13.2 metres below ground level (Talis Consultants, 2024). With high annual evaporation rates and low annual rainfall, regional groundwater recharge mostly occurs during heavy rainfall or flooding events (BoM, 2006; BoM, 2024; Johnson et al., 1999). Due to the short life of mine, there is a lower likelihood of flood events occurring during the operation of the project (Talis Consultants, 2024). Therefore, the proposed clearing is unlikely to deteriorate the quality of 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:	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
The application area has an arid with low and irregular annual rainfall (BoM, 2024; CALM, 2002; Talis Consultants, 2024). There are no permanent watercourses or waterbodies within the application area (Talis Consultants, 2024; GIS Database). There are two ephemeral creeks within the application area and temporary localised flooding may occur briefly following heavy rainfall events (Talis Consultants, 2024; GIS Database). The proposed clearing is unlikely to increase the incidence or intensity of natural flooding events (Talis Consultants, 2024).		

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. Vegetation group descriptions

D.1. *Hakea preissii* over *Eremophila pantonii* shrubland

This vegetation group consisted of 7 families, 16 genera and 23 species (Native Vegetation Solutions, 2021). The vegetation group makes up 0.01 hectares (0.0003%) of the application area.

Scrub dominated by *Hakea preissii* over *Eremophila pantonii*, *Acacia victoriae*, *Sclerolaena diacantha*, *Sclerolaena densifolia*, *Enchylaena tomentosa* var. *tomentosa*, *Maireana triptera*, *Atriplex codonocarpa* and *Senna artemisioides* subsp. *filifolia* (Native Vegetation Solutions, 2021).

Figure 1. *Hakea preissii* over *Eremophila pantonii* shrubland within the survey area.

D.2. Mulga shrubland – Drainage

This vegetation group consisted of 8 families, 9 genera and 21 species (Native Vegetation Solutions, 2021). The vegetation group makes up 36.6 hectares (18.4%) of the application area.

Shrub Mallee was dominated by *Acacia aneura*, *Acacia pteraneura* and *Acacia aptaneura* over *Eremophila platycarpa* subsp. Leonora, *Ptilotus obovatus*, *Acacia tetragonophylla*, *Maireana triptera*, *Sida ectogama*, *Eremophila compacta* and *Sida* sp. Golden calyces glabrous (Native Vegetation Solutions, 2021).

Figure 2. Mulga shrubland – Drainage within the survey area.

D.3. Open mulga shrubland

This vegetation group consisted of 12 families, 17 genera and 30 species (Native Vegetation Solutions, 2021). The vegetation group makes up 161.7 hectares (81.5%) of the application area.

Very Open Shrub Mallee was dominated by *Acacia aneura* and *Acacia craspedocarpa* over *Senna artemisioides* subsp*. sturtii, Eremophila platycarpa* subsp. Leonora*, Eremophila metallicorum, Eremophila latrobei* subsp. *latrobei, Ptilotus obovatus* and *Solanum lasiophyllum* (Native Vegetation Solutions, 2021)*.*

Figure 3. Open mulga shrubland within the survey area.

Appendix E. Sources of information

E.1. GIS databases

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

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Clearing Regulations - Environmentally Sensitive Areas (DWER-046)
- Clearing Regulations - Schedule One Areas (DWER-057)
- DBCA - Legislated Lands and Waters (DBCA-011)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- IBRA Vegetation Statistics
- Native Title (ILUA) (LGATE-067)
- Native Vegetation Extent (DPIRD-005)
- Pre-European Vegetation (DPIRD-006)
- RIWI Act, Groundwater Areas (DWER-034)
- Soil Landscape Mapping – Best Available (DPIRD-027)
- WA Now Aerial Imagery

Restricted GIS Databases used:

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

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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.