

## 1. Application details and outcomes

### 1.1. Permit application details

<b>Permit number:</b>	10630/1
<b>Permit type:</b>	Purpose Permit
<b>Applicant name:</b>	Gold Valley Wiluna West Pty Ltd
<b>Application received:</b>	29 April 2024
<b>Application area:</b>	88.36 hectares
<b>Purpose of clearing:</b>	Mineral production and associated activities
<b>Method of clearing:</b>	Mechanical Removal
<b>Tenure:</b>	Mining Lease 53/971 Mining Lease 53/972 Mining Lease 53/1018 Mining Lease 53/1078 Mining Lease 53/1087 Miscellaneous Licence 53/146
<b>Location (LGA area/s):</b>	Shire of Wiluna
<b>Colloquial name:</b>	Wiluna West Project

### 1.2. Description of clearing activities

Gold Valley Wiluna West Pty Ltd proposes to clear up to 88.36 hectares of native vegetation within a boundary of approximately 393 hectares, for the purpose of mineral production and associated activities. The project is located approximately 40 kilometres southwest of Wiluna, within the Shire of Wiluna.

The application is to allow for mine development and construction of mining infrastructure. The initial application requested to clear up to 58.01 hectares within a boundary of approximately 355 hectares. The Permit Holder later requested an increase on the boundary and the amount of clearing of 30.35 hectares to allow for the development of additional gold resources. This clearing permit covers the existing permit (CPS 4006/3). A new permit had to be requested as the applicant bought the project from the previous permit holder.

### 1.3. Decision on application and key considerations

<b>Decision:</b>	Grant
<b>Decision date:</b>	19 September 2024
<b>Decision area:</b>	88.36 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 information from a flora and vegetation, and fauna surveys (Appendix D), the clearing principles set out in Schedule 5 of the EP Act (Appendix B), proposed avoidance and minimisation measures (Section 3.1), relevant planning instruments and any other matters considered relevant to the assessment (Section 3.3). The Delegated Officer also took into consideration the purpose of the application, to replace an existing clearing permit (CPS 4006/3).

The assessment identified that the proposed clearing may result in:

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values;

- impacts to priority flora and Priority Ecological Communities (PEC); and
- impacts to riparian vegetation.

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

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

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- limit the amount of clearing in vegetation types containing priority flora and associated with a PEC; and
- avoid clearing riparian vegetation where possible, and where drainage lines are impacted, maintain waterflows.

## 2. Legislative context

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

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

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

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Mining Act 1978* (WA)

The key guidance documents which inform this assessment are:

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

## 3. Detailed assessment of application

### 3.1. Avoidance and mitigation measures

The applicant has indicated that clearing has been limited to only the areas required and designed to avoid significant flora/fauna as much as practicable. With the exception of the open pits, all areas will be rehabilitated at the completion of mining activities in accordance with the approved Mine Closure Plan. The existing environmental management measures will continue to be implemented for clearing, weed management and in accordance with the Malleefowl Management Plan (CLA, 2024b).

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

### 3.2. Assessment of impacts on environmental values

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

The application area contains four Priority flora species, of which only one is likely to be significantly impacted. The application area intersects a Priority Ecological Community which will be impacted by the proposed clearing. Conditions to minimise these impacts are placed in the clearing permit. Additionally cumulative impacts have been taken into account as the applicant has applied for another permit (CPS 10631/1) adjacent to the north of this clearing permit.

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

### 3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 7 June 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 (WCD2013/004 and WCD2017/001) over the area under application (DPLH, 2024). These claims have been determined by the Federal Court on behalf of the claimant groups (TARLPA and TARLKA MATUWA PIARKU (ABORIGINAL CORPORATION) RNTBC. 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, 2024). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

Other relevant authorisations required for the proposed land use include:

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

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

**End**

## Appendix A. Site characteristics

### A.1. Site characteristics

Characteristic	Details			
Local context	The area proposed to be cleared is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia. It is surrounded by vegetation and landscape of the Murchison bioregion. There are also various tracks and cleared areas, including exploration drill lines within the application area (GIS Database).			
Ecological linkage	According to aerial imagery, the application area does not form part of any formal or informal ecological linkages (GIS Database).			
Conservation areas	The application area does not form part of any known or mapped conservation areas. The closest conservation area is located approximately 40 kilometres southwest of the application area (GIS Database).			
Vegetation description	The vegetation of the application area is broadly mapped as the following Beard vegetation association: 202: Shrublands; mulga & <i>Acacia quadrimarginea</i> scrub (GIS Database).			
	A flora and vegetation survey was conducted over the application area by Recon Environmental during March-June, 2009. The following vegetation associations were recorded within the application area (Recon, 2010):			
	Veg Unit	Vegetation Type	Vegetation Description	DBC Community
	SIMS-B	Stony Ironstone Mulga Shrublands on rocky slopes and crests, frequently on BIF	<i>Acacia aneura</i> var. <i>microcarpa</i> shrubland with <i>Grevillea berryana</i> occurring on rocky outcrops usually on banded iron formation (BIF)	<b>TYPE 1:</b> found on crests and steeper upper slopes; described as a sparse open tall shrubland of <i>Acacia aneura</i> cf. var. <i>microcarpa</i> , <i>Grevillea berryana</i> and less commonly, <i>Acacia quadrimarginea</i> over <i>Eremophila latrobei</i> subsp. <i>latrobei</i> , <i>Prostanthera campbellii</i> , above <i>Ptilotus obovatus</i> , <i>Sida</i> sp. Golden <i>calyces glabrous</i> , <i>Sida</i> sp. <i>Excedentifolia</i> , <i>Ptilotus schwartzii</i> , <i>Cheilanthes brownii</i> , with <i>Eriachne helmsii</i> , <i>E. mucronata</i> , and <i>Monachather paradoxus</i>
	ASET	<i>Acacia</i> shrubland over <i>Eremophila</i> and <i>Triodia</i>	mixed <i>Acacia</i> shrubland generally comprised of <i>Acacia aneura</i> over mid to low shrubs including <i>Eremophila punctata</i> , <i>E. latrobei</i> , <i>E. forrestii</i> , over <i>Triodia melvillei</i>	<b>TYPE 2:</b> located on flat summit surfaces on ridge tops, and on the undulating pediments and valley floors off the main ridges. It encompasses mosaics of <i>Acacia</i> over <i>Triodia</i> grasslands or low myrtaceous- <i>Eremophila</i> shrublands, with isolated mallees of <i>Eucalyptus kingsmillii</i> subsp. <i>kingsmillii</i>
	LOMS	Low Open Myrtaceae Shrubland	low open shrubland, usually dominated by <i>Aluta maisonneuvei</i> subsp. <i>auriculata</i> , and tending to have very sharp boundaries with the surrounding <i>Acacia</i> shrublands	
	SIMS-C	Stony Ironstone Mulga Shrublands on rocky slopes and crests	commonly occurring upland habitat associated with ironstone or laterite; dominated by <i>Acacia aneura</i> var. <i>microcarpa</i>	
	OALS	Open <i>Acacia</i> Shrubland on ironstone or laterite over low scattered shrubs	varying habitat generally dominated by <i>Acacia quadrimarginea</i> and/or <i>A. balsamea</i> (P4) and frequently occurs on lateritic low rises; low outcrops of weathered BIF; rough quartz slopes; and upper breakaway surfaces	<b>TYPE 3:</b> usually found on pediments, lower slopes and slightly low outcrops of weathered BIF and other metasediments, quartz and ultramafic lithologies, usually obscured by colluvium. It consists of <i>Acacia aneura</i> , and less frequently <i>Acacia balsamea</i> and <i>A. cuthbertsonii</i> subsp. <i>cuthbertsonii</i> tall open shrublands over shrubs including <i>Scaevola spinescens</i> , <i>Senna artemisioides</i> subsp. <i>helmsii</i> , <i>Eremophila flabellata</i> , and scattered <i>Maireana convexa</i> , <i>M. georgei</i> , and <i>Ptilotus obovatus</i>
	SXSS	Scattered Mixed Shrubland on Low Stony Rises	open, scattered shrubland dominated by <i>Acacia</i> species occurring on stony ironstone	
SAES	Stony <i>Acacia Eremophila</i> Shrubland	An open <i>Acacia aneura</i> shrubland on stony red earth over scattered <i>Eremophila</i>	<b>TYPE 4:</b> consists of a tall open shrubland of <i>Acacia aneura</i> and <i>A. tetragonophylla</i> , occasionally with	

Characteristic	Details			
			spp., <i>Sida ectogama</i> , <i>Ptilotus obovatus</i> , and <i>P. schwartzii</i>	isolated emergent trees of <i>Acacia pruinocarpa</i> , over a mosaic of shrubland and chenopods
	DRAS	Drainage Tract <i>Acacia</i> Shrubland	Scattered to close tall shrubland, sometimes woodland with understorey development inversely related to upper storey cover	
	SIME	Stony Ironstone Mulga with <i>Eremophila forrestii</i> Shrubland	Commonly occurring mulga shrubland dominated by <i>Acacia aneura</i> var. <i>microcarpa</i> , above <i>Eremophila forrestii</i> often with <i>E. punctata</i> , <i>E. flabellata</i> and <i>E. jucunda</i> subsp. <i>jucunda</i>	<b>TYPE 5:</b> found on lower slopes, pediments and valley flats. It is a tall <i>Acacia aneura</i> shrubland often with a canopy of <i>A. pruinocarpa</i> over <i>Eremophila forrestii</i> , <i>E. latrobei</i> , <i>Senna</i> spp., <i>Eremophila flabellata</i> , <i>Rhagodia eremaea</i> , <i>Sida ectogama</i> , <i>Ptilotus obovatus</i> , with <i>P. schwartzii</i> , <i>Sida</i> sp. <i>Excedentifolia</i> and <i>Monachather paradoxa</i>
	SIMS-M	Stony Ironstone Mid-slope Mulga Shrubland	Mid-slope habitat associated with iron rich outcrops. It consists of <i>Acacia aneura</i> var. <i>microcarpa</i> , with scattered <i>A. pruinocarpa</i> above <i>Eremophila latrobei</i> subsp. <i>latrobei</i> , <i>Dodonaea petiolaris</i> , <i>Harnieria kempeana</i> subsp. <i>muelleri</i> , <i>Eremophila flabellata</i> , with <i>E. jucunda</i> subsp. <i>jucunda</i> , and <i>Ptilotus rotundifolius</i>	<b>TYPE 6:</b> generally located mid-slope, associated with massive haematite-enriched outcrops; it can be summarized as consisting of <i>Acacia aneura</i> cf. var. <i>microcarpa</i> and occasionally <i>A. pruinocarpa</i> over <i>Eremophila latrobei</i> subsp. <i>latrobei</i> , <i>Dodonaea petiolaris</i> , <i>Eremophila flabellata</i> , <i>Sida</i> sp. Wiluna, (Markey and Dillon 4126) [ <i>Sida picklesiana</i> (ms) (Markey et al. 2011) and less frequently <i>Ptilotus rotundifolius</i> , <i>Eremophila jucunda</i> subsp. <i>jucunda</i> , <i>Harnieria kempeana</i> subsp. <i>muelleri</i>
	BCLS	Breakaway Foothlope <i>Chenopod</i> Low Shrubland	Generally comprised of a low scattered shrubland generally dominated by chenopod species	Not on BIF – not surveyed by DBCA
	BRXS	Breakaway Mixed Shrublands	<i>Acacia</i> species shrubland above <i>Eremophila</i> species, <i>Ptilotus obovatus</i> , with <i>Scaevola spinescens</i> , and often with emergent <i>Eucalyptus carnei</i> near the foothlope edges of the breakaway scarp; it has also been recorded as a moderately close tall to mid shrubland	

Vegetation condition	The vegetation survey (Recon, 2010) and aerial imagery indicate the vegetation within the proposed clearing area is in Excellent to Very Poor (Trudgen, 1991) condition.  The full Trudgen (1991) condition rating scale is provided in Appendix C.
Climate and landform	The application area is located in an arid zone where the annual average rainfall (Wiluna Aero) is of 181.9 millimetres (BoM, 2024).
Soil description	The soil within the application area is mapped as soil unit Fa8 (GIS Database). This soil unit is described as steep ranges comprising fine-grained sedimentary rocks along with basic dykes; extensive portions of this unit are without soil cover: chief soils are shallow stony earthy loams on the steep slopes while shallow stony soils occur in similar situations (Northcote et al. 1960-68).
Land degradation risk	The application area is located within the Gabanintha and the Sherwood land systems (DPIRD, 2024). These land systems are described by Curry et al. (1994) as shown below: <b>Gabanintha land system:</b> Ridges, hills and foothslopes of various metamorphosed volcanic rocks (greenstones), supporting sparse acacia and other mainly non-halophytic shrublands. Hills mostly poorly accessible; not generally susceptible to grazing-induced erosion but widely scarred by past mining activities. <b>Sherwood land system:</b> Extensive, gently sloping stony and sandy plains on granite and gneiss below saline foothslopes of lateritised breakaways and outcrops of weathered rock; mainly supports scattered mulga shrub lands with understorey nonhalophytic and halophytic shrubs. Duplex soils of foothslopes plains, sandy alluvial fans and drainage tracts and channels are highly susceptible to accelerated erosion when shrub cover is degraded, as it is in most areas. Major units are not generally susceptible to accelerated erosion and are in better condition.

Characteristic	Details
Waterbodies	The desktop assessment and aerial imagery indicated that two minor, non-perennial watercourses transect the area proposed to be cleared (GIS Database).
Hydrogeography	The application area is located within the East Murchison Groundwater Area, legislated by the RIWI Act 1914. The mapped groundwater salinity 500-1,000 milligrams per litre total dissolved solids which is described as marginal (GIS Database).
Flora	There are records of four Priority flora species within the application area (Recon, 2010). Nine other Priority flora species are located within 20 kilometres of the application area (see Appendix A.2).
Ecological communities	Recon Environmental (2010) lists vegetation groups SIMS-B and SIMS-M as being closely associated with Banded Ironstone Formations (BIF) and have been recognised as important vegetation groups.
Fauna	There were conservation significant fauna species recorded within the greater survey area but outside of the application area (CLA, 2024a). There were also records from GIS Databases of conservation significant fauna species within the application area. See Appendix A.3.

## A.2. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix E.1), and biological survey information (Recon, 2010), impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Total individuals recorded (survey area)	Total individuals in local area	Total individuals to be cleared	Percentage of individuals to be cleared
<i>Homalocalyx echinulatus</i>	P3	325	>2,000	20	1%
<i>Olearia mucronata</i>	P3	2	400	0	0%
<i>Ptilotus luteolus</i>	P3	Population not determined	>2,000	0	0%
<i>Sida picklesiana</i>	P3	13,367	31,312	6,382	20.3%

These numbers represent the populations present in the application area prior to clearing being conducted by GWR Group Limited.

(Recon, 2010; Western Australian Herbarium, 1998-; GIS Database)

A desktop review identified the following Priority flora species located within 20 kilometres of the application area (GIS Database).

Species name	Conservation status	Suitable vegetation? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
<i>Beyeria lapidicola</i>	P1	Y	Y	0.7 km	12	N
<i>Eremophila congesta</i>	P1	Y	Y	1.96 km	18	N
<i>Euryomyrtus inflata</i>	P3	N	N	17.1 km	12	Y
<i>Hibiscus</i> sp. Perrinvale Station (J. Warden & E. Ager WB 10581)	P1	Y	Y	0.56 km	15	N
<i>Maireana prosthocochaeta</i>	P3	Y	N	5 km	24	N
<i>Mirbelia stipitata</i>	P3	N	N	15 km	2	N
<i>Prostanthera ferricola</i>	P3	Y	Y	5 km	23	N
<i>Ptilotus chrysocomus</i>	P1	N	N	5 km	5	N
<i>Tribulus adelacanthus</i>	P3	N	Y	10 km	18	N

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

(Western Australian Herbarium, 1998-; GIS Database)

## A.3. Fauna analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Brush-tailed mulgara	P4	N	10 km	1,216	Y
Long-tailed dunnart	P4	Y	3.3 km	291	Y

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Malleefowl	VU	N	0 km	29,638	Y
Peregrine falcon	OS	Y	0 km	1,786	Y

(CLA,2024; GWR, 2019; KLA, 2012)

#### A.4. Ecological community analysis table

Community name	Conservation status	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Wiluna West vegetation complexes (BIF)	P1	Y	Y	0 km	3	Y

(CLA, 2024a; GIS Database)

#### Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
<b>Environmental value: biological values</b>		
<p><u>Principle (a):</u> "Native vegetation should not be cleared if it comprises a high level of biodiversity."</p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared contains various species of Priority flora (see Figure 1 in Appendix Appendix D). However, the previous project owners (GWR Group Limited) have already cleared 50.64 hectares of native vegetation in the application area and have affected some of the individuals present (CLA, 2024c). <i>Sida picklesiana</i> has been recorded within the vegetation group SIMS-M. Clearing within this vegetation group will be limited to 20.53 hectares of native vegetation. Given the application area has already been greatly disturbed, it is unlikely that the proposed clearing will represent a significant impact to the Priority flora in the application area.</p> <p>A portion of the application area is mapped as the 'Wiluna West vegetation complexes (BIF)' (Priority 1) Priority Ecological Community (PEC). The boundary of this PEC including the buffer is mapped as comprising 10,670 hectares (CLA, 2024a; GIS Database). The clearing area (88.36 hectares) comprises less than 1 per cent of the total PEC and buffer area. It is unlikely that the proposed clearing would have a significant impact on the portion of the PEC located in the application area. The vegetation group SIMS-B is closely associated with the BIF. Clearing within this vegetation group will be limited to 20.53 hectares.</p> <p>Six introduced weed species have been recorded across the Wiluna West Project to date. Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.</p>	May be at variance	No
<p><u>Principle (b):</u> "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."</p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared contains suitable habitat for long-tailed dunnart in the rocky outcrops, however, population densities may be low due to limited food resources. There was a malleefowl record within the application area (GIS Database). However, no malleefowl mounds were recorded in the application area and there is no suitable habitat for malleefowl within the application area as the surface was either too rocky or lacked suitable leaf litter (CLA, 2024a; GWR,2019).</p> <p>However, the applicant is aware that malleefowl may enter the clearing area and will continue to operate in accordance with the Project Malleefowl Management Plan (CLA, 2024b).</p>	Not likely to be at variance	No
<p><u>Principle (c):</u> "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."</p>	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Assessment:</u></p> <p>There were no records of Threatened flora species in the area proposed to be cleared (CLA, 2024a; GIS Database).</p>		
<p><u>Principle (d):</u> <i>“Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community.”</i></p> <p><u>Assessment:</u></p> <p>The application area does not form part of any known or mapped Threatened Ecological Communities (GIS Database).</p>	Not likely to be at variance	No
<b>Environmental value: significant remnant vegetation and conservation areas</b>		
<p><u>Principle (e):</u> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u></p> <p>The application area falls within the Murchison Bioregion of the Interim Biogeographic Regionalisation for Australia (GIS Database). Over 99 per cent of the pre-European vegetation still exists in the Murchison Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation association 202 (GIS Database). This vegetation association has not been extensively cleared as over 99 per cent of the pre-European extent of this vegetation association remains uncleared at both the state and bioregional level (Government of Western Australia, 2019).</p>	Not at variance	No
<p><u>Principle (h):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.”</i></p> <p><u>Assessment:</u></p> <p>Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of any known or mapped conservation areas (GIS Database).</p>	Not likely to be at variance	No
<b>Environmental value: land and water resources</b>		
<p><u>Principle (f):</u> <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p> <p><u>Assessment:</u></p> <p>Given two minor ephemeral water courses are recorded within the DRAS - Drainage Tract <i>Acacia</i> Shrubland vegetation community in the application area (GIS Database), the proposed clearing is likely to impact native vegetation growing in, or in association with, an environment associated with a watercourse.</p>	At variance	No
<p><u>Principle (g):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</i></p> <p><u>Assessment:</u></p> <p>The mapped land systems within the application area are not susceptible to erosion except for drainage tracts (Curry et al., 1994). Noting the small number of watercourses in the application area, the proposed clearing is not likely to have an appreciable impact on land degradation.</p>	Not likely to be at variance	No
<p><u>Principle (i):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.”</i></p> <p><u>Assessment:</u></p> <p>Given no permanent water courses, wetlands, or Public Drinking Water Source Areas are recorded within the application area (GIS Database), the proposed clearing is unlikely to impact surface or ground water quality.</p>	Not likely to be at variance	No
<p><u>Principle (j):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.”</i></p> <p><u>Assessment:</u></p>	Not likely to be at variance	No



Assessment against the clearing principles	Variance level	Is further consideration required?
Given no permanent water courses or wetlands are recorded within the application area (GIS Database), the proposed clearing is unlikely to cause, or exacerbate, the incidence or intensity of flooding.		

### Appendix C. Vegetation condition rating scale

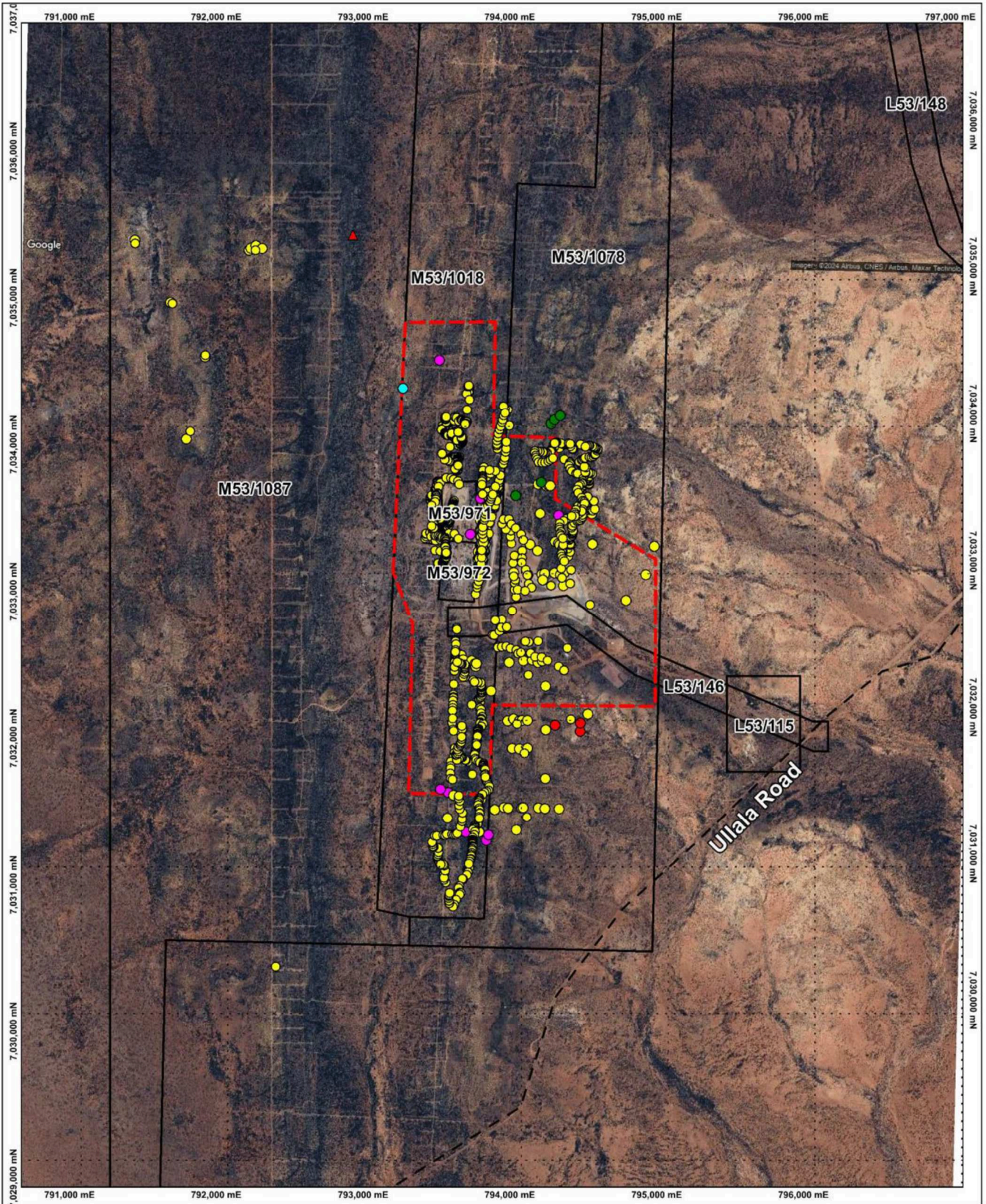
Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree 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)

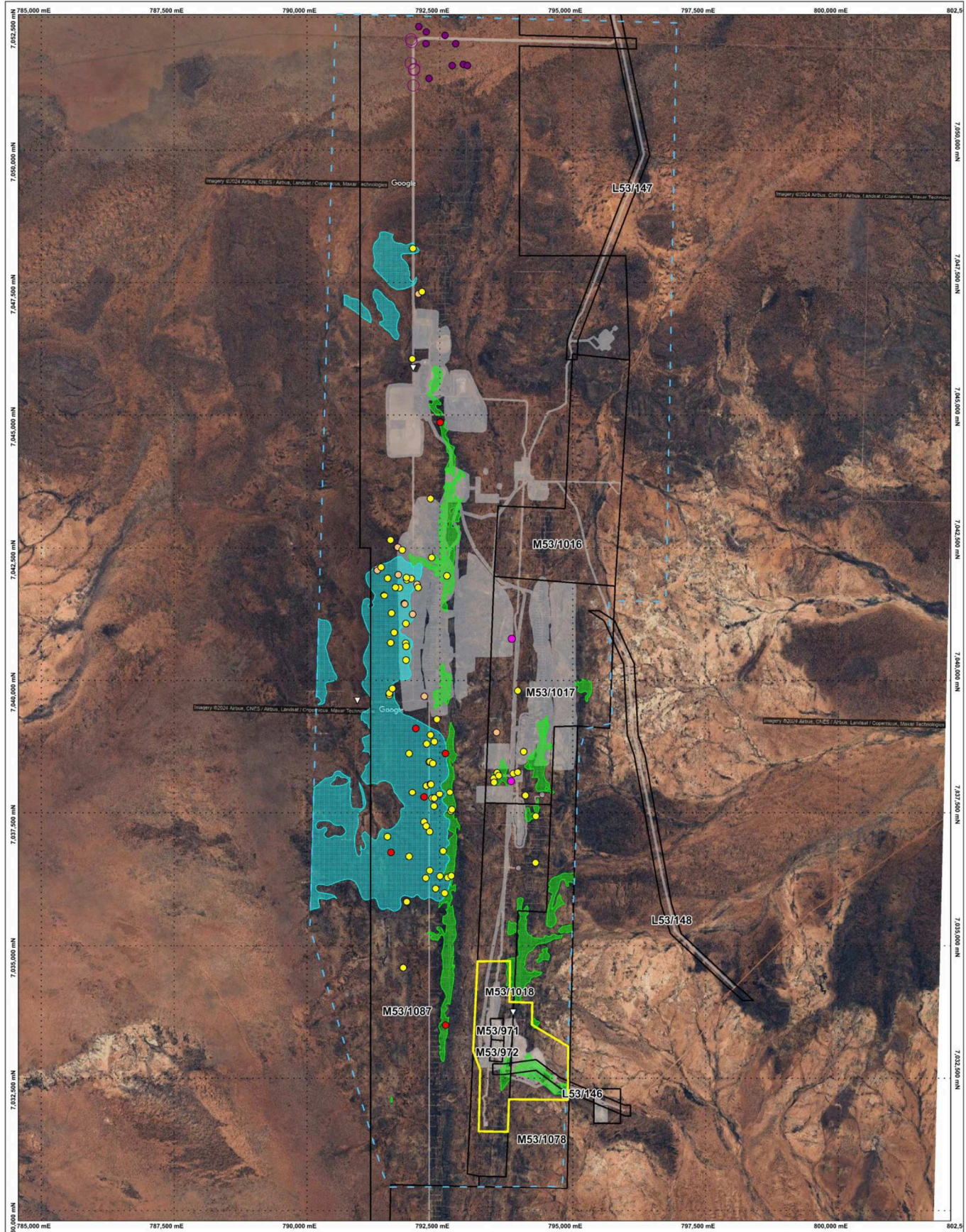
Condition	Description
Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated 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. Maps of the Priority flora and fauna



GVW Clearing Area	<b>Priority flora records</b> ▲ <i>Beyeria lapidicola</i> (P1) ● <i>Eremophila arachnoides</i> subsp. <i>arachnoides</i> (P3) ● <i>Homalocalyx echinulatus</i> (P3) ● <i>Olearia mucronata</i> (P3) ● <i>Ptilotus luteolus</i> (P3) ● <i>Sida picklesiana</i> (P3)	CLARK LINDBECK & ASSOCIATES PTY LTD Environmental Management Consultants	
		Gold Valley Wiluna West Pty Ltd Wiluna West Project Clearing Permit Priority flora records	
		Date: 24/04/2024 Author: BC Office: Drawing:	Scale: 1:35000 Projection: MGA Zone 50 (GDA 94)
		0 ————— 1,400 metres	

Figure 1. Mapped Priority flora records (Recon, 2010; NVS 2018).



GWV clearing area	<b>Malleefowl mound status (at time of most recent survey)</b>	Long-tailed Dunnart record
Vegetation clearing proposed	Active	Mulgara records - 2009
Recon (2010) survey area	Inactive	Mulgara records - 2020
	Old/Extinct	Burrowing Bettong secondary evidence (extinct)
	<b>Malleefowl habitat</b>	
	ASET veg group	
	MSET veg group	

CLARK LINDBECK & ASSOCIATES PTY LTD Environmental Management Consultants	
Date: 22/03/2024	Gold Valley Wiluna Pty Ltd Wiluna West Project Clearing Permit Fauna records
Author: BC	
Office:	
Drawing:	
Scale: 1:64999.7	Projection: MGA Zone 50 (GDA 94)

Figure 2. Mapped conservation significant fauna records (CLA, 2024a).

### E.1. GIS databases

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

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

Restricted GIS Databases used:

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

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- Environmental Protection Authority (EPA) (2016a) 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](http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf)
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## 4. Glossary

### Acronyms:

<b>BC Act</b>	<i>Biodiversity Conservation Act 2016</i> , Western Australia
<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>DAA</b>	Department of Aboriginal Affairs, Western Australia (now DPLH)
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia (now DPIRD)
<b>DCCEEW</b>	Department of Climate Change, Energy, the Environment and Water, Australian Government
<b>DBCA</b>	Department of Biodiversity, Conservation and Attractions, Western Australia
<b>DEMIRS</b>	Department of Energy, Mines, Industry Regulation and Safety
<b>DER</b>	Department of Environment Regulation, Western Australia (now DWER)
<b>DMIRS</b>	Department of Mines, Industry Regulation and Safety, Western Australia (now DEMIRS)
<b>DMP</b>	Department of Mines and Petroleum, Western Australia (now DEMIRS)
<b>DoEE</b>	Department of the Environment and Energy (now DCCEEW)
<b>DoW</b>	Department of Water, Western Australia (now DWER)
<b>DPaW</b>	Department of Parks and Wildlife, Western Australia (now DBCA)
<b>DPIRD</b>	Department of Primary Industries and Regional Development, Western Australia
<b>DPLH</b>	Department of Planning, Lands and Heritage, Western Australia
<b>DRF</b>	Declared Rare Flora (now known as Threatened Flora)
<b>DWER</b>	Department of Water and Environmental Regulation, Western Australia
<b>EP Act</b>	<i>Environmental Protection Act 1986</i> , Western Australia
<b>EPA</b>	Environmental Protection Authority, Western Australia
<b>EPBC Act</b>	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
<b>GIS</b>	Geographical Information System
<b>ha</b>	Hectare (10,000 square metres)
<b>IBRA</b>	Interim Biogeographic Regionalisation for Australia
<b>IUCN</b>	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
<b>PEC</b>	Priority Ecological Community, Western Australia
<b>RIWI Act</b>	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
<b>TEC</b>	Threatened Ecological Community

### Definitions:

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

#### T **Threatened species:**

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

**Threatened fauna** is that subset of ‘Specially Protected Fauna’ listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

**Threatened flora** is that subset of ‘Rare Flora’ listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

#### CR **Critically endangered species**

Threatened species considered to be “facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines”.

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

**EN**            **Endangered species**  
Threatened species considered to be “*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

**VU**            **Vulnerable species**  
Threatened species considered to be “*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*”.

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

**Extinct Species:**

**EX**            **Extinct species**  
Species where “*there is no reasonable doubt that the last member of the species has died*”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

**EW**            **Extinct in the wild species**  
Species that “*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

**Specially protected species:**

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

**MI**            **Migratory species**  
Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

**CD**            **Species of special conservation interest (conservation dependent fauna)**  
Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

**OS**            **Other specially protected species**  
Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

**P**            **Priority species:**

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

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

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

**P1**            **Priority One - Poorly-known species**

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

**P2**            **Priority Two - Poorly-known species**

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

**P3**            **Priority Three - Poorly-known species**

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

**P4**            **Priority Four - Rare, Near Threatened and other species in need of monitoring**

(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.

(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent.

(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

**Principles for clearing native vegetation:**

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.
- (d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.
- (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

- (h)** Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.
- (i)** Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.
- (j)** Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.