



1. Application details and outcomes

1.1. Permit application details

Permit number:	10446/1
Permit type:	Purpose Permit
Applicant name:	GMA Garnet Pty Ltd
Application received:	11 December 2023
Application area:	25.42 hectares
Purpose of clearing:	Expanding existing haul road
Method of clearing:	Mechanical Removal
Tenure:	Mining Leases 70/204, 70/1330
Location (LGA area):	Shire of Northampton
Colloquial name:	Port Gregory Mine

1.2. Description of clearing activities

GMA Garnet Pty Ltd proposes to clear up to 25.42 hectares of native vegetation within a boundary of approximately 25.42 hectares, for the purpose of expanding an existing haul road (GMA, 2023). The project is located approximately four kilometres north of Gregory, within the Shire of Northampton (GIS Database).

The application is to allow for the expansion of the existing haul road connecting the Hose and Lynton sites that form the Port of Gregory Mine (GMA, 2023).

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	30 January 2023
Decision area:	25.42 hectares of native vegetation

1.4. Reasons for decision

This clearing permit application was made in accordance with section 51E of the *Environmental Protection Act 1986* (EP Act) and was received by the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) on 11 December 2023. DEMIRS advertised the application for a public comment for a period of 21 days, and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix A), relevant datasets (Appendix D), supporting information provided by the applicant, including the results of a flora and vegetation survey, the clearing principles set out in Schedule 5 of the EP Act (Appendix B), proposed avoidance and minimisation measures (Section 3.1), relevant planning instruments and any other matters considered relevant to the assessment (Section 3.3).

The assessment identified that the proposed clearing may result in:

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values;
- potential impacts to conservation significant flora;
- potential impacts to conservation significant fauna; and
- potential land degradation.

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;
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity; and

- staged clearing – the purpose for which the clearing is authorised is enacted within 3 months of the authorised clearing being undertaken.

1.5. Site map

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

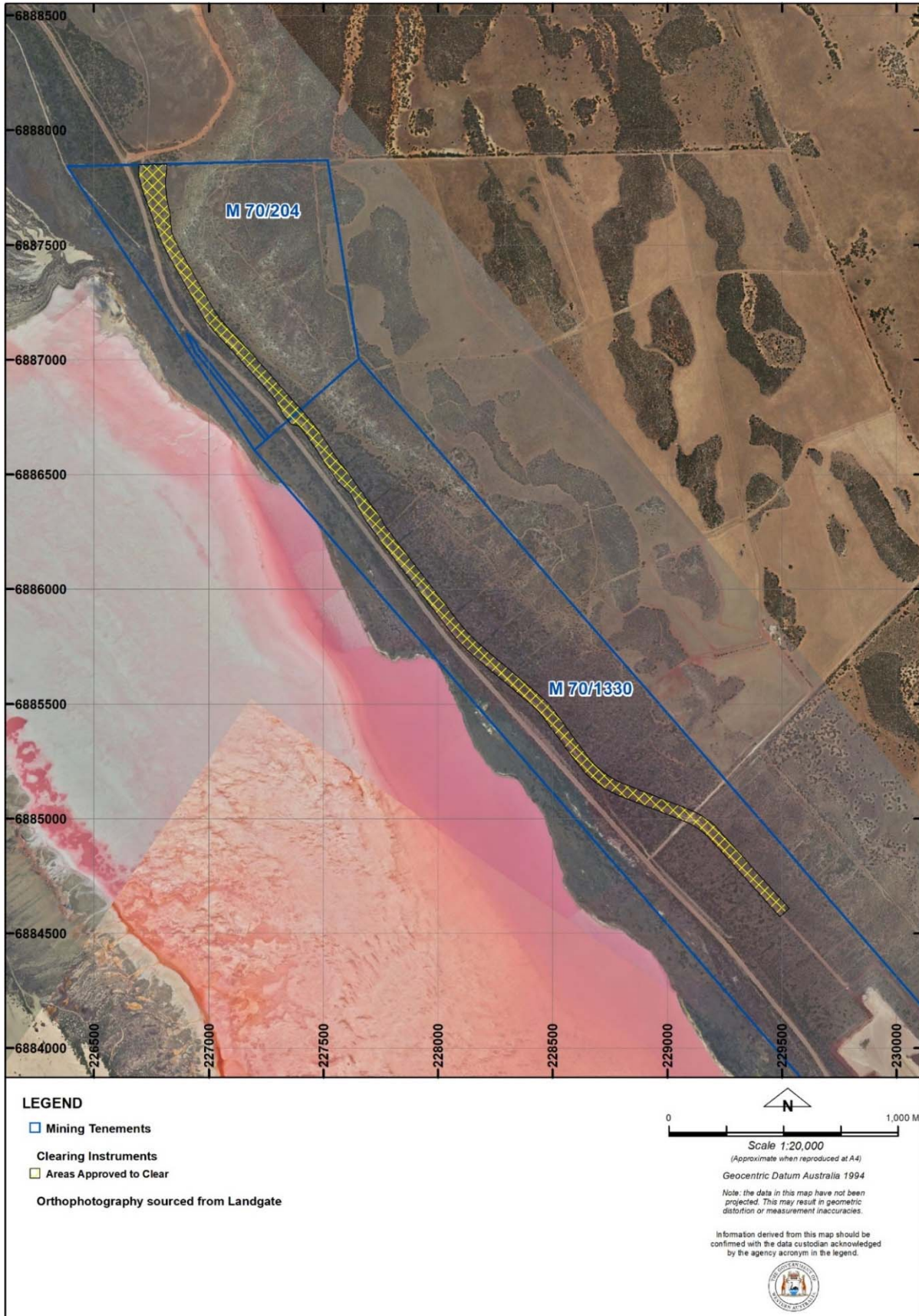


Figure 1. Map of the application area. The yellow area indicates the area within which conditional authorised clearing can occur under the granted clearing permit.

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 – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2016)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2020)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

GMA (2023) have outlined they maintain following internal databases, and undertake avoidance and mitigation measures:

- the haul road has been designed to avoid new areas of disturbance;
- clearing area will be demarcated before the commencement of the clearing;
- clearing will be undertaken with the site Ground Disturbance Permit Procedures;
- dust suppression will be implemented; and
- induction of all contractors and/or internal personnel undertaking the clearing with GMA's internal procedures.

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

3.2. Assessment of impacts on environmental values

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

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

3.2.1. Biological values - Clearing Principles (a), (b) & (c)

Assessment

The desktop investigation has identified 52 conservation significant flora recorded within 20 kilometres of the application area (GIS Database). Based on biological survey information and historical records 17 of these conservation significant flora are considered to potentially occur within the application area (16 Priority and one Threatened flora species) (Earth Stewardship, 2020; GHD, 2020a; 2020b; GIS Database). Flora and vegetation surveys have been undertaken within the application area from 8-13 December 2019 by GHD (2020a) and on 20 August 2020 by Earth Stewardship (2020), including a targeted survey for Threatened flora *Caladenia bryceana* subsp. *cracens* (GHD, 2020b). Sixty-four flora taxa representing 26 families and 50 genera were recorded within the survey area, and no conservation significant flora were recorded within the application area (GHD, 2020a; 2020b).

The 'Melaleuca cardiophylla shrubland to open shrubland' vegetation type, recorded adjacent to the application area, was identified as being potential habitat for Threatened flora species *Caladenia bryceana* subsp. *cracens* (GHD, 2020a; 2020b). A known location (adjacent to the permit area) of this species was visited with staff from DBCA in August 2020 and was confirmed flowering, with suitable habitat present on the adjacent tenement (Mining Lease 70/204). Flora surveys of the broader application area, including the application area did not record any species of Threatened flora (GHD, 2020a; 2020b).

The desktop investigation has identified 38 conservation significant fauna species recorded within 50 kilometres of the application area (GIS Database). Based on biological survey information and historical records, five of these conservation significant species are considered to potentially occur within the application area (four Migratory species and one Other Specially protected) (GHD, 2020a; GIS Database). The field survey undertaken by GHD recorded 31 fauna species including 21 bird, eight mammal, and two reptile species within the survey area (GHD, 2020a). No conservation significant fauna species were recorded within the application area (GHD, 2020a). Three fauna habitats were identified within the application area (GHD, 2020a):

- Acacia woodlands: recorded over the majority of the application area and is associated with lower and middle slopes on brown to orange sands. This habitat provides suitable habitat for reptiles and birds and has experienced high grazing impacts from feral pigs;
- Shrubland on seasonally wet brackish drainage flats: recorded over a small area on the western side of the application area on light brown clay on seasonally wet brackish drainage flats. This vegetation provides ideal habitats for reptiles and birds; and
- Cleared areas: degraded habitat associated with previously cleared areas, access tracks and firebreaks (GHD, 2020a).

Although no conservation significant fauna species were recorded within the application area (GHD, 2020a; GIS Database), the application area may be used as part of a wider home-range for a range of Migratory fauna species, however no conservation significant species are likely to be solely dependent on the habitats present within the application area.

The application area forms part of an ecological linkage running north-west to south-east, with Hutt Lagoon to the west and large areas of cleared farmland to the east (GIS Database). This linkage is likely to be significant for fauna species in the local area. Expanding the existing haul road is not likely to sever the linkage, however it may have an impact on the ability for fauna to move through the landscape.

Conclusion

For the reasons set out above, it is considered that the vegetation within the application area is not likely to represent an area of high diversity. The proposed clearing does have the potential to exacerbate the spread of weeds in the local area. Based on the above assessment, the proposed clearing will result in the reduction of vegetation within an ecological linkage. This may have an impact on the ability for some fauna to move through the landscape.

Conditions

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

- Take hygiene steps to minimise the risk of the introduction and spread of weeds; and
- Undertake slow progressive clearing to allow fauna to move into adjacent environments.

3.2.2. Significant remnant vegetation - Clearing Principles (e)

Assessment

The application area falls within the Geraldton Sandplains Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 44% of the pre-European vegetation still exists in the IBRA Geraldton Sandplains Bioregion (Government of Western Australia, 2019), which gives it a conservation status of 'Depleted' according to the Department of Natural Resources and Environment (2002). The local area (20 kilometres radius) has been extensively cleared for agricultural purposes (GIS Database).

The application area is broadly mapped as Beard vegetation associations 17: shrublands; *Acacia rostellifera* thicket; and 371: low forest; *Acacia rostellifera* (GIS Database). Approximately 83-88% of the pre-European extent of vegetation association 17 remains uncleared at the state, bioregional and subregional level (Government of Western Australia, 2019). Approximately 10% of the pre-European extent of vegetation association 371 remains uncleared at both the state, bioregional and subregional level (Government of Western Australia, 2019). This gives vegetation association 371 a conservation status of 'Vulnerable' according to the Department of Natural Resources and Environment (2002). A vegetation and flora survey conducted by GHD (2020a) mapped the vegetation of the application area at a much finer scale than the Beard vegetation mapping. The vegetation of the amendment areas was mapped as VT01: *Acacia rostellifera* open woodland to woodland, which was evaluated to better align with vegetation association 17: Shrublands; *Acacia rostellifera* thicket (GHD, 2020). Therefore, the proposed clearing will not reduce the extent of Beard vegetation association 371.

Conclusion

Further clearing of the remnant may contribute to the continued decline in the condition of the remnant, however the proposed clearing will not have any substantial impacts on the remaining extents of pre-European vegetation as it was determined that the vegetation in the area was either aligned with vegetation 17 (remaining extent well above the minimum threshold of 30%) or highly degraded (Earth Stewardship, 2020; GHD, 2020a)

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 19 December 2023 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 is one native title claim (Yamatji Nation – WC2019/008) over the area under application (DPLH, 2024). This claim has been determined by the Federal Court on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are 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 project is located approximately four kilometres north of Gregory, within the Shire of Northampton (GIS Database). The area is located within the Geraldton Sandplains bioregion and Geraldton Hills subregion as described by the Interim Biogeographic Regionalisation of Australia (IBRA). The area proposed to be cleared is part of a remnant patch of native vegetation in the intensive land use zone of Western Australia (GIS Database). It is surrounded by areas of cleared agricultural land to the east and there are also some adjacent areas of garnet mining in the southern area (GIS Database).
Ecological linkage	The proposed clearing area contributes to an ecological linkage between areas on the dune system to the east and the coastal plain to the west (GIS Database).
Conservation areas	There are no conservation areas located within the application area (GIS Database). <i>Caladenia elegans</i> (Threatened) has been recorded approximately 77 metres south-west of the application area (GIS Database). Nearby conservation areas include the Hutt Lagoon (non-perennial Lake), a wetland of national importance, which is located approximately 160 metres southwest of the application area (GIS Database). The nearest DBCA managed land is the Utcha Well Nature Reserve which is located approximately 2.4 kilometres north-west of the broader application area (GIS Database).
Vegetation description	<p>The vegetation of the application area is broadly mapped as the following Beard vegetation associations:</p> <ul style="list-style-type: none"> • 17: Shrublands; <i>Acacia rostellifera</i> thicket: wattle, casuarina and teatree acacia-allocauarina melaleuca alliance; and • 371: Low forest; <i>Acacia rostellifera</i>: Acacia, Rottnest pine, coastal moort or mixed tropical forest, <i>Acacia rostellifera</i>, <i>Callitris preissii</i>, <i>Eucalyptus lehmannii</i>, <i>E. cornuta</i> (GIS Database). <p>Flora and vegetation surveys were conducted over the application area by GHD during December, 2019 and by Earth Stewardship during August, 2020. The following vegetation associations were recorded within the application area (Earth Stewardship, 2020; GHD, 2020a):</p> <ul style="list-style-type: none"> • VT01: <i>Acacia rostellifera</i> open woodland to woodland. <i>Acacia rostellifera</i> open woodland to woodland over <i>Rhagodia preissii</i> subsp. <i>obovata</i>, <i>Pimelea microcephala</i> subsp. <i>microcephala</i>, <i>Olearia</i> sp. Kennedy Range (G. Byrne 66) and <i>Stylobasium spathulatum</i> open shrubland over <i>Austrostipa elegantissima</i> and <i>*Ehrharta longiflora</i> open grassland to grassland. Other common species include <i>Alyogyne hakeifolia</i>, <i>Roepera fruticulosa</i>, <i>Commicarpus australis</i> and <i>Euphorbia boophthona</i>. Occurs over lower and middle slopes on brown to orange sands. Previously disturbed through historic clearing and heavily disturbed by grazing; • VT03: <i>Myoporum insulare</i> shrubland. <i>Myoporum insulare</i> shrubland over <i>Frankenia pauciflora</i> and <i>Threlkeldia diffusa</i> open chenopod shrubland over <i>Sporobolus virginicus</i> open grassland. Occurs on light brown clay on seasonally wet brackish drainage flats; • Rehabilitation areas: Rehabilitation areas consisting of <i>Acacia rostellifera</i>, <i>Alyogyne hakeifolia</i>, <i>Pimelea microcephala</i> subsp. <i>microcephala</i>, <i>Stylobasium spathulatum</i> and <i>Olearia</i> sp. Kennedy Range (G. Byrne 66) on lower and middle slopes on brown to orange sands. The understorey is dominated by introduced grasses including <i>*Avena barbata</i> and <i>*Ehrharta calycina</i>; and • Cleared areas (including mine areas, tracks, cleared areas containing no native species). <p>*denotes weed species</p>
Vegetation condition	<p>The vegetation survey (Earth Stewardship, 2020; GHD, 2020a) indicate the vegetation within the proposed clearing area is in 'Good' to 'Completely Degraded' (Keighery, 1994) condition, described as:</p> <ul style="list-style-type: none"> • Good: Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing. • Degraded: Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing. • Completely degraded: The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs. <p>The full Keighery (1994) condition rating scale is provided in Appendix C.</p>

Characteristic	Details
Climate and landform	The area proposed to be cleared experiences a Mediterranean type climate, characterised by warm to hot dry summers and mild wet winter with an annual rainfall of approximately 334.9 millimetres (BoM, 2024).
Soil description and Land degradation risk	<p>The soils of the application area are broadly mapped as the following soil types:</p> <ul style="list-style-type: none"> 231Gy: Grey system. River beds, terraces and alluvial flats, includes dissected margins of relic alluvial plains; 231QuSW3: Quindalup North Swamp, phase 3. Dune ridges, lower slopes and flat, swampy areas with Calcareous deep sand, Alkaline grey shallow sandy duplex and Wet soils; 231Ta_1: Tamala North 1 subsystem. Low hills with relict dunes and some limestone outcrop. Forms a coastal band 3 to 7 km wide; and 231Ta_2: Tamala North 2 subsystem. Low hills with relict dunes and some limestone outcrop. Forms a coastal band 3 to 7 km wide (DPIRD, 2024). <p>The land systems present within the application area are described as having boulder-strewn limestone plains and rises interspersed with sandy-surfaced plains and sand sheets; much of the local redistribution of topsoil material is tough wind erosion (Payne et al., 1987).</p>
Waterbodies	The desktop assessment and aerial imagery indicates that no surface water course intersects the application area (GIS Database). The Hutt Lagoon (non-perennial Lake) is located approximately 160 metres southwest of the application area.
Hydrogeography	The application area is not mapped within a proclaimed public drinking water area (GIS Database). The proposed area is located within Gascoyne Groundwater Area (GIS Database).
Flora	There are no records of conservation significant flora within the application area (GIS Database). No Threatened or Priority flora species were recorded within the survey area (GDH, 2020a; 2020b). Several conservation significant flora taxa have been recorded within 20 kilometres of the application area (GIS Database).
Ecological communities	The application area is not located within any known or mapped Threatened or Priority Ecological Communities (GIS Database). The Kalbarri Ironstone Community is mapped within eight kilometres of the proposed clearing area (GIS Database).
Fauna	There are no records of conservation significant fauna species located within the application area (GIS Database). Several conservation significant fauna taxa have been recorded within 20 kilometres of the application area (GIS Database).
Fauna habitat	<p>Three fauna habitats were identified within the application area (GHD, 2020a):</p> <ul style="list-style-type: none"> Acacia woodlands; Shrubland on seasonally wet brackish drainage flats; and Cleared areas.

A.2. Vegetation extent

	Pre-European area (ha)	Current extent (ha)	Extent Remaining %	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre-European extent in all DBCA Managed Lands
IBRA Bioregion Geraldton Sandplains	3,136,037.83	1,404,424.32	44.78	18.24	18.12
IBRA Subregion Geraldton Hills	1,964,262.65	901,446.88	45.89	355,757.17	18.11
Local Government Shire of Northampton	1,258,428.76	930,228.68	73.92	230,957.58	18.35
Beard vegetation associations - State					
Veg Assoc No. 17	76,633.84	67,605.49	88.22	8,831.50	11.52
Veg Assoc No. 371	32,816.04	3,499.60	10.66	242.15	0.74
Beard vegetation associations - Bioregion					
Veg Assoc No. 17	54,078.08	45,159.85	83.51	6,067.99	11.22
Veg Assoc No. 371	32,807.53	3,499.10	10.67	242.15	0.74
Beard vegetation associations					

- Subregion					
Veg Assoc No. 17	49,605.04	42,016.28	84.70	5,572.71	11.23
Veg Assoc No. 371	32,807.53	3,499.10	10.67	242.15	0.74

Government of Western Australia (2019)

A.3. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix D.1), and biological survey information (Earth Stewardship, 2020; GHD, 2020a; 2020b; Western Australian Herbarium, 1998-), impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)
<i>Acacia latipes</i> subsp. <i>licina</i>	3	Y	<5	21
<i>Acacia pelophila</i>	1	N	<10	9
<i>Acacia ridleyana</i>	3	N	<20	27
<i>Androcalva microphylla</i>	2	N	<20	18
<i>Anthocercis intricata</i>	3	Y	<20	33
<i>Balladonia aevoides</i>	3	Y	<10	16
<i>Beyeria cinerea</i> subsp. <i>cinerea</i>	3	N	<20	53
<i>Blackallia nudiflora</i>	3	N	<10	24
<i>Caladenia bigeminata</i>	1	N	<20	2
<i>Caladenia bryceana</i> subsp. <i>cracens</i>	T	Y	<5	10
<i>Caladenia elegans</i>	T	N	<5	15
<i>Caladenia hoffmanii</i>	T	N	<20	17
<i>Calectasia browneana</i>	2	N	<20	11
<i>Calytrix harvestiana</i>	2	Y	<20	28
<i>Calytrix pimeleoides</i>	3	N	<20	19
<i>Calytrix purpurea</i>	2	Y	<20	17
<i>Chamaescilla maculata</i>	1	Y	<20	5
<i>Chamelaucium</i> sp. Coolcalalaya (A.H. Burbidge 4233)	1	N	<20	17
<i>Comesperma rhadinocarpum</i>	3	Y	<10	17
<i>Cryptandra glabriflora</i>	2	Y	<20	14
<i>Diuris drummondii</i>	T	N	<20	55
<i>Diuris recurva</i>	4	N	<20	37
<i>Drakaea concolor</i>	T	N	<10	7
<i>Eremophila microtheca</i>	4	N	<10	9
<i>Eucalyptus blaxellii</i>	4	N	<20	119
<i>Frankenia confusa</i>	4	N	<10	29
<i>Gastrolobium propinquum</i>	3	N	<20	33
<i>Geleznovia amabilis</i>	2	N	<20	35
<i>Grevillea triloba</i>	3	Y	<10	59
<i>Guichenotia quasicalva</i>	2	N	<20	21
<i>Hemigenia pimeleifolia</i>	2	Y	<20	4
<i>Lasiopetalum oldfieldii</i>	3	Y	<5	25

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)
<i>Leucopogon</i> sp. Port Gregory (C. Page 33)	1	N	<20	14
<i>Liparophyllum congestiflorum</i>	4	N	<20	17
<i>Malleostemon costatus</i>	2	N	<20	17
<i>Melaleuca huttensis</i>	3	Y	<20	17
<i>Ozothamnus vesperinus</i>	1	N	<20	6
<i>Prostanthera scutata</i>	2	N	<20	12
<i>Pterostylis sinuata</i>	T	N	<20	6
<i>Ptilotus chortophytus</i>	1	N	<20	7
<i>Scaevola kallophylla</i>	4	Y	<10	13
<i>Scaevola oldfieldii</i>	3	N	<20	21
<i>Scholtzia oleosa</i>	3	Y	<20	45
<i>Stachystemon nematophorus</i>	4	N	<10	14
<i>Stylidium torticarpum</i>	3	N	<20	51
<i>Styphelia cernua</i>	2	N	<20	8
<i>Teucrium</i> sp. Hutt River (W.H. Butler 54)	1	Y	<20	1
<i>Trithuria australis</i>	4	N	<20	19
<i>Verticordia dasystylis</i> subsp. <i>kalbarriensis</i>	2	N	<20	10
<i>Verticordia densiflora</i> var. <i>roseostella</i>	3	Y	<20	46
<i>Wurmbea tubulosa</i>	T	N	<20	20
<i>Xanthoparmelia xanthomelanoides</i>	2	N	<20	5

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

A.4. Fauna analysis table

Species name	Common Name	Conservation status	Distance of closest record to application area (km)	Suitable habitat features? [Y/N]
<i>Actitis hypoleucos</i>	common sandpiper	MI	<5	N
<i>Anous stolidus</i>	common noddy	MI	<10	N
<i>Apus pacificus</i>	fork-tailed swift	MI	<5	Y
<i>Arenaria interpres</i>	ruddy turnstone	MI	<5	N
<i>Calidris acuminata</i>	sharp-tailed sandpiper	MI	<5	N
<i>Calidris alba</i>	sanderling	MI	<5	N
<i>Calidris canutus</i>	red knot	EN	<5	N
<i>Calidris ferruginea</i>	curlew sandpiper	CR	<5	N
<i>Calidris melanotos</i>	pectoral sandpiper	MI	<5	N
<i>Calidris ruficollis</i>	red-necked stint	MI	<5	N
<i>Calidris subminuta</i>	long-toed stint	MI	<5	N
<i>Calidris tenuirostris</i>	great knot	CR	<5	N
<i>Zanda latirostris</i>	Carnaby's cockatoo	EN	<5	N
<i>Zanda</i> sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	EN	<50	N

Species name	Common Name	Conservation status	Distance of closest record to application area (km)	Suitable habitat features? [Y/N]
<i>Charadrius leschenaultii</i>	greater sand plover, large sand plover	VU	<5	N
<i>Charadrius mongolus</i>	lesser sand plover	EN	<5	N
<i>Falco peregrinus</i>	peregrine falcon	OS	<10	Y
<i>Gelochelidon nilotica</i>	gull-billed tern	MI	<10	N
<i>Hydroprogne caspia</i>	caspian tern	MI	<5	N
<i>Idiosoma arenaceum</i>	Geraldton Sandplain shield-backed trapdoor spider	P3	<50	N
<i>Limosa lapponica</i>	bar-tailed godwit	MI	<10	N
<i>Limosa limosa</i>	black-tailed godwit	MI	<50	N
<i>Neopasiphae simplicior</i>	a short-tongued bee	EN	<10	N
<i>Notamacropus eugenii derbianus</i>	tammar wallaby	P4	<50	N
<i>Numenius minutus</i>	little curlew	MI	<10	Y
<i>Numenius phaeopus</i>	whimbrel	MI	<5	N
<i>Pandion cristatus</i>	osprey	MI	>5	Y
<i>Phalaropus lobatus</i>	red-necked phalarope	MI	<10	N
<i>Philomachus pugnax</i>	ruff	MI	<5	N
<i>Pluvialis fulva</i>	Pacific golden plover	MI	<5	Y
<i>Pluvialis squatarola</i>	grey plover	MI	<5	N
<i>Synemon gratiosa</i>	graceful sunmoth	P4	<10	N
<i>Thalasseus bergii</i>	crested tern	MI	<5	N
<i>Tringa brevipes</i>	grey-tailed tattler	MI & P4	<10	N
<i>Tringa glareola</i>	wood sandpiper	MI	<5	N
<i>Tringa nebularia</i>	common greenshank	MI	<5	N
<i>Tringa stagnatilis</i>	marsh sandpiper	MI	<5	N
<i>Xenus cinereus</i>	Terek sandpiper	MI	<10	N

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

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<p><u>Principle (a):</u> "Native vegetation should not be cleared if it comprises a high level of biodiversity."</p> <p><u>Assessment:</u></p> <p>A total of 64 flora species representing 26 families and 50 genera were recorded within the greater survey area (GHD, 2020a). There are 18 species of conservation significant flora which have been recorded in the local area (20 kilometres) which are considered to possibly occur within the application area (GIS Database). No species of Threatened or Priority flora were identified during a flora survey of the application area.</p> <p>Fifteen species of weeds were recorded during the greater field survey of the application area and surrounding areas (GHD, 2020a).</p> <p>The impacts from weeds and grazing means the application area is not likely to support a high level of faunal diversity.</p>	Not likely to be at variance	Yes <i>Refer to Section 3.2.1, above.</i>

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Principle (b):</u> <i>“Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.”</i></p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared is part of a remnant of vegetation and is likely to act as an ecological linkage for fauna species moving through the landscape (GIS Database).</p>	May be at variance	Yes <i>Refer to Section 3.2.1, above.</i>
<p><u>Principle (c):</u> <i>“Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</i></p> <p><u>Assessment:</u></p> <p>There are no known records of Threatened flora within the application area (GIS Database). There are records of seven Threatened flora species within 20 kilometres of the application (GIS Database).</p>	Not likely to be at variance	Yes <i>Refer to Section 3.2.1, above.</i>
<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>There are no known Threatened Ecological Communities (TECs) located within or in close proximity to the amendment areas (GIS Database).</p> <p>A flora and vegetation survey of the amendment areas did not identify any TECs (GHD, 2020a; 2020b).</p>	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
<p><u>Principle (e):</u> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u></p> <p>The broader application area is broadly mapped as Beard vegetation associations 17 and 371 (GIS Database). Vegetation association 371 has been extensively cleared as there is less than 11% of the pre-European extent remaining (Government of Western Australia, 2019). The broader application area is located within a relatively intact band of vegetation along the eastern edge of Hutt Lagoon (GIS Database).</p>	At variance	Yes <i>Refer to Section 3.2.2, above.</i>
<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>There are no conservation areas located within application area (GIS Database). The nearest DBCA managed land is the Utcha Well Nature Reserve which is located approximately 2.4 kilometres north-west of the broader application area (GIS Database). The proposed clearing is unlikely to impact on the environmental values of any conservation area.</p>	Not likely to be at variance	Yes
Environmental value: land and water resources		
<p><u>Principle (f):</u> <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p> <p><u>Assessment:</u></p> <p>Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact on- or off-site hydrology and water quality (GIS Database).</p>	Not likely to be 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 soils are moderately susceptible to wind erosion. Land degradation and dust suppression will be managed through the implementation of GMA’s Dust Management Procedure and through a staged clearing condition (GMA, 2023).</p>	May be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Principle (i):</u> “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.”</p> <p><u>Assessment:</u></p> <p>Given no water courses, wetlands or Public Drinking Water Sources Areas are recorded within the application area, the proposed clearing is unlikely to impact surface or ground water quality (GIS Database).</p>	Not likely to be at variance	No
<p><u>Principle (j):</u> “Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.”</p> <p><u>Assessment:</u></p> <p>There are no permanent water courses or waterbodies within the amendment areas (GIS Database). Based on the soils present the proposed clearing has a low risk of increasing the incidence or intensity of natural flooding events (DPIRD, 2024). Further, it is likely that the area is only subject to localised flooding during prolonged or high intensity rainfall events, which occur infrequently in the area.</p>	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 Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

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

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

Appendix D. Sources of information

D.1. GIS databases

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

- Aboriginal Heritage Places (DPLH-001)
- Contours (DPIRD-073)
- Clearing Regulations – Schedule One Areas (DWER-057)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments – Catchments (DWER-028)

- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- IBRA Vegetation Statistics
- Native Title (ILUA) (LGATE-067)
- Pre-European Vegetation Statistics
- Interim Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping – Best Available (DPIRD-027)
- Soil Landscape Mapping – Rangelands (DPIRD-064)
- WA Now Aerial Imagery

Restricted GIS Databases used:

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

D.2. References

- GMA (2023) Clearing permit application form, CPS 10446/1, received 11 December 2023.
- Bureau of Meteorology (BoM) (2024) Bureau of Meteorology Website – Climate Data Online, Weather Station #8251. Bureau of Meteorology. <http://www.bom.gov.au/climate/data/> (Accessed 4 January 2024).
- Department of Environment Regulation (DER) (2014) *A guide to the assessment of applications to clear native vegetation*. Perth. Available from: https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- Department of Planning, Lands and Heritage (DPLH) (2024) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 4 January 2024).
- Department of Primary Industries and Regional Development (DPIRD) (2024) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. URL: <https://dpiird.maps.arcgis.com/apps/webappviewer/index.html?id=662e8cbf2def492381fc915aaf3c6a0f> (Accessed 4 January 2024).
- Department of Water and Environmental Regulation (DWER) (2021) Procedure: Native vegetation clearing permits. Joondalup. Available from: https://dwer.wa.gov.au/sites/default/files/Procedure_Native_vegetation_clearing_permits_v1.pdf
- Earth Stewardship (2020) Hose Mining Operations – Vegetation Survey. Report prepared for GMA Garnet Pty Ltd, September 2020.
- Environmental Protection Authority (EPA) (2016) Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment. Available from: http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf
- Environmental Protection Authority (EPA) (2016) Technical Guidance – Terrestrial Fauna Surveys. Available from: https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Tech%20guidance-%20Terrestrial%20Fauna%20Surveys-Dec-2016.pdf
- GHD (2020a) Lynton Mine Expansion Biological Survey. Report prepared for GMA Garnet Pty Ltd, February 2020.
- GHD (2020b) Memorandum – Targeted *Caladenia bryceana subsp. cracens* survey and conservation listed flora survey of proposed haul road, September 2020.
- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Payne, A L, Spencer, G F, and Curry, P J. (1987) An inventory and condition survey of rangelands in the Carnarvon Basin, Western Australia. Department of Agriculture and Food, Western Australia. Technical Bulletin 73, 478p.
- Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions, Western Australia. <https://florabase.dpaw.wa.gov.au/> (Accessed 15 January 2024).

4. Glossary

Acronyms:

BC Act	<i>Biodiversity Conservation Act 2016</i> , Western Australia
BoM	Bureau of Meteorology, Australian Government

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

Definitions:

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

T Threatened species:

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

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

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

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

CR **Critically endangered species**

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

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

EN **Endangered species**

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

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

VU **Vulnerable species**

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

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

Extinct Species:

EX

Extinct species

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

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

EW

Extinct in the wild species

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

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

Specially protected species:

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

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

MI

Migratory species

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

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

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

CD

Species of special conservation interest (conservation dependent fauna)

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

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

OS

Other specially protected species

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

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

P

Priority species:

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

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

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

P1 Priority One - Poorly-known species

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

P2 Priority Two - Poorly-known species

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

P3 Priority Three - Poorly-known species

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

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

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

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

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

Principles for clearing native vegetation:

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.
- (d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.
- (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.
- (i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.
- (j) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.