Department of Energy, Mines, Industry Regulation and Safety

GOVERNMENT OF WESTERN AUSTRALIA

Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	11000/1
Permit type:	Purpose Permit
Applicant name:	BHP Iron Ore Pty Ltd
Application received:	24 March 2025
Application area:	3 hectares
Purpose of clearing:	Construction and maintenance of potable bores and associated infrastructure
Method of clearing:	Mechanical Removal
Tenure:	*Iron Ore (Mount Goldsworthy) Agreement Act 1964*, Special Lease for Mining Operations, Lease 3116/5647, Document I123410L, Lease Extension J973146, Lot 9 on Deposited Plan 193615
Location (LGA area):	Shire of East Pilbara
Colloquial name:	Yarrie Project

1.2. Description of clearing activities

BHP Iron Ore Pty Ltd proposes to clear up to 3 hectares of native vegetation within a boundary of approximately 10.04 hectares, for the purpose of the construction and maintenance of potable bores and associated infrastructure (BHP, 2025a, 2025b). The project is located approximately 107 kilometres north-northeast of Marble Bar, within the Shire of East Pilbara.

The application is to allow for the construction of a new potable water bore, as the existing potable water bores which supplied Yarrie Camp are no longer servicable (BHP, 2025a). The new bore will be located in close proximity to the old bores and will tie into the existing water supply pipeline, adjacent to the old potable bore locations (BHP, 2025a).

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	19 June 2025
Decision area:	3 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), the clearing principles set out in Schedule 5 of the EP Act (Appendix B), proposed avoidance and minimisation measures (Section 3.1), relevant planning instruments and any other matters considered relevant to the assessment (Section 3.3). The Delegated Officer also took into consideration the purpose of the clearing to allow for the construction of a new potable water bore.

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 the locally significant flora species, *Gardenia pyriformis* subsp. *keartlandii*;
- a risk of injury to conservation listed fauna through clearing operations given the presence of suitable habitat for the greater bilby (Vulnerable), brush-tailed mulgara (Priority 4), and Dampierland plain slider (Priority 2); and
- loss of potentially significant fauna habitats.

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

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;
- engage a fauna specialist to undertake pre-clearance surveys for the greater bilby, including specific management measures should greater bilby burrows be identified;
- undertake a fauna survey to identify *Dasycercus blythi* (brush-tailed mulgara) burrows, and avoid located burrows with a buffer of ten metres;
- a flora management condition where no clearing of identified *Gardenia pyriformis* subsp. *keartlandii*, or within 10 metres is permitted, unless first approved by the CEO; and
- retain cleared vegetation and topsoil and rehabilitate cleared areas within 12 months of clearing to ensure flora and fauna habitat is not permanently lost.

2. Legislative context

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

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

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

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Biosecurity and Agriculture Management Act 2007* (BAM Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Land Administration Act 1997* (WA)
- *Mining Act 1978* (WA)
- *Iron Ore (Mount Goldsworthy) Agreement Act 1964*

Relevant agreements (treaties) considered during the assessment include:

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

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2014)
- *Procedure: Native vegetation clearing permits* (DWER, October 2021)
- 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 commits to the following environmental management measures:

- The known record of *Gardenia pyriformis* subsp. *keartlandii* will be avoided using a ten metre buffer, where practicable;
- control of established weed populations will be carried out according to BHP's standard Weed Control and Management Procedures;
- a preclearance fauna inspection will be conducted over the area, prior to any disturbance to identify any active burrows;
- should any active greater bilby burrows be identified, they will be avoided using a 50 metre buffer. Inactive burrows will be avoided using a ten metre buffer, where practicable; and
- should any brush-tailed mulgara burrows (either active or inactive) be identified, they will be avoided using ten metre buffer, where practicable (BHP, 2025a).

Additionally, as the new bores will tie into the existing water supply pipeline, adjacent to the old potable bore locations, clearing is minimised by this project design (BHP, 2025a).

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 (flora and fauna). The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

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

Assessment

A flora and vegetation survey was conducted on 23 July 2024 by Biota (2025). The following significant flora require further consideration based on known distribution and habitat preferences, their likelihood of occurrence within the application area, survey adequacy, and current knowledge of the species.

Gardenia pyriformis* subsp. *keartlandii
Two *Gardenia pyriformis* subsp. *keartlandii* individuals were recorded within the application area (Biota, 2025). This record increases the extent of occurrence of the species, with the closest vouchered records at the WA Herbarium located approximately 73 kilometres northeast and 100 kilometres east of the Survey Area (Biota, 2025; Western Australian Herbarium, 1998-). Therefore, the proposed clearing may result in a significant impact to these species at a local level. The applicant has committed to avoiding this species with a ten metre buffer (BHP, 2025a).

Rothia indica* subsp*. australis
Rothia indica subsp*. australis*, Priority 3, is an annual species that inhabits sandy soils on sandhills and sandy flats (Biota, 2025; Boatwright et al., 2008.; Western Australian Herbarium, 1998-). This suitable habitat occurs within the application area (Biota, 2025). This species is known from 23 specimens at the WA Herbarium and is recorded in the Great Sandy Desert, Dampierland, Pilbara and Victoria Bonaparte bioregions (Western Australian Herbarium, 1998-). The application area is within the current distribution of the species (Biota, 2025; Western Australian Herbarium, 1998-). This species was not able to be identified during the survey, as annual species are most likely to be detected during the wet season, and the flora survey was conducted outside of the recommended survey timing for the Eremaean Botanical Province (Biota, 2025; EPA, 2016).The species may occur within the application area during good seasonal conditions (Biota, 2025).

The nearest record of this species is to the southwest of the application area, within the Pilbara bioregion (GIS Database). There are three records of this species within the Great Sandy Desert bioregion, with all these records being recorded along drainage lines near Lake Mackay (GIS Database). There are no drainage lines or waterbodies within the application area (GIS Database). As this species is more commonly recorded in the Pilbara or Kimberley, and in the Great Sandy Desert records are associated with drainage lines, the proposed clearing is unlikely to significantly impact the species.

Conclusion
Based on the above assessment, the proposed clearing may result in a significant impact to locally significant species, *Gardenia pyriformis* subsp. *keartlandii*.

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

- Avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- a flora management condition where no clearing of identified *Gardenia pyriformis* subsp. *keartlandii*, or within 10 metres is permitted, unless first approved by the CEO; and
- retain cleared vegetation and topsoil and rehabilitate cleared areas within 12 months of clearing to ensure flora habitat is not permanently lost.

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

Assessment
A fauna habitat field assessment was conducted on 23 July 2024 by Biota (2025). Two broad habitat types were identified:

- Sand plain (shrubland on sandy plains); and
- Cleared areas (Biota, 2025).

The below species were determined to be potentially impacted by the proposed clearing based on known distribution and habitat preferences, and their likelihood of occurrence within the application area, accounting for local environment, age and location of records, ecological knowledge and regional context.

Greater bilby

The greater bilby (*Macrotis lagotis*), Vulnerable, inhabits sandplains and sandy areas with spinifex and mulga (DCCEEW, 2023). Secondary signs of greater bilby were identified during the fauna survey, being a singular burrow system (Biota, 2025). Additionally, five records of secondary evidence of greater bilby are located within 200 metres of the application area, all recorded in the year 2000 (Biota, 2025; GIS Database). The burrow system located in the fauna survey featured two entrances and a sand spoil pile (Biota, 2025). There were no signs of fresh scat or diggings in the vicinity of the burrow, but the entrance of the burrow is intact, indicating the burrow is potentially active (Biota, 2025; Dziminski & Carpenter, 2018).

Bilbies are highly mobile, and can forage over large distances, depending on resource availability and environmental conditions (Biota, 2025; DCCEEW, 2023). Bilbies are known to return to old burrows at any time, meaning although the recorded burrow was recorded as “inactive”, it could still be utilised by bilbies (Biota, 2025; Dziminski & Carpenter, 2018).

The greater bilby burrow did have evidence that it may have been used by a large varanid, such as *Varanus gouldii,* due to the presence of triangular shaped burrows adjacent to the spoil pile and tracks (Biota, 2025). Monitors and a range of other species commonly utilise burrow systems excavated by the greater bilby as important refuge habitat (Biota, 2025; DCCEEW, 2023; Dziminski & Carpenter, 2018; Silcock et al., 2023).

Brush-tailed mulgara

The brush-tailed mulgara (*Dasycercus blythi*), Priority 4, inhabits sandplains or sand dunes with spinifex (NESP, 2021; Pavey et al., 2012). During the fauna survey, diggings and tracks were recorded at one location within the application area (Biota, 2025). Based on the presence of suitable habitat, nearby previous records, and observations of previous activity in the application area during the survey, the species is considered to occur within the application area (Biota, 2025).

Dampierland plain slider

The Dampierland plain slider (*Lerista separanda*), Priority 2, inhabits sand dunes and sandy areas of the northwestern Great Sandy Desert and the Kimberley (ALA, n.d.; Biota, 2025; IUCN, 2017; Storr et al., 1999). The sand plain habitat of the application area may be suitable for this species (ALA, n.d.; Biota, 2025; IUCN, 2017; Storr et al., 1999). This species is more closely associated with consolidated coastal dunes, however, the two nearest records of the species are both from the Nita land system, to the southwest of the application area (IUCN, 2017; GIS Database). Therefore, the sandplain habitat of the application area may be suitable for this species.

As the lizard is small, and would likely burrow or utilise refugia such as logs, stones or termite mounds, it is unlikely to be identified during a basic survey (EPA, 2020; IUCN, 2017; Storr et al., 1999).

Grey falcon, peregrine falcon, oriental plover, oriental pratincole and sharp-tailed sandpiper

The grey falcon (*Falco hypoleucos*), Vulnerable, has a wide distribution across much of arid inland and northern Australia, occurring mainly on lightly wooded plains and along major watercourses (Biota, 2025). Critical habitat consists of major drainage lines with suitably sized Eucalypts for breeding (Biota, 2025). Critical habitat does not occur within the application area, but the sand plain habitat is considered suitable foraging habitat (Biota, 2025).

The peregrine falcon (*Falco peregrinus*), Other Specially Protected, is a migratory species. Within their global range, peregrine falcons can be found in a variety of habitats, including mountains, forests, cities, valleys, deserts, and coastlines (NWF, n.d.). This species may use the application area as a wider home range, however the area is not considered critical habitat.

The oriental plover (*Charadrius veredus*), Migratory, and the oriental pratincole (*Glareola maldivarum*), Migratory, utilise plains, grasslands and open areas as foraging habitat (Commonwealth of Australia, 2008). These species may use the application area to forage during the wet season (Biota, 2025). They are highly mobile, and disperse according to conditions (Biota, 2025; Commonwealth of Australia, 2008). These species do not breed in Australia (Commonwealth of Australia, 2008).

The sharp-tailed sandpiper (*Calidris acuminata*), Vulnerable Migratory, is a coastal and wetland dwelling bird (Commonwealth of Australia, 2008). However, after rainfall events, the sandpiper may utilise plains further inland for foraging (Commonwealth of Australia, 2008). The nearest records of the species are on the same land system as the application area (GIS Database). This means that the application area may be used opportunistically as foraging habitat after rainfall events. The species does not breed in Australia (Commonwealth of Australia, 2008).

Spectacled hare-wallaby, northern short-tailed mouse and northern quoll

The spectacled hare-wallaby (*Lagorchestes conspicillatus leichardti*), Priority 4, inhabits arid spinifex grasslands of the Pilbara, Great Sandy Desert and Little Sandy Desert, and tussock grasslands of the Kimberley (Burbidge, 1992; Crew, 2014). In the Pilbara, its range has contracted, possibly due to fox predation or changes in burning regimes resulting in the loss of large *Triodia* hummocks, which it requires for shelter (IUCN, 2015; van Dyck & Strahan, 2008). Given the application area is more degraded than the surrounding area, it is unlikely that the application area represents critical habitat for the spectacled hare-wallaby (BHP, 2025a).

The northern short-tailed mouse (*Leggadina lakedownensis*), Priority 4, inhabits areas of the Pilbara and Kimberley with sandy soils and cracking clays (CALM, n.d.). The sand plain habitat of the application area is potential habitat for the short-tailed mouse (Biota, 2025). However, only three records are located within the Great Sandy Desert bioregion, with these records being from 1979 and 1981. Given this, it is unlikely that the application area represents important habitat for the northern short-tailed mouse.

The northern quoll (*Dasyurus hallucatus*), Endangered, is an opportunist which can inhabit a range of habitats includes sandy plains (Commonwealth of Australia, 2008; Hill & Ward, 2010). Habitat critical for the survival of this species is described as rocky areas and offshore islands (Hill & Ward, 2010). The application are does not contain critical habitat for this species.

Ghost bat, Pilbara leaf-nosed bat and western pebble-mound mouse

The ghost bat (*Macroderma gigas*), Vulnerable, and the Pilbara leaf-nosed bat (*Rhinonicteris aurantia*), Vulnerable, are unlikely to occur within the application area as no suitable roosting sites are located within, or are likely to exist in close proximity to, the application area (Bat Call WA, 2021a, 2021b; Biota, 2025; Bullen, 2023; Commonwealth of Australia, 2008; Cramer et al., 2022; GIS Database).

The western pebble-mound mouse (*Pseudomys chapmani*), Priority 4, burrows in stony areas with limited topsoil (IUCN, 2016; Start et al., 2000). As the application area consists of sandy soils, it is unlikely that the application area is habitat for the western pebble-mound mouse (GIS Database).

Northern marsupial mole

The northern marsupial mole (*Notoryctes caurinus),* Priority 4, inhabits well vegetated non-coastal aeolian dunes of the sandy deserts of central Australia (Benshemesh, 2004). Sandy plains are less likely to represent critical habitat for marsupial moles,

with research on habitat requirements still limited (Benshemesh, 2004). The clearing of native vegetation may threaten the species by in the availability of the invertebrate prey of this species (Benshemesh, 2004).

The proposed clearing of 3 hectares, within an application area consisting of strips approximately 40 metres wide, is unlikely to result in a significant loss of prey for marsupial moles, if they were to occur.

Fork-tailed swift

The fork-tailed swift (*Apus pacificus*), Migratory, is an aerial species (Commonwealth of Australia, 2008). It is likely to occur in the airspace above the application area (Biota, 2025).

Conclusion

The following species may be impacted by the proposed clearing:

The recorded greater bilby burrow represents critical habitat, for bilbies, if they return to the area, as well as other species that use greater bilby burrows as refuge (Biota, 2025; DCCEEW, 2023; Dziminski & Carpenter, 2018; Silcock et al., 2023).

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

Brush-tailed mulgara occurs within the application area (Biota, 2025). Therefore, this species is likely to be impacted by the proposed clearing.

The proposed clearing may result in a significant impact to the Dampierland plain slider at a local level if it is located within the clearing area.

The following species are unlikely to be impacted by the proposed clearing:

There is no critical habitat for the following species, and their foraging habitat is widespread in the local area:

- Grey falcon;
- peregrine falcon;
- oriental plover;
- oriental pratincole; and
- sharp-tailed sandpiper.

The application area does not represent critical habitat for the following species:

- Spectacled hare-wallaby;
- northern short-tailed mouse; and
- northern quoll.

The following species are unlikely to occur within the application area:

- Ghost bat;
- Pilbara leaf-nosed bat; and
- western pebble-mound mouse.

The northern marsupial mole is unlikely to be impacted by the proposed clearing, as the proposed clearing is unlikely to significantly affect the availability of prey for this species on a local scale.

The fork-tailed swift is unlikely to impacted by the proposed clearing this species, as it does not utilise vegetation as habitat (Biota, 2025).

Conditions

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

- engage a fauna specialist to undertake pre-clearance surveys for the greater bilby and brush-tailed mulgara burrows, including specific management measures should greater burrows be identified;
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity; and
- retain cleared vegetation and topsoil and rehabilitate cleared areas within 12 months of clearing to ensure fauna habitat is not permanently lost.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 20 May 2025 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 no native title claims and no registered Aboriginal Sites of Significance within the application area (DPLH, 2025). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

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

Other relevant authorisations required for the proposed land use include:

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

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 located within the McLarty subregion of the Great Sandy Desert Bioregion (GIS Database). The application area is surrounded by iron ore mining operations (GIS Database).
Ecological linkage	The application area is not considered a significant ecological linkage. The vegetation immediately surrounding the application area and the majority of the region remains uncleared (GIS Database).
Conservation areas	The application area is not located within any DBCA legislated conservation areas (GIS Database). The nearest legislated conservation areas are the Jarrkunpungu Nature Reserve and the Eighty Mile Beach Marine Park both approximately 51 kilometres north of the application area (GIS Database).
Vegetation description	The vegetation of the application area is broadly mapped as the following Beard vegetation association: • 117: Grass-steppe: hummock grassland, *Triodia* spp. (GIS Database). A flora and vegetation survey was conducted over the application area by Biota (2025) on 23 July 2024. The following vegetation association was recorded over the application area: • SA Tsc AerAancAm OwrCozErare (*Triodia* open hummock grassland) (Biota, 2025). Full description and photographs of this vegetation association are provided in Appendix D.
Vegetation condition	The vegetation survey (Biota, 2025) indicates the vegetation within the proposed clearing area is in very good or completely degraded (Trudgen, 1991) condition, described as: • Very good: Some relatively slight signs of damage caused by human activities since European settlement; and • Completely degraded: Areas that are completely or almost completely without native species in the structure of their vegetation. 8.3 hectares (83%) of the application area was recorded to be in very good condition, and the remaining 1.7 hectares (17%) was in completely degraded condition (Biota, 2025). The full Trudgen (1991) condition rating scale is provided in Appendix C.
Climate and landform	The climate of the McLarty subregion of the Great Sandy Desert bioregion is described as arid tropical, with summer rain and monsoonal influence (CALM, 2002). The nearest weather station, Muccan, records an average annual rainfall of 301.7 millimetres per year (BoM, 2025). The application area is flat to gently-sloping and mapped at elevations of 120-140 metres Australian height datum (Biota, 2025; GIS Database). Land system mapping broadly describes the application area as sandplains (GIS Database).
Soil description	The soil of the application area is broadly mapped as 117Nt (Nita System), described as sandplains supporting shrubby spinifex grasslands with occasional trees (DPIRD, 2025). Soils within the application area are mapped as the AB21 soil unit, described as: • Pindan country – gently undulating sand plain with a few small rocky sandstone residuals; no external drainage: chief soils are red earthy sands (Biota, 2025).
Land degradation risk	The Nita land system is susceptible to wind erosion following fire, but is usually stabilised rapidly following rainfall and consequent vegetation regeneration (van Vreeswyk et al., 2004).
Waterbodies	The desktop assessment indicated that no permanent or non-perennial watercourses or waterbodies intersect the application area (GIS Database).
Hydrogeography	The application area is not within any mapped Public Drinking Water Source Areas (PDWSA) (GIS Database). The nearest PDWSA is the De Grey River Water Reserve and Catchment Area located approximately 86 kilometres to the west of the application area (GIS Database). The application area is located within the Pilbara Surface Water Area and the Canning-Kimberley Groundwater Area, both proclaimed under the *Rights in Water and Irrigation Act 1914* (GIS Database). The mapped groundwater salinity is 500-1,000 total dissolved solids milligrams per litre, which is described as freshwater (NWGA, 2023; GIS Database).

Characteristic	Details
Flora	There are records of 13 priority flora located within a 50 kilometre radius of the application area. One flora species (*Gardenia pyriformis* subsp. *keartlandii*), recorded within the application area, is considered significant, as this record constitutes a range extension for the species. See Appendix A.3 for the full list of significant flora species considered.
Ecological communities	The botanical survey did not record any threatened ecological communities (TECs) or priority ecological communities (PECs) within the application area (Biota, 2025). There are two TECs listed within the Great Sandy Desert bioregion (DBCA, 2023b). These are the 'Assemblages of Dragon Tree Soak organic mound spring' and the 'Assemblages of the organic springs and mound springs of the Mandora Marsh area' TECs (DBCA, 2023b). These are both wetland communities, and as the application area does not contain any wetlands, these TECs are unlikely to occur (DBCA, 2023b; GIS Database). There are four PECs recorded within a 50 kilometre radius of the application area (GIS Database). These are the: • Lime Land System, Priority 3; • Roebuck Land System, Priority 3; • Eighty Mile Land System, Priority 3; and • Gregory Land System, Priority 3 (GIS Database). The Roebuck Land System and Eighty Mile Land System PECs are coastal communities, and are therefore unlikely to occur within the application area (DBCA, 2023a). The Lime Land System PEC is found within the Dampierland Interim Biogeographic Regionalisation for Australia (IBRA) region on calcareous plains, so is therefore unlikely to occur within the application area (DBCA, 2023a). As the nearest occurrence of the Gregory land system is approximately 31 kilometres from the application area, it is unlikely the Gregory Land System PEC occurs within the application area (GIS Database).
Fauna	There are records of 46 conservation significant fauna located within a 50 kilometre radius of the application area. 18 of these were coastal or wetland species which are unlikely to occur. See Appendix A.4 for the full list of conservation significant fauna species considered.
Fauna habitat	A fauna habitat field assessment was conducted on 23 July 2024 by Biota (2025). Two broad habitat types were identified: • Sand plain (shrubland on sandy plains); and • Cleared areas (Biota, 2025). The sand plain habitat accounted for 83% of the application area (Biota, 2025).

A.2. Vegetation extent

	Pre-European area (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current extent in all DBCA Managed Land (proportion of pre-European extent) (%)
IBRA Bioregion - Great Sandy Desert	29,538,799.43	29,535,810.52	99.99	1,020,661.82	3.46
Beard vegetation associations - State					
117	919,517.05	886,005.79	96.36	131,013.19	14.25
Beard vegetation associations - Great Sandy Desert Bioregion					
117	467,578.77	467,121.73	99.90	909.64	0.19

Government of Western Australia (2019)

A.3. Flora analysis table

The following priority flora species have been recorded within 50 kilometres of the application area, or were included in the desktop search by Biota (2025) (GIS Database).

The likelihood of occurrence for these species were determined by potentially suitable habitat within the application area, species distribution, biological survey information and adequacy, and known regional records (Barrett & Barrett, 2015; Biota, 2025; Botanical Realm, 2024a, 2024b, 2025; Butcher et al., 2017; EPA, 2016; Forster, 2003; Hellquist & Jacobs, 2024; Western Australian Herbarium, 1998-; GIS Database).

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N, N/A]	Likelihood of occurrence
Gardenia pyriformis subsp. *keartlandii*	-	Y	Y	0	Y	Recorded within application area - discussed in Section 3.2.1
Rothia indica subsp. *australis*	P3	Y	Y	<27	N – survey timing inadequate	Potential - discussed in Section 3.2.1
Croton aridus	P3	Y	Y	<17	Y	Unlikely
Goodenia hartiana	P2	Y	Y	<25	Y	Unlikely
Indigofera ammobia	P3	Y	Y	<38	Y	Unlikely
Eremophila maculata subsp. *filifolia*	P1	Y	Y	<39	Y	Unlikely
Bonamia oblongifolia	P3	Y	Y	<53	Y	Unlikely
Terminalia kumpaja	P3	Y	Y	<73	Y	Unlikely
Tribulopis marliesiae	P3	Y	Y	<83	Y	Unlikely
Polymeria sp. Broome (K.F. Kenneally 9759)	P3	Y	Y	<145	Y	Unlikely
Fimbristylis sp. Shay Gap (K.R. Newbey 10293)	P1	N	Y	<23	N	Unlikely
Euphorbia clementii	P3	N	N	<25	Y	Unlikely
Nicotiana umbratica	P3	N	N	<27	Y	Unlikely
Bulbostylis burbidgeae	P4	N	N	<28	N	Unlikely
Acacia monticola x *tumida* var. *kulparn*	P3	N	Y	<37	Y	Unlikely
Euploca parviantrum	P1	Y	N	<39	N	Unlikely
Aponogeton queenslandicus	P1	N	N	<40	N	Unlikely
Corchorus sp. Yarrie (J. Bull & D. Roberts CAL 01.05)	P1	N	N	<40	Y	Unlikely
Tephrosia rosea var. Port Hedland	P1	Y	N	<74	Y	Unlikely
Phyllanthus hebecarpus	P3	N	N	<148	Y	Unlikely

A.4. Fauna analysis table

The following conservation significant fauna species have been recorded within 50 kilometres of the application area (GIS Database). The likelihood of occurrence for these species were determined by potentially suitable habitat within the application area, species distribution, biological survey information and known regional records (ALA, n.d.; Australian Fauna, n.d.; Bat Call WA, 2021a, 2021b; Benshemesh, 2004; Biota, 2025; BirdLife International, 2019; Bullen, 2023; Burbidge, 1992; CALM, n.d.; Commonwealth of Australia, 2008; Cramer et al., 2022; Crew, 2014; DCCEEW, 2023; Garnett & Crowley, 2000; IUCN, 2016; NESP, 2021; NWF, n.d.; Pavey et al., 2012; Start et al., 2000; GIS Database).

As the 50 kilometre search radius included the coastline, many migratory birds and the flatback turtle (*Natator depressus*) were recorded in the desktop search. These species are unlikely to occur within the application area, as it is not coastal and there are no wetlands present (Biota, 2025; Commonwealth of Australia, 2008, 2020; TSSC, 2015; GIS Database). Therefore, these species do not require further discussion.

Species name	Conservation status		Habitat suitability	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N, N/A]	Likelihood of occurrence
	WA	EPBC				
Macrotis lagotis (greater bilby)	VU	VU	High	0.0	Y	Recorded within application area - discussed in Section 3.2.2
Dasycercus blythi (brush-tailed mulgara)	P4	-	High	0.0	Y	Recorded within application area -

Species name	Conservation status		Habitat suitability	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N, N/A]	Likelihood of occurrence
	WA	EPBC				
						discussed in Section 3.2.2
Falco hypoleucos (grey falcon)	VU	VU	Moderate	36.8	N	Likely - discussed in Section 3.2.2
Apus pacificus (fork-tailed swift)	MI	MI	Moderate	31.1	N	Likely - discussed in Section 3.2.2
Falco peregrinus (peregrine falcon)	OS	-	Moderate	34.3	N	Likely - discussed in Section 3.2.2
Charadrius veredus (oriental plover)	MI	MI	Moderate	29.5	N	Potential - discussed in Section 3.2.2
Glareola maldivarum (oriental pratincole)	MI	MI	Moderate	47.2	N	Potential - discussed in Section 3.2.2
Lerista separanda (Dampierland plain slider)	P2	-	Moderate	28.5	N	Potential - discussed in Section 3.2.2
Lagorchestes conspicillatus leichardti (speactacled hare-wallaby)	P4	-	Moderate	14.5	Y	Potential - discussed in Section 3.2.2
Leggadina lakedownensis (northern short-tailed mouse)	P4	-	Moderate	34.7	Y	Potential - discussed in Section 3.2.2
Notoryctes caurinus (northern marsupial mole)	P4	-	Moderate	38.9	Y	Potential - discussed in Section 3.2.2
Dasyurus hallucatus (northern quoll)	EN	EN	Low	18.9	Y	Unlikely - discussed in Section 3.2.2
Macroderma gigas (ghost bat)	VU	VU	Low	20.3	Y	Unlikely - discussed in Section 3.2.2
Rhinonicteris aurantia (Pilbara leaf-nosed bat)	VU	VU	Low	22.7	Y	Unlikely - discussed in Section 3.2.2
Calidris acuminata (sharp-tailed sandpiper)	MI	VU, MI	Low	29.8	N	Unlikely - discussed in Section 3.2.2
Pseudomys chapmani (western pebble-mound mouse)	P4	-	Low	18.0	Y	Unlikely - discussed in Section 3.2.2
Calidris ferruginea (curlew sandpiper)	CR	CR, MI	Low	29.8	N	Unlikely
Numenius madagascariensis (eastern curlew)	CR	CR, MI	Low	43.2	N	Unlikely
Tringa nebularia (common greenshank)	MI	EN, MI	Low	36.9	N	Unlikely
Limosa limosa (black-tailed godwit)	MI	EN, MI	Low	43.2	N	Unlikely
Calidris tenuirostris (great knot)	CR	VU, MI	Low	43.2	N	Unlikely
Calidris canutus (red knot)	EN	VU, MI	Low	38.0	N	Unlikely
Charadrius leschenaultia (greater sand plover)	VU	VU, MI	Low	37.1	N	Unlikely
Natator depressus (flatback turtle)	VU	VU, MI	Low	43.5	Y	Unlikely
Sternula albifrons (little tern)	MI	VU, MI	Low	29.3	N	Unlikely

Species name	Conservation status		Habitat suitability	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N, N/A]	Likelihood of occurrence
	WA	EPBC				
Arenaria interpres (ruddy turnstone)	MI	VU, MI	Low	43.2	N	Unlikely
Pluvialis squatarola (grey plover)	MI	VU, MI	Low	43.2	N	Unlikely
Xenus cinereus (terek sandpiper)	MI	VU, MI	Low	43.4	N	Unlikely
Gallinago megala (Swinhoe's snipe)	MI	MI	Low	21.2	N	Unlikely
Gallinago stenura (pin-tailed snipe)	MI	MI	Low	21.2	N	Unlikely
Plegadis falcinellus (glossy ibis)	MI	MI	Low	29.5	N	Unlikely
Calidris ruficollis (red-necked stint)	MI	MI	Low	29.8	N	Unlikely
Tringa stagnatilis (marsh sandpiper)	MI	MI	Low	29.8	N	Unlikely
Actitis hypoleucos (common sandpiper)	MI	MI	Low	36.1	N	Unlikely
Hydroprogne caspia (Caspian tern)	MI	MI	Low	36.1	N	Unlikely
Thalasseus bergii (crested tern)	MI	MI	Low	36.1	N	Unlikely
Tringa glareola (wood sandpiper)	MI	MI	Low	40.8	N	Unlikely
Hirundo rustica (barn swallow)	MI	MI	Low	42.7	N	Unlikely
Limosa lapponica (bar-tailed godwit)	MI	MI	Low	43.2	N	Unlikely
Calidris alba (sanderling)	MI	MI	Low	43.4	N	Unlikely
Numenius phaeopus (whimbrel)	MI	MI	Low	43.4	N	Unlikely
Sterna hirundo (common tern)	MI	MI	Low	43.7	N	Unlikely
Gelochelidon nilotica (gull-billed tern)	MI	MI	Low	43.8	N	Unlikely
Pluvialis fulva (Pacific golden plover)	MI	MI	Low	44.5	N	Unlikely
Chlidonias leucopterus (white-winged black tern)	MI	MI	Low	49.7	N	Unlikely
Tringa brevipes (grey-tailed tattler)	P4	MI	Low	43.4	N	Unlikely

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

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."* Assessment: The area proposed to be cleared contains locally significant flora and may contain conservation significant fauna and their habitats.	At variance	Yes *Refer to Section 3.2.1and Section 3.2.2, above.*
Principle (b): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."* Assessment:	At variance	Yes *Refer to Section 3.2.2, above.*

Assessment against the clearing principles	Variance level	Is further consideration required?
The area proposed to be cleared contains potentially significant habitat for conservation significant fauna.		
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: There are no known records of threatened flora within a 50 kilometre radius of the application area (GIS Database). The flora survey of the application area did not record any species of threatened flora (Biota, 2025).	Not likely to be at variance	No
Principle (d): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."* Assessment: As no threatened ecological communities (TECs) were identified during the flora and vegetation survey, and regional TECs are reliant on the presence of wetlands, which do not occur within the application area, the application area is unlikely to be representative of a TEC (Biota, 2025; DBCA, 2023b; GIS Database).	Not likely to be at variance	No .
Environmental value: significant remnant vegetation and conservation areas		
Principle (e): *"Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."* Assessment: The local area has not been extensively cleared (GIS Database). The extent of the native vegetation in the local area is consistent with the national objectives and targets for biodiversity conservation in Australia (Commonwealth of Australia, 2001; Appendix A.2).	Not at variance	No
Principle (h): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."* Assessment: Given the distance (51 kilometres) to the nearest conservation areas, the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.	Not likely to be at variance	No
Environmental value: land and water resources		
Principle (f): *"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."* Assessment: Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact any vegetation growing within association with a watercourse or wetland.	Not at variance	No
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The proposed clearing of up to 3 hectares is not likely to have an appreciable impact on land degradation.	Not likely to be at variance	No
Principle (i): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water."* Assessment: There are no Public Drinking Water Source Areas within or in close proximity to the application area (GIS Database). There are no watercourses or wetlands within the application area (GIS Database). The proposed clearing is unlikely to cause deterioration in the quality of surface or underground water.	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (j): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."* Assessment: The mapped soils and topographic contours in the surrounding area do not indicate the proposed clearing is likely to contribute to increased incidence or intensity of flooding. The application area is generally flat to gently undulating, and there are no watercourses or wetlands recorded within the application area. The proposed clearing is unlikely to contribute to waterlogging (GIS Database).	Not likely to be at variance	No

Appendix C. Vegetation condition rating scale

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

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

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

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

Appendix D. Vegetation association description and photographs

Table from Biota (2025).

Association code	SA Tsc AerAancAm OwrCozErare
Broad floristic formation	*Triodia* open hummock grassland
Vegetation association description	Open hummock grassland of *Triodia schinzii* with high open shrubland of *Acacia eriopoda, A. ancistrocarpa, A. monticola* and scattered low trees of *Owenia reticulata, Corymbia zygophylla, Erythrophleum arenarium* on orange Pindan sand plains.
Distribution and habitat	This association was mapped for the entire application area and occurred more broadly in the surrounding areas on the undulating sandy plains in the locality.
Other associated species	**Trees/Tall Shrubs:** *Gardenia pyriformis* subsp. *keartlandii, Grevillea eriostachya* and *G. wickhamii.* **Shrubs:** *Acacia tumida* var. *kulparn* and *Sida arenicola.* **Low Shrubs:** *Acacia stellaticeps, Bonamia erecta, Jacksonia aculeata, Halgania solanacea, Leptosema anomalum* and *Tephrosia* sp. D Kimberley Flora (R.D. Royce 1848). **Grasses:** *Aristida holathera* var. *holathera, A. inaequiglumis, Eragrostis eriopoda* and *Eriachne obtusa*. **Herbs:** *Bonamia alatisemina, Evolvulus alsinoides, Rhynchosia minima, Trigastrotheca molluginea* and *Zornia chaetophora*.

Vegetation condition	Very Good: some camel and cattle tracks and scats noted; some areas with signs of human disturbance (discarded broken pipes, some evidence of previous clearing).
Sampling sites	YWB-01, YWB-02.
Notes	The dominant *Acacia* species present in the high open shrubland was variable across the application area, and some areas also supported an open shrubland to scattered shrubs of *Acacia tumida* var. *kulparn,* and a low open shrubland to scattered low shrubs of *Acacia stellaticeps*.

(Biota, 2025)

(Biota, 2025)

Appendix E. Sources of information

E.1. GIS databases

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

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Contours (DPIRD-073)
- Clearing Regulations - Environmentally Sensitive Areas (DWER-046)
- Clearing Regulations - Schedule One Areas (DWER-057)
- DBCA - Lands of Interest (DBCA-012)
- DBCA - Legislated Lands and Waters (DBCA-011)
- DBCA Fire History (DBCA-060)
- Esri World Imagery
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments – Catchments (DWER-028)
- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Native Title (ILUA) (LGATE-067)
- Native Vegetation Extent (DPIRD-005)
- Pre-European Vegetation (DPIRD-006)
- 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 and Priority Flora (TPFL)
- Threatened and Priority Flora (WAHerb)
- Threatened and Priority Fauna
- Threatened and Priority Ecological Communities
- Threatened and Priority Ecological Communities (Buffers)

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4. Glossary

Acronyms:

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

Definitions:

{DBCA (2023) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:

T **Threatened species:**

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

Threatened fauna is the species of fauna that are listed as critically endangered, endangered or vulnerable threatened species.

Threatened flora is the species of flora that are listed as critically endangered, endangered or vulnerable threatened species.

The assessment of the conservation status of threatened species is in accordance with the BC Act listing criteria and the requirements of Ministerial Guideline Number 1 and Ministerial Guideline Number 2 that adopts the use of the International Union for Conservation of Nature (IUCN) Red List of Threatened Species Categories and Criteria, and is based on the national distribution of the species.

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

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines.

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

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines.

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

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines.

Extinct Species:

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

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

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild.

Specially protected species:

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

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

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

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

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

Currently only fauna are listed as species of special conservation interest.

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

Currently only fauna are listed as species otherwise in need of special protection.

P **Priority species:**

Priority is not a listing category under the BC Act. The Priority Flora and Fauna lists are maintained by the department and are published on the department's website.

All fauna and flora are protected in WA following the provisions in Part 10 of the BC Act. The protection applies even when a species is not listed as threatened or specially protected, and regardless of land tenure (State managed land (Crown land), private land, or Commonwealth land).

Species that may possibly be threatened species that do not meet the criteria for listing under the BC Act because of insufficient survey or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of prioritisation for survey and evaluation of conservation status so that consideration can be given to potential listing as threatened.

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

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

P1 **Priority One - Poorly-known species – known from few locations, none on conservation lands**
Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, for example, agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation.

Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements for threatened listing and appear to be under immediate threat from known threatening processes. These species are in urgent need of further survey.

P2 **Priority Two - Poorly-known species – known from few locations, some on conservation lands**
Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, for example, national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation.

Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements for threatened listing and appear to be under threat from known threatening processes. These species are in urgent need of further survey.

P3 **Priority Three - Poorly-known species – known from several locations**
Species that are known from several locations and the species does not appear to be under imminent threat or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat.

Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. These species need further survey.

P4 **Priority Four - Rare, Near Threatened and other species in need of monitoring**
(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.
(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as a conservation dependent specially protected species.
(c) Species that have been removed from the list of threatened species or lists of conservation dependent or other specially protected species, during the past five years for reasons other than taxonomy.
(d) Other species in need of monitoring.

Principles for clearing native vegetation:

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

(j) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.