Department of Mines, Petroleum and Exploration

GOVERNMENT OF WESTERN AUSTRALIA

Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	11136/1
Permit type:	Purpose permit
Applicant name:	Gibb River Diamonds Limited
Application received:	29 April 2025
Application area:	30 hectares
Purpose of clearing:	Mineral production and associated activities
Method of clearing:	Mechanical removal
Tenure:	Mining Lease 31/495
	Miscellaneous Licence 31/91, 31/92
Location (LGA area):	Shire of Menzies
Colloquial name:	Edjudina Gold Project

1.2. Description of clearing activities

Gibb River Diamonds Limited proposes to clear up to 30 hectares of native vegetation within a boundary of approximately 47.52 hectares, for the purpose of mineral production and associated activities. The project is located approximately 125 kilometres south of Laverton, within the Shire of Menzies. The application is to allow for mining activities at the Neta gold mine, within the Edjudina Gold Project (Gibb River Diamonds Limited, 2025).

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	5 March 2026
Decision area:	30 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 51Oof the *Environmental Protection Act 1986* (EP Act). The Department of Mines, Petroleum and Exploration (DMPE) 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), the clearing principles set out in Schedule 5 of the EP Act (A.4), proposed avoidance and minimisation measures (Section 3.1), relevant planning instruments and any other matters considered relevant to the assessment (Section 0). The Delegated Officer also took into consideration the purpose of the clearing to facilitate the replacement of drainage culverts along a haul road.

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;
- the loss of native vegetation that is suitable habitat for conservation significant flora and fauna, however habitat extends beyond the application area; 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 can be minimised and managed to be unlikely to lead to an unacceptable risk to environmental values.

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

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat

ahead of the clearing activity;
- commence construction no later than three months after undertaking clearing to reduce the risk of erosion; and
- watercourse management to avoid riparian vegetation and maintain existing water flow.

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)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Mining Act 1978* (WA)
- *Rights in Water and Irrigation Act 1914* (RIWI Act)

The key guidance documents which inform this assessment are:

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

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

The applicant has stated the proposed clearing activities will occur in an area which has been previously disturbed by mining and exploration activities dating to the 1890s (Gibb River Diamonds Limited, 2025). Contracted clearing equipment will be washed down before being transported to site, to minimise the spread of weeds, and soil will be stockpiled for rehabilitation (Gibb River Diamonds Limited, 2025). Further impacts to environmental values can be managed with conditions on the permit.

3.2. Assessment of impacts on environmental values

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

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

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 5 September 2025 by the Department of Mines, Petroleum and Exploration inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim over the area under application (DPLH, 2026). This claim (WCD2023/002) has registered with the National Native Title Tribunal on behalf of the claimant group. 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, 2026). 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 southern whiteface (*Aphelocephala leucopsis*) and malleefowl (*Leipoa ocellata*), which are 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 (Commonwealth) Department of Climate Change, Energy, the 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 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 Development and Closure Proposal approved under the *Mining Act 1978*

It is the proponent's responsibility to liaise with the Department of Water and Environmental Regulation and the Department of Biodiversity, Conservation and Attractions, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

End

Appendix A. Site characteristics

A.1. Site characteristics

Characteristic	Details
Local context	The area proposed to be cleared contains areas of intact native vegetation and mining disturbance within the extensive land use zone of Western Australia (GIS Database). It is surrounded by native vegetation, historic mining and exploration activities (GIS Database). The predominant land use in the Eastern Murchison subregion is native pastures, UCL and Crown Reserves, mining and conservation estate (CALM, 2002).
Ecological linkage	According to available databases, the application area does not contain any known or mapped ecological linkages (GIS Database).
Conservation areas	There are no conservation areas within the application area or local surrounds (50 kilometres) (GIS Database). The nearest conservation area is Goongarrie National Park located approximately 75 kilometres west of the application area (GIS Database).
Vegetation description	The vegetation of the application area is broadly mapped as the following Beard vegetation association: **Barlee 400:** Saltbush and/or bluebush with scattered low trees (GIS Database). A flora and vegetation survey was conducted over the application area by Ecotec Environmental Management (Ecotec) during December 2024. The following vegetation associations were recorded within the application area, in addition to disturbed areas (approximately 7.59 hectares) (Ecotec, 2024): • **VT1:** Isolated low trees of *Acacia aneura* or *Casuarina pauper* over *Maireana sedifolia* and *Atriplex* spp. on stony plains (approximately 6.03 hectares); • **VT2:** Mixed low open woodland patches within mixed shrublands in broad drainage lines (approximately 2.13 hectares); • **VT3:** *Casuarina pauper* open woodland over *Acacia, Casuarina* tall open shrubland over *Eremophila, Acacia, Senna, Cratystylis* open shrubland (approximately 0.36 hectares); • **VT4:** *Acacia aneura* low isolated trees or low open woodland over *Atriplex, Sida, Scaevola, Maireana* understorey (approximately 30.66 hectares); and • **VT5:** *Acacia aneura, A. caesaneura* low open woodland over *Acacia tetragonophylla. A. caesaneura, Eremophila forrestii* subsp. *forrestii, E. latrobei* subsp. *latrobei, Acacia aptaneura* sparse shrubland (approximately 0.78 hectares). The full vegetation descriptions and representative photos are available in Appendix D.
Vegetation condition	Vegetation surveys and aerial imagery of the application area indicate the vegetation to be in Degraded to Very Good condition (Trudgen, 1991). The full Trudgen (1991) condition rating scale is provided in Appendix C.
Climate and landform	The climate of the Eastern Murchison subregion is described as arid, with the nearest weather station recording an average rainfall of approximately 224.7 millimetres per year (BoM, 2026; CALM, 2002). The application area is mapped at elevations of 360 to 380 metres Australian Height Datum (GIS Database).
Soil description and land degradation risk	The soil is mapped as a part of the following land systems (DPIRD, 2026; Pringle et al.,1994; GIS Database): • **Gundockerta system (279Gu):** extensive, gently undulating calcareous stony plains supporting bluebush shrublands. Where not protected by stony mantle, saline plains and adjacent lower alluvial tracts are susceptible to water erosion, particularly in areas where perennial shrub cover is substantially reduced or soil surface is distributed; and • **Lawrence system (279LW):** low greenstone hills with ironstone ridges supporting pearl bluebush shrublands and eucalypt woodlands with halophytic undershrubs. Narrow drainage tracts are susceptible to water erosion, particularly where perennial shrub cover has been substantially reduced and / or the soil surface is disturbed. (<0.01hectares).
Waterbodies	The desktop assessment and aerial imagery indicated that one minor, non-perennial watercourse transects the area proposed to be cleared (GIS Database). The nearest water body is Lake Raeside approximately 5 kilometres east of the application area (GIS Database).
Hydrogeography	The application area is located within the Goldfields Groundwater Area proclaimed under the *Rights in Water and Irrigation Act 1914* (GIS Database). The nearest Public Drinking Water Source Area is Menzies Water Reserve, located approximately 130 kilometres west of the application area (GIS Database). The nearest Wetland of National Importance is Lake Marmion located approximately 80 kilometres west of the application area (GIS Database). The

Characteristic	Details
	groundwater salinity is mapped as 3000 to 7000 milligrams per litre total dissolved solids which is described as brackish to saline (BoM, 2019; GIS Database).
Flora	There are no records of threatened flora species occurring within the application area and local surrounds (50 kilometres) (Ecotec, 2024; GIS Database). There are no records of priority flora within the application area (Ecotec, 2024; GIS Database). Within the local surrounds there are records of 13 priority flora species (GIS Database).
Ecological communities	There is one priority ecological community within the local surrounds (50 kilometres); Mount Linden Range vegetation complex (banded ironstone formation) located approximately 45 kilometres north of the application area (GIS Database). No Threatened Ecological Communities are known within the local surrounds (50 kilometres) (GIS Database).
Fauna	There are two records of conservation significant fauna that have been recorded within the local surrounds (50 kilometres) (GIS Database). There are a further three fauna species within the Eastern Murchison bioregion that need to be considered, Appendix A.4.(GIS Database).
Fauna habitat	Three fauna habitats were identified within the application area (Ecotec, 2024): • Acacia Shrubland (approximately 3.19 hectares); • Drainage (approximately 1.10 hectares); and • Stony Plain (approximately 43.27 hectares).

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	28,120,586.77	28,044,823.42	99.73	2,185,987.96	7.77
Beard vegetation associations - State					
Veg Assoc 400.	190,823.50	403,889.60	99.39	-	-
Beard vegetation associations - Bioregion					
Veg Assoc 400.	190,823.50	189,665.42	99.39	-	-

Government of Western Australia (2019)

A.3. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets, scientific journals, and biological survey information, impacts to the following conservation significant flora required further consideration (Ecotec, 2024; Obbens, 2018; WA Herbarium, 1998-; GIS Database).

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)
Acacia eremophila var. Numerous-nerved variant (A.S. George 11924)	P3	N	N	Y	<20	19
Austrostipa vickeryana	P3	N	Y	Y	<5	9
Calandrinia quartzitica	P1	N	Y	Y	<50	18
Calandrinia sp. Menzies (F. Hort et al. FH 4100)	P3	Y	Y	Y	<45	5
Eragrostis sp. Lake Carey (J. Paterson & J. Warden WB 40825)	P1	N	N	N	<50	4
Eremophila arachnoides subsp. *tenera*	P3	N	Y	Y	<45	18
Eremophila sp. Lake Carey (E. Mattiske LM 197)	P1	Y	Y	Y	<50	6
Eucalyptus pimpiniana	P3	N	N	N	<50	34
Placynthium nigrum	P3	N	N	N	<50	9

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)
Stackhousia sp. Lake Mackay (P.K. Latz 12870)	P1	N	N	N	<40	9
Tecticornia mellarium	P1	N	N	Y	<30	21
Tecticornia sp. Lake Way (P. Armstrong 05/961)	P1	N	N	N	<20	8
Thryptomene eremaea	P2	N	N	N	<15	13

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, and biological survey information, impacts to the following conservation significant fauna required further consideration (Commonwealth of Australia, 2008; GIS Database).

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)
Birds				
Malleefowl (*Leipoa ocellata*)	VU	N	Y	<35
Southern whiteface (*Aphelocephala leucopsis*)	VU	Y	Y	<330, within modelled distribution
Reptiles				
Woma (*Aspidites ramsayi*)	P1	N	N	<30
Invertebrates				
Arid bronze azure butterfly (*Ogyris petrina*)	CR	N	N	<135
Inland hairstreak butterfly (*Jalmenus aridus*)	P2	Some	Y - limited	<105

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, MI: migratory, CD: conservation dependent, OS: other specially protected, P: priority

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: Flora and fauna surveys conducted over the application area recorded 79 native flora species, and 13 native fauna species were opportunistically observed. No species of conservation significance were recorded (Ecotec, 2024). Five introduced flora species were recorded during the survey. None are listed as Declared Pest species in Western Australia, nor Weeds of National Significance (DPIRD, 2026; Ecotec, 2024). The application area contains potentially suitable habitat for *Calandrinia* sp. Menzies (F. Hort et al. FH 4100) (P3) and *Eremophila* sp. Lake Carey (E. Mattiske LM 197) (P1), however these species were not recorded within the application area (Ecotec, 2024; WA Herbarium, 1998-). Given that both species are located greater than 40 kilometres north of the application area, and the application area is outside of these species known range, it is unlikely these species will be present within the application area (WA Herbarium, 1998-). *Austrostipa vickeryana* (P3) is known within five kilometres of the application area, and this species is often found in association with salt lakes, across Coolgardie, Mallee, and Murchison regions, however, not always (WA Herbarium, 1998-). The record adjacent to the application area is from 1992 on	May be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
the edge of Lake Raeside within kopi dunes. Whilst the application area contains some suitable soil and vegetation for this species, given the age of this record and lack of suitable landforms, it is unlikely to occur within the application area (WA Herbarium, 1998-). It should be noted surveys were conducted outside of the optimal survey time, so biodiversity may not be accurately reflected; however, surveys were conducted following a dry spring and above rainfall in November, during a year of above average rainfall (BoM, 2026; Ecotec, 2024; EPA, 2016).		
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 the following conservation significant fauna: malleefowl (*Leipoa ocellata*, VU), southern whiteface (*Aphelocephala leucopsis*, VU), and inland hairstreak (*Jalmenus aridus*, P2). Acacia shrubland habitat (approximately 3.2 hectares) within the application area provides potential habitat for malleefowl towards the west of the application area (Ecotec, 2024). However, the Acacia woodland habitat generally lacked leaf litter (10-20% cover), which would be unsuitable for malleefowl mound construction and incubation (Ecotec, 2024). It is unlikely that this limited suitable habitat significantly contributes to the maintenance of the malleefowl population within the local area or region, and therefore impacts of the proposed clearing are unlikely to be significant to malleefowl. Relatively undisturbed open woodlands and shrublands with an understorey of grasses or shrubs is also considered habitat critical to the survival of the southern whiteface (DCCEEW, 2023). Critical habitat should not be cleared, fragmented or degraded, however large areas of the application area have been impacted by historical mining activity and long-term pastoral activity (DCCEEW, 2023; Ecotec, 2024). The application area has become partially destocked in recent years which has allowed vegetation to regenerate (Ecotec, 2024), however intensive grazing has resulted in degradation of vegetation and habitat. It is unlikely suitable habitat within the application area significantly contributes to the maintenance of southern whiteface population within the local area or region, and therefore impacts of the proposed clearing are unlikely to be regionally significant to southern whiteface. Suitable habitat for these species (malleefowl and southern whiteface) extends into the local surrounds. To reduce impacts on any fauna within the application area a slow directional clearing condition will be implemented to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity. The inland hairstreak inhabits open woodlands with a mixture of young and mature *Senna artemisioides* subsp. *filifolia* shrubs, a variety of flowering shrubs (*Eremophila* sp., *Scaevola* sp., and *Maireana* sp.), some scattered taller vegetation (*Allocasuarina* sp., *Santalum* sp.) to create sheltered microhabitats, and open areas of exposed, well-drained ground adjoining *Senna* host plants (Eastwood et al., 2023). Most breeding sites have been found on clay loam on relatively flat ground or adjoining seasonal floodplains (Eastwood et al., 2023). *Senna artemisioides* subsp. *filifolia* is known to occur within the application area, however given previous disturbance it is unknown if there is a mixture of young and mature shrubs suitable for this species. There are some areas of suitable habitat for this species, particularly within VT3 vegetation association and drainage line habitats, however this suitable habitat extends beyond the clearing boundary. Whilst there may be some areas suitable for this species to occur in, given the historic disturbance and grazing within the application area, it is unlikely that the proposed clearing will significantly impact the inland hairstreak.	Not likely to be at variance	No
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: The area proposed to be cleared is unlikely to contain habitat for flora species listed under the BC Act (Ecotec, 2024; GIS Database).	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (d): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."* Assessment: There are no known Threatened Ecological Communities (TECs) located within the application area, or the local surrounds (50 kilometres) (GIS Database). The area proposed to be cleared does not contain species that can indicate a TEC (Ecotec, 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 extent of the mapped vegetation type is consistent with the national objectives and targets for biodiversity conservation in Australia (Commonwealth of Australia, 2001; Appendix A.2.). The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area.	Not at variance	No
Principle (h): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."* Assessment: Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas (GIS Database).	Not likely to be at variance	No
Environmental value: land and water resources		
Principle (f): *"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."* Assessment: Ephemeral drainage areas and lines within the application area are associated with vegetation types 2 and 3 (Mixed low open woodland patches within mixed shrublands in broad drainage lines, and *Casuarina pauper* open woodland over *Acacia*, *Casuarina* tall open shrubland over *Eremophila*, *Acacia*, *Senna*, *Cratystylis* open shrubland) (Ecotec, 2024). Potential impacts to vegetation associated with watercourses can be minimised by the implementation of a watercourse management condition.	May be 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 mapped soils within the application area are susceptible to water erosion when stony mantle is disturbed or perennial shrub cover is removed (Pringle et al., 1994). Noting the location of the application area, the proposed clearing is likely to have an appreciable impact on land degradation. Whilst there is historic disturbance within the application area and immediate surrounds, majority of the vegetation within the local surrounds (20 kilometres) remains undisturbed. Potential erosion impacts as a result of the proposed clearing can be minimised by the implementation of a staged clearing condition to ensure large areas are not void of vegetation cover for extended periods.	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: Surface water from drainage lines within the application area flow east toward Poton Creek which subsequently turns into Lake Raeside, approximately 5 kilometres east application area (Ecotec, 2024; GIS Database). Given the distance to Lake Raeside, and the absence of permanent water courses, wetlands or Public Drinking Water Sources Areas within 20 kilometres of the application area, the proposed clearing is unlikely to significantly impact surface or ground water quality. Potential impacts can be reduced through implementation of a watercourse management condition and staged clearing condition will reduce erosion into watercourses.	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
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: The application area contains ephemeral drainage lines and floodplain habitats, which following rainfall events can become inundated with water. It is unlikely the proposed clearing will significantly exacerbate the intensity of flooding. Potential impacts can be minimised by the implementation of a watercourse management condition.	Not likely to be at variance	No

Appendix C. Vegetation condition rating scale

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

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

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

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

Appendix D. Biological survey information excerpts / photographs of the vegetation / DMPE site inspection report

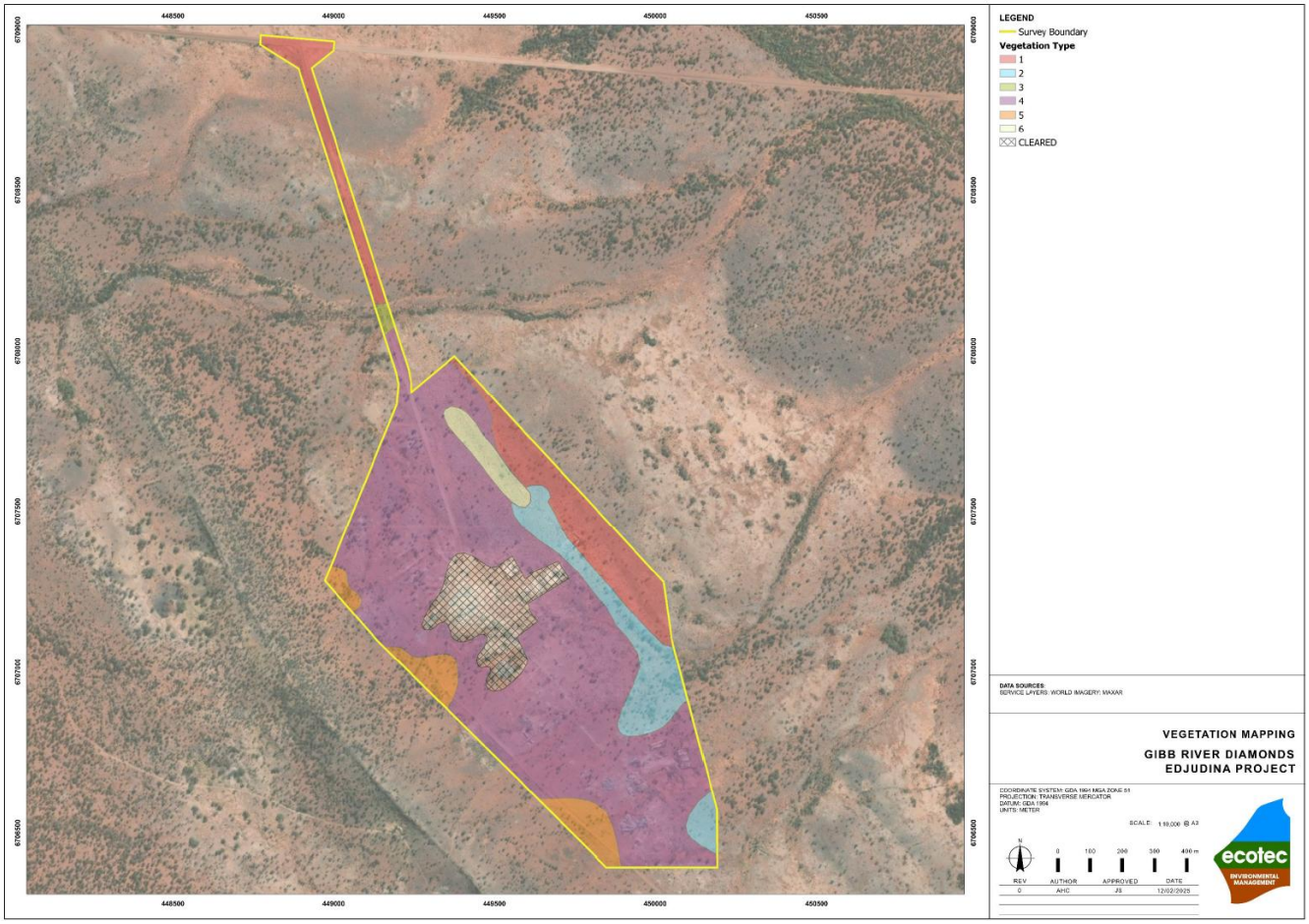

Figure 1. Vegetation mapping over broader survey area (Ecotec, 2024). Note, exploration works and access tracks within the application area have not been mapped as cleared vegetation types.

Table 1. Vegetation types recorded within the broader survey area (Ecotec, 2024).

Vegetation type (VT)	Description	Image
1 - Stony plain Sites EDJ1, 3b, south of 7	Isolated low trees of *Acacia aneura* or *Casuarina pauper* over *Maireana sedifolia* and *Atriplex* spp. on stony plains. Undulating stony plain; Yellowish red (5YR5/8) clay loam to fine sandy clay loam surface rock (quartz, other) 40 – 60 %. *Acacia aneura* or *Casuarina pauper* low isolated trees over *Maireana sedifolia, Atriplex vesicaria, A. nummularia, Acacia tetragonophylla, Senna artemisioides subsp. filifolia* open chenopod shrubland over *Eriachne pulchella* subsp. *pulchella, Austrostipa scabra, A. elegantissima, Sclerolaena* spp. low sparse to open tussock grassland.	
2 - Drainage line; unincised Sites EDJ3a, 4 & 7b	Mixed low open woodland patches within mixed shrublands in broad drainage lines. Undulating plain, low valley; drainage line, unincised with land surface disturbance (dam). The drainage line area may have become inundated with sediment washed down from the surrounding plains, with channel flow greatly reduced because of the dam and other historic mining structures. *Acacia aneura, Casuarina pauper, Alectryon oleifolius* subsp. *canescens, Acacia aptaneura, A. ramulosa* low open woodland patches within open shrubland of *Acacia tetragonophylla, Dodonaea lobulata, Eremophila spp., Teucrium disjunctum, Maireana sedifolia, M. triptera, Atriplex vesicaria, A. nummularia, Ptilotus obovatus* subsp. *obovatus,* grasses and forbs.	

3 - Incised drainage line; lower slope of outwash slope Site EDJ10	*Casuarina pauper* open woodland over *Acacia, Casuarina* tall open shrubland over *Eremophila, Acacia, Senna, Cratystylis* open shrubland. Yellowish red (5YR5/8) clay loam to fine sandy clay loam; sandy banks with patches of rocks between channels on west side; east side deeply incised channel. Occurs slightly higher in the landscape to VT 2. *Casuarina pauper* open woodland over *Acacia aneura, Casuarina pauper, Acacia tetragonophylla* tall open shrubland over *Eremophila granitica, E. alternifolia var. alternifolia, Acacia tetragonophylla* open shrubland over *Cratystylis subspinescens, Maireana sedifolia, Senna cardiosperma* low open shrubland.	
4 - Undulating plain/ low rises Sites EDJ 2, 7c, 8	*Acacia aneura* low isolated trees or low open woodland over *Atriplex, Sida, Scaevola, Maireana* understorey. Highly disturbed areas with historic mining impacts and pastoral impacts – vegetation variable with small pockets in good to very good condition. *Acacia aneura* low isolated trees or small patches of trees over *Acacia tetragonophylla, Acacia aneura* isolated shrubs over *Atriplex nummularia, A. vesicaria, Roepera aurantiaca* subsp. *aurantiaca, Ptilotus obovatus* var. *obovatus, Pittosporum angustifolium, Sida calyxhymenia, grasses , Sclerolaena obliquicuspis, Calandrinia eremaea* low open chenopod shrubland. *(8) Acacia aneura, Casuarina pauper, Brachychiton gregorii* low open forest over *Sida ectogama, Scaevola spinescens, Sida calyxhymenia* low shrubland over *Maireana triptera, Solanum lasiophyllum, Sida ectogama* low chenopod shrubland.	
5 - Outwash slope; lower slope Sites EDJ 5, 5b, 6	*Acacia aneura, A. caesaneura* low open woodland over *Acacia tetragonophylla. A. caesaneura, Eremophila forrestii* subsp. *forrestii, E. latrobei* subsp. *latrobei, Acacia aptaneura* sparse shrubland. Low hills; lower slopes; aspect east; Reddish yellow (5YR6/8) fine sandy clay loam; surface rock 50 – 60 %. Condition: mostly good to very good with more regrowth and recruitment occurring than areas closer to the historic mining area (Site 2, VT 4). *Acacia aneura, A. caesaneura* low open woodland over *Acacia tetragonophylla. A. caesaneura, Eremophila forrestii* subsp. *forrestii, E. latrobei* subsp. *latrobei, Acacia aptaneura* sparse shrubland over *Acacia aneura, A. caesaneura, Sida ectogama* low open shrubland over *Maireana triptera, Acacia caesaneura, Cratystylis subspinescens* low chenopod shrubland.	
6 - Low rocky ridge within stony undulating plain Site EDJ 9	*Acacia oswaldii, Casuarina pauper* tall sparse shrubland over *Dodonaea lobulata, Acacia tetragonophylla* open shrubland. Shallow pockets of yellowish red (5YR5/6) silty clay loam; surface rock (outcrop, quartz, metamorphic rocks; chert) > 90 %. *Acacia oswaldii, Casuarina pauper* tall sparse shrubland over *Dodonaea lobulata, Acacia tetragonophylla, Atriplex nummularia* open shrubland over *Maireana sedifolia, Ptilotus exaltatus, P. obovatus* var. *obovatus* low open chenopod shrubland.	
C – Cleared land.	Cleared or highly disturbed; changes to land form; some native species present; vegetation structure highly modified The main area is mapped in Figure 5.2; however there are numerous minor areas throughout the central survey area.	

Appendix E. Sources of information

E.1. GIS datasets

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

- Cadastre (Polygon) (LGATE-217)
- Clearing Regulations - Environmentally Sensitive Areas (DWER-046)
- Clearing Regulations - Schedule One Areas (DWER-057)
- DBCA - Lands of Interest (DBCA-012)
- DBCA - Legislated Lands and Waters (DBCA-011)
- DBCA Fire History (DBCA-060)
- Directory of Important Wetlands in Australia - Western Australia (DBCA-045)
- Groundwater Salinity Statewide (DWER-026)

- IBRA Vegetation Statistics
- Local Government Area (LGA) Boundaries (LGATE-233)
- Localities (LGATE-234)
- Medium Scale Topo Contour (Line) (LGATE-015)
- Mineral Field Boundaries (DMIRS-005)
- Native Title (Determination) (LGATE-066)
- Native Title (Fed Court) (LGATE-005)
- Native Title (NNTT) (LGATE-004)
- Native Vegetation Extent (DPIRD-005)
- Pre-European Vegetation (DPIRD-006)
- Public Drinking Water Source Areas (DWER-033)
- 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 - Systems (DPIRD-064)
- Townsites (LGATE-248)
- 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)

E.2. References

Gibb River Diamonds Limited (2025) Clearing permit application form, CPS 11136/1, received 29 April 2025.

Bureau of Meteorology (BoM) (2019) Bureau of Meteorology Website – Groundwater Information – Average Salinity. Bureau of Meteorology. https://www.bom.gov.au/water/groundwater/insight/metadata.shtml (Accessed 18 February 2026).

Bureau of Meteorology (BoM) (2026) Bureau of Meteorology Website – Climate Data Online, Edjudina (012027). Bureau of Meteorology. https://reg.bom.gov.au/climate/data/ (Accessed 18 February 2026).

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

Commonwealth of Australia (2001) *National Objectives and Targets for Biodiversity Conservation 2001-2005*, Canberra.

Commonwealth of Australia (2008) Species Profile and Threats Database. Department of Climate Change, Energy, the Environment and Water, Australia. https://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl (Accessed 25 February 2026).

Department of Climate Change, Energy, the Environment and Water (DCCEEW) (2023) Conservation Advice for *Aphelocephala leucopsis* (southern whiteface). Available from: https://environment.gov.au/biodiversity/threatened/species/pubs/529-conservation-advice-31032023.pdf (Accessed 27 February 2026).

Department of Planning, Lands and Heritage (DPLH) (2026) Aboriginal Cultural Heritage Inquiry System. Department of Planning, Lands and Heritage. https://espatial.dplh.wa.gov.au/ACHIS/index.html?viewer=ACHIS (Accessed 19 February 2026).

Department of Primary Industries and Regional Development (DPIRD) (2026) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. https://dpird.maps.arcgis.com/apps/webappviewer/index.html?id=662e8cbf2def492381fc915aaf3c6a0f (Accessed 18 February 2026).

Department of Primary Industries and Regional Development (DPIRD) (2026) Western Australian Organism List. Department of Primary Industries and Regional Development. Government of Western Australia. https://www.dpird.wa.gov.au/online-tools/western-australian-organism-list/ (Accessed 26 February 2026).

Eastwood, R. Jacks, A. Williams, A.A.E. Petersen. L, Cameron, J. (2023) Current distribution, preferred habitat, behaviour, and biology of the Inland Hairstreak, *Jalmenus aridus* Graham & Moulds, 1988 (Lepidoptera: Lycaenidae) in the Eastern Goldfields region of Western Australia. Records of the Western Australian Museum.

Ecotec (WA) Pty Ltd (Ecotec) (2024) Edjudina Gold Project Flora, Vegetation and Fauna Habitat Reconnaissance Survey, December 2024, Prepared by Ecotec (WA) Pty Ltd for Gibb River Diamonds Ltd.

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

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

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

Obbens, F. J. (2018) Three new perennial species of Calandrinia (Montiaceae) from southern Western Australia. *Nuytsia (29)*, 193-204. https://doi.org/10.58828/nuy00845

Pringle, H.J.R., Van Vreeswyk, A.M.E., Gilligan, S.A. (1994) An inventory and condition survey of the north-eastern Goldfields, Western Australia. Technical Bulletin No. 87. Department of Agriculture, South Perth, Western Australia.

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

Western Australian Herbarium (WA Herbarium) (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions, Western Australia. https://florabase.dbca.wa.gov.au/ (Accessed 19 February 2026).

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 (now DMPE)
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia (now DMPE)
DMP	Department of Mines and Petroleum, Western Australia (now DMPE)
DMPE	Department of Mines, Petroleum and Exploration
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* (Commonwealth 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:

Threatened species

T 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

Listed by order of the Minister as extinct under section 23(1) of the BC Act as extinct or extinct in the wild.

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

SP **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.

Priority species

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.