

# Clearing Permit Decision Report

## 1. Application details and outcomes

### 1.1. Permit application details

<b>Permit number:</b>	5572/3
<b>Permit type:</b>	Purpose Permit
<b>Applicant name:</b>	BHP Iron Ore Pty Ltd
<b>Application received:</b>	14 April 2025
<b>Application area:</b>	110 hectares
<b>Purpose of clearing:</b>	Closure activities, borrow pits, exploration, hydrogeological and geotechnical investigations, infrastructure maintenance and associated activities
<b>Method of clearing:</b>	Mechanical Removal
<b>Tenure:</b>	<i>Iron Ore (Mount Goldsworthy) Agreement Act 1964</i> , Mining Lease 235SA (AML 70/235) <i>Iron Ore (Mount Goldsworthy) Agreement Act 1964</i> , Mining Lease 249SA (AML 70/249) General Purpose Lease 45/278
<b>Location (LGA area):</b>	Town of Port Hedland and Shire of East Pilbara
<b>Colloquial name:</b>	Goldsworthy Project

### 1.2. Description of clearing activities

This amendment to Clearing Permit CPS 5572/2 is to amalgamate the boundaries of Clearing Permit CPS 5572/2 and Clearing Permit CPS 5045/2, so that all clearing at the Goldsworthy Mining Operations is covered under a single permit (BHP, 2025b). The period in which clearing is authorised under CPS 5045/2 ends on 30 November 2025, and the applicant intends to surrender CPS 5045/2 once CPS 5572/3 is granted (GoWA, 2018a; Appendix A). Additionally, the purpose is to be changed from "clearing for the purposes of borrow pits, exploration, hydrogeological and geotechnical investigations, infrastructure maintenance and associated activities" to "clearing for the purposes of closure activities, borrow pits, exploration, hydrogeological and geotechnical investigations, infrastructure maintenance and associated activities"; the permit duration and the period in which clearing is authorised are to be extended (each by five years); and the Permit Holder is to be updated from "BHP Billiton Iron Ore Pty Ltd" to "BHP Iron Ore Pty Ltd" (BHP, 2025b).

This amendment to Clearing Permit CPS 5572/2 will allow BHP Iron Ore Pty Ltd to clear up to 110 hectares of native vegetation within a footprint of approximately 6,817 hectares within State Agreement Mining Leases 235SA (AML 70/235) and 249SA (AML 70/249) and General Purpose Lease 45/278 for the purpose of closure activities, borrow pits, exploration, hydrogeological and geotechnical investigations, infrastructure maintenance and associated activities. Clearing under this permit will be authorised until 30 November 2030, and the permit will be due to expire 30 November 2035.

Clearing Permit CPS 5572/2 allowed for the clearing of up to 110 hectares of native vegetation within a footprint of approximately 6,760 hectares within State Agreement Mining Leases 235SA (AML 70/235) and 249SA (AML 70/249) for the purpose of borrow pits, exploration, hydrogeological and geotechnical investigations, infrastructure maintenance and associated activities (DMIRS, 2018b; GoWA, 2018b). Clearing under this permit was authorised until 30 November 2025, and the permit was due to expire 30 November 2030 (GoWA, 2018b). This permit was amended from 5572/1 to extend the duration and remove the crest-tailed dunnart condition to reflect the current range of the species (DMIRS, 2018b).

Clearing Permit CPS 5045/2 allowed for the clearing of up to 42 hectares of native vegetation within a footprint of approximately 572 hectares within State Agreement Mining Lease 235SA (AML 70/235) and General Purpose Lease 45/278 for the purpose of abandonment bund construction; drilling related to ongoing monitoring, remediation activities and drainage control; and supporting infrastructure (DMIRS, 2018a; GoWA, 2018a). Clearing under this permit was authorised until 30 November 2025, and the permit was due to expire 30 November 2030 (GoWA, 2018a). This permit was amended from 5045/1 to extend the duration (DMIRS, 2018a).

### 1.3. Decision on application and key considerations

<b>Decision:</b>	Grant
<b>Decision date:</b>	16 December 2025
<b>Decision area:</b>	110 hectares of native vegetation

#### 1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed, and determined in accordance with sections 51KA(1) and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Energy, Mines, Industry Regulation and Safety (now the Department of Mines, Petroleum and Exploration) 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 B), relevant datasets (Appendix G), supporting information provided by the applicant (Appendix A), the clearing principles set out in Schedule 5 of the EP Act (Appendix C), 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 closure activities, borrow pits, exploration, hydrogeological and geotechnical investigations, infrastructure maintenance and associated activities.

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 identified conservation significant flora;
- impacts to locally significant vegetation type C5;
- the loss of native vegetation that is suitable habitat for *Macrotis lagotis* (greater bilby), *Dasycercus blythi* (brush-tailed mulgara), and *Pseudomys chapmani* (western pebble-mound mouse);
- potential clearing of riparian vegetation;
- potential siltation of watercourses, leading to a deterioration of surface water quality;
- potential land degradation in the form of erosion.

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

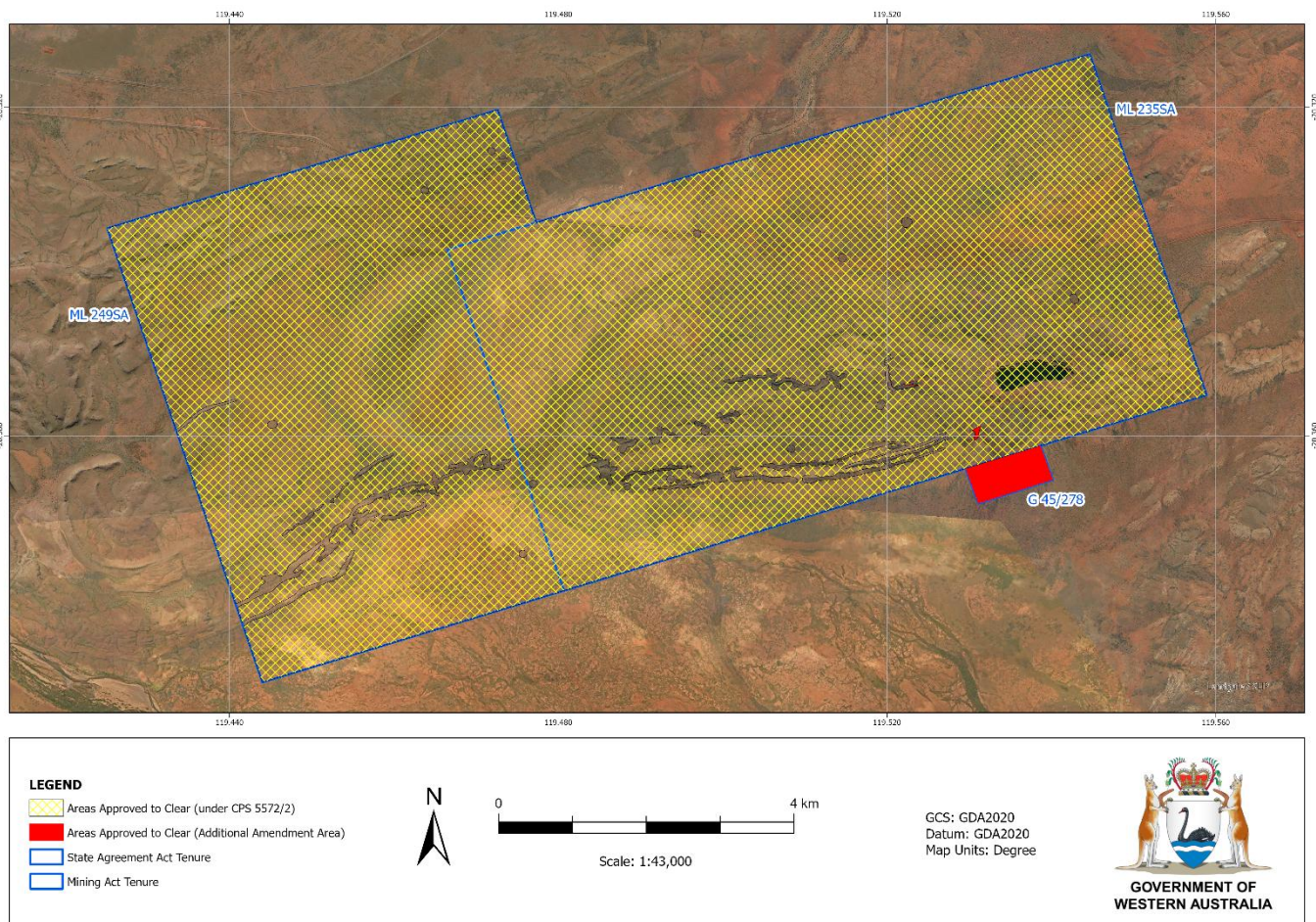
The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- where practicable, avoid clearing riparian vegetation;
- commence construction no later than six months after undertaking clearing to reduce the risk of erosion;
- flora management (avoid identified locations of the listed species with a buffer of ten metres, except for where the identified flora is located within required closure activity areas);
- restricted clearing (restrict clearing within the C5 vegetation type to clearing for the purpose of rehabilitation and closure activities);
- inspect for *Macrotis lagotis* (greater bilby) and *Dasycercus blythi* (brush-tailed mulgara) burrows, and avoid identified active burrows with a buffer of 50 metres;
- a fauna management condition for *Pseudomys chapmani* (western-pebble mound mouse); 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.

The assessment has not changed since the assessment for CPS 5572/2, except in the case of principle (a), principle (h), and principle (i). The record of *Euphorbia clementii* within the amendment area is considered under principle (a) in this assessment. The proclaimed Eighty Mile Beach Marine Park is considered under principle (h) in this assessment. Upon further review, the delegated officer determined the proposed clearing may be at variance to principle (i), given the susceptibility of soils within the application area to erosion could lead to siltation of watercourses within the application area. The Delegated Officer determined that the proposed amalgamation of permit boundaries and extension of duration is not likely to lead to an unacceptable risk to environmental values.

#### 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 cross-hatched area indicates the previous permit area (CPS 5572/2) and the red shaded area indicates the additional area applied for under the amended permit (CPS 5572/3). Both the yellow cross-hatched area and the red shaded area indicate the areas within which conditional authorised clearing can occur under the granted clearing permit (CPS 5572/3).**

## 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)
- Conservation and Land Management Act 1984* (WA) (CALM Act)
- Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- 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)
- Guidance for the Assessment of Environmental Factors – *Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia* (EPA, 2004a)

- Guidance for the Assessment of Environmental Factors – *Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia* (EPA, 2004b)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016b)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2016a)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2020)

### 3. Detailed assessment of application

#### 3.1. Avoidance and mitigation measures

The applicant submitted the following avoidance and mitigation commitments (BHP, 2025a; 2025b; Appendix A):

- Should any population of Threatened Flora be identified they will be avoided with a 50 metre buffer unless they are within previously disturbed areas and areas identified for closure activities. A Permit to Take will be obtained in Threatened Flora are required to be disturbed.
- Identified priority flora will be avoided where practicable with a 10 metre buffer. If priority flora are identified within required closure activity areas they may need to be cleared.
- Identified *Polymeria* sp. indet. will be avoided where practicable with a 10 metre buffer. If *Polymeria* sp. indet. are identified within required closure activity areas they may need to be cleared.
- Minimise activities within locally significant vegetation association *OT CcTeCrr AiLycuCfl AacAthe* (C5) to those associated with rehabilitation and closure activities;
- Control of established weed populations will be carried out according to BHP's standard Weed Control and Management Procedures.
- If any active brush-tailed mulgara burrows are identified they will be avoided using a 10 metre buffer, where practicable.
- If any active greater bilby burrows are identified they will be avoided using a 10 metre buffer, where practicable.
- Identified active western pebble-mound mouse burrows will be avoided using a 10 metre buffer, where practicable.
- Where practicable, existing cleared tracks will be used to cross the unnamed non-perennial minor drainage line. If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum and will be constructed flat level to the surface (i.e. a simple clearing with no bunds) to maintain the natural surface flow.

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

A review of current environmental information (Appendix B) reveals that the assessment against the clearing principles has not changed significantly from the clearing permit decision report CPS 5572/2, except in the case of principle (a), principle (h) and principle (i). The record of *Euphorbia clementii* within the amendment area is considered under principle (a) in this assessment. The proclaimed Eighty Mile Beach Marine Park is considered under principle (h) in this assessment. Upon further review, the delegated officer determined the proposed clearing may be at variance to principle (i), given the susceptibility of soils within the application area to erosion could lead to siltation of watercourses within the application area.

##### 3.2.1. Biological values (flora and vegetation) - Clearing Principle (a)

###### Assessment

###### **Conservation significant flora**

The following conservation significant flora have been identified within the application area, and requires further discussion.

###### ***Euphorbia clementii***

*Euphorbia clementii* is a Priority 3 species that inhabits gravelly hillsides and stony ground (Western Australian Herbarium, 1998-). This species was recorded in one location during the Pilbara Flora (2009) flora and vegetation survey. Clearing Permit CPS 5045/2, which is being amalgamated with the CPS 5572/2 permit boundary under this amendment, included a flora management condition to avoid the known location of *Euphorbia clementii* within the permit boundary (GoWA, 2018a).

The more recent flora surveys by Biota (2025b), Spectrum (2025) and Umwelt (2025), recorded this species at several locations within the application area. This species is known from 32 Western Australian Herbarium (1998-) records, within the Pilbara bioregion. As 41 of the 50 known local records of this species occur within the application area, the proposed clearing is likely to impact this species at a local scale, but not at a regional or species scale (Biota, 2025b; Spectrum, 2025; Umwelt, 2025; Western Australian Herbarium, 1998-).

###### ***Rothia indica* subsp. *australis***

*Rothia indica* subsp. *australis* is a Priority 3 species that inhabits sandy soils on sandhills and sandy flats (Western Australian Herbarium, 1998-). It was recorded within the application area during the flora surveys by Spectrum (2025) and Umwelt (2025). Of the eight records of the species within the application area, four of these are located within vegetation type C5 (Spectrum, 2025; Umwelt, 2025). As the species is known from 23 Western Australian Herbarium (1998-) records, across multiple bioregions, the proposed clearing is unlikely to be significant to the conservation of the species at a species or regional scale.

###### ***Euphorbia inappendiculata* var. *inappendiculata***

*Euphorbia inappendiculata* var. *inappendiculata* is a Priority 3 species that can be found inhabiting cracking clay plains, creek beds, minor drainage lines and slopes (Western Australian Herbarium, 1998-). It was recorded within the application area during the flora survey by Umwelt (2025). Additionally, the Biota (2025b) survey recorded the species at two sites outside of the



application area. This species is known from 17 Western Australian Herbarium (1998-) records, across the Gascoyne and Pilbara bioregions. As 11 of the 13 known local records of this species occur within the application area, the proposed clearing is likely to impact this species at a local scale, but not at a regional or species scale (Biota, 2025b; Umwelt, 2025; Western Australian Herbarium, 1998-).

#### ***Euphorbia inappendiculata* var. *queenslandica***

*Euphorbia inappendiculata* var. *queenslandica* is a Priority 3 species that inhabits cracking clay soils (Western Australian Herbarium, 1998-). It was recorded within the application area during the flora survey by Spectrum (2025). Additionally, the Biota (2025b) survey recorded the species at one site outside of the application area. These collections represent a range extension of approximately 230 kilometres northeast towards the Pilbara coast, with there being no vouchered specimens from the Chichester and Roebourne subregions of the Pilbara bioregion (Biota, 2025b; Western Australian Herbarium, 1998-). This species is known from 18 Western Australian Herbarium (1998-) records. The proposed clearing is unlikely to be significant to the conservation of *Euphorbia inappendiculata* var. *queenslandica* at a species level, but is likely to result in regional and local impacts.

#### ***Polymeria* sp. indet.**

*Polymeria* sp. indet. is a potentially undescribed species, which appears to prefer alluvial sandy or clay loam soils, sometimes with stones, in lower lying situations, including minor flow lines and flats, and may favour areas that have been recently disturbed, including by fire or machinery works (Umwelt, 2025). It was recorded within the application area during the flora survey by Umwelt (2025). It was also recorded in three locations, outside of the application area, in the survey by Biota (2025b). There have been 14 populations of this entity recorded across a wide distribution (Umwelt, 2025). From this information, the Western Australian Herbarium has advised that this entity is unlikely to be of high conservation concern (Umwelt, 2025).

#### **Conservation significant vegetation**

Although no Priority Ecological Communities (PECs) or Threatened Ecological Communities (TECs) have been detected within the application area (Biota, 2025b; Onshore, 2013; Spectrum, 2025; Umwelt, 2025), the following vegetation types as recorded in the Spectrum (2025) survey are considered locally significant:

- vegetation types C2, C3 and C4; and
- vegetation type C5.

Vegetation types C2, C3 and C4 are considered locally significant as habitat for *Euphorbia inappendiculata* var. *queenslandica*. As the occurrence of this species within the application area is considered locally significant, these vegetation types are locally, but not regionally significant (Spectrum, 2025). As impacts to *Euphorbia inappendiculata* var. *queenslandica* can be managed through adding a flora management condition to the amended permit, no further management is required for these vegetation types.

Vegetation type C5 is considered locally significant due to having a restricted distribution and an uncommon vegetation composition for the local area (Spectrum, 2025). The applicant has committed to minimising activities within vegetation type C5 to those associated with rehabilitation and closure activities (Section 3.1).

#### **Conclusion**

The proposed clearing is likely to result in impacts to *Euphorbia clementii*, *Rothia indica* subsp. *australis*, *Euphorbia inappendiculata* var. *inappendiculata*, *Euphorbia inappendiculata* var. *queenslandica*, and *Polymeria* sp. indet. The proposed clearing will also impact on the locally significant vegetation type, C5.

For the reasons set out above, it is considered that the impacts of the proposed clearing on *Euphorbia clementii* and *Rothia indica* subsp. *australis* can be managed through adding a flora management condition and a restricted clearing condition to the amended permit.

The impacts of the proposed clearing on *Euphorbia inappendiculata* var. *inappendiculata* and *Polymeria* sp. indet. can be managed through adding a flora management condition and a riparian vegetation condition to the amended permit.

The impacts of the proposed clearing on *Euphorbia inappendiculata* var. *queenslandica* can be managed through adding a flora management condition to the amended permit.

The impacts of the proposed clearing on vegetation type C5 can be managed through a restricted clearing condition.

#### **Conditions**

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

- avoid, minimise and reduce impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- where practicable, avoid clearing riparian vegetation;
- retain cleared vegetation and topsoil and rehabilitate cleared areas within 12 months of clearing to ensure biodiversity is not permanently lost;
- flora management (avoid identified locations of the listed species with a buffer of ten metres, except for where the identified flora is located within required closure activity areas); and
- restricted clearing (restrict clearing within the C5 vegetation type to clearing for the purpose of rehabilitation and closure activities).

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

##### **Assessment**

A fauna habitat survey was conducted by Biologic (2013) over the application area during the period 16 to 23 August 2012. More recently, surveys have been conducted by Biota (2025a) in March 2025. The following habitats occur within the application area:

- Gorge/gully/breakaway systems;
- Major drainage line;
- Medium drainage line;
- Minor drainage line;
- Crests and slopes/ hillcrest/ hillslope;
- Undulating low hills;
- Gibber plain;
- Sandplain habitats (Sandplain with pindan/ Sandplain with hummock grass);
- Gilgai with tussock grass/ Gilgai plain; and
- Disturbed areas (including old pit, waste dumps and townsite) (Biologic, 2013; Biota, 2025a).

Other habitat features recorded, to note were:

- Caves;
- Waterholes; and
- Flooded mine pit (Biologic, 2013).

### **Gorge/gully/breakaway habitat – including caves and waterholes**

The gorge/gully/breakaway habitat is potential habitat for the following conservation significant species.

The northern quoll (*Dasyurus hallucatus*), Endangered, is an opportunist which can inhabit a range of habitats (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 gorge/gully/breakaway habitat represents critical habitat within the application area (Biologic, 2013).

Ghost bat (*Macroderma gigas*), Vulnerable, inhabits caves, and forages in a variety of habitats, particularly drainage lines (Bullen, 2021; Cramer et al., 2022). Caves within the application area had evidence of use by ghost bats, with scats being observed at three caves, and calls at one cave (Biologic, 2013). Gorges and gullies are also likely to be critical habitat for ghost bat foraging (Biologic, 2013).

The Pilbara leaf-nosed bat (PLNB) (*Rhinonicteris aurantia* (Pilbara form)), Vulnerable, forages in a variety of habitats and roosts during the day in caves with stable, warm and humid microclimates (Bat Call WA, 2021). Caves located within the application area were inspected, and none were found to be suitable for PLNB (Biologic, 2013). However, calls of the PLNB were observed within the application area, so it is likely that the PLNB uses the application for foraging, with a roosting cave located nearby, outside of the application area (Biologic, 2013). Gorges and gullies likely to be critical habitat for PLNB foraging (Biologic, 2013).

Wood sandpiper (*Tringa glareola*), Migratory, utilises wetlands including swamps, marshes and waterholes (Commonwealth of Australia, 2008). The species may visit the waterholes within the application area, as well as inundated areas following periods of heavy rain (Biologic, 2013).

Pilbara olive python (POP) (*Liasis olivaceus barroni*), Vulnerable, inhabits rocky gorges, gullies and waterholes within the Pilbara (Northover et al., 2023). POP was not detected during the Biologic (2013) survey, but is considered likely to occur in the gorge/gully/breakaway habitat, which is excellent habitat for the species.

The Pilbara dragonfly (*Antipodogomphus hodgkini*), Priority 3, inhabits streams, rivers and riverine pools (Theischinger & Endersby, 2009). Waterholes within the application area may provide suitable habitat for this species.

### **Sandplain habitats**

The sandplain habitats are potential habitat for the following conservation significant species.

The greater bilby (*Macrotis lagotis*), Vulnerable, inhabits sandplains and sandy areas with spinifex and mulga (DCCEEW, 2023b). Signs of greater bilby were found within the application area in the form of burrows, scats and diggings (Biologic, 2013; Biota, 2025a). The sandplain habitat is considered critical habitat for bilbies, and the Gilgai plain habitat is considered supporting habitat (Biota, 2025a). Although there has not been evidence of recent activity, it is likely the greater bilby occurs within the application area periodically as bilbies are highly mobile and show low site fidelity (Biota, 2025c).

The brush-tailed mulgara (*Dasyercus blythi*), Priority 4, inhabits sandplains or sand dunes with spinifex (NESP, 2021; Pavey et al., 2012). Signs of brush-tailed mulgara were found within the application area in the form of active burrows and scats (Biologic, 2013).

Northern short-tailed mouse (*Leggadina lakedownsensis*), Priority 4, is a burrowing species known to occur on sandy soils and cracking clays in Western Australia (CALM, n.d.). Habitat critical to the survival of this species is on islands, where the mouse is more common, including Thevenard Island and Serrurier Island (CALM, n.d.). Although the mouse is sparsely populated elsewhere in the Pilbara, the habitat within the application area is unlikely to be critical to the survival of this species (CALM, n.d.).

### **Major drainage lines**

The grey falcon (*Falco hypoleucos*), Vulnerable, is a nomadic species occurs at low densities across inland Australia (Birdlife International, 2022). It inhabits timbered plains, particularly *Acacia* shrublands near tree-lined watercourses (Birdlife

International, 2022; Garnett & Crowley, 2000). Within the application area, the major drainage line habitat has potential for foraging and breeding (Biologic, 2013). As the grey falcon is wide-ranging and other major watercourses exist with similar habitat outside of the application area, the proposed clearing is unlikely to be significant to the conservation of this species.

### **Disturbed areas – mine pit**

The mine pit is potential habitat for the following conservation significant species.

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 (Australian Museum, 2019; NWF, n.d.). There is one record of peregrine falcon within the application area (GIS Database). The crest/slope and major drainage line habitats represents foraging habitat for peregrine falcons within the application area (GIS Database). Peregrine falcons lay their eggs on cliff faces, tree hollows or abandoned nests of other large birds (Australian Museum, 2019). Mature eucalypt trees, located within the major drainage line habitat, may provide suitable hollows or nests for peregrine usage (Biologic, 2013). However, cliff nesting is the preferred habitat for peregrine falcon nesting (Australian Museum, 2019; COSEWIC, 2017). The gorge/gully/breakaway habitat within the application area was inspected and found to not have cliffs suitable for peregrine nesting (Biologic, 2013). The walls of the abandoned pit were considered suitable breeding habitat, but searches were conducted within the breeding season and no nesting was observed (Biologic, 2025). Peregrine falcons mate for life, and breeding pairs return to the same area to nest (Australian Museum, 2019). As no nesting was observed within suitable habitat, it is unlikely that the application area is critical breeding habitat for peregrine falcons.

The following species may occasionally visit the application area, utilising the flooded mine pit or inundated areas following significant rainfall:

- Sharp-tailed sandpiper (*Calidris acuminata*);
- Swinhoe's snipe (*Gallinago megala*);
- Common greenshank (*Tringa nebularia*);
- Curlew sandpiper (*Calidris ferruginea*);
- Common sandpiper (*Actitis hypoleucos*);
- Red-necked stint (*Calidris ruficollis*);
- Gull-billed tern (*Gelochelidon nilotica*);
- Osprey (*Pandion haliaetus*); and
- Barn swallow (*Hirundo rustica*) (Biologic, 2013; Commonwealth of Australia, 2008; GIS Database).

### **Crest/ slope/ undulating low hills habitat**

The western pebble-mound mouse (WPMM) (*Pseudomys chapmani*), Priority 4, constructs pebble-mounds in rocky areas dominated by hummock forming spinifex (Burbidge, 2016; Start et al., 2000). The undulating low hills habitat is critical habitat for WPMM within the application area, however is not restricted to the application area (Biota, 2025a; 2025c). Signs of western pebble-mound mouse were found within the application area in the form of active and inactive mounds (Biota, 2025a).

### **(Spinifex) grassland habitats**

Night parrot (*Pezoporus occidentalis*), Critically Endangered, inhabits mature spinifex habitat in arid and semi-arid regions (DCCEEW, 2023a). Much of the application area may contain suitable habitat for night parrot. Acoustic recorders were deployed in potentially suitable night parrot habitat for a period of six to 12 recording nights (Biota, 2025a; 2025c). No recordings resembling that of the night parrot were detected (Biota, 2025a; 2025c). Based on the results of the habitat assessment and the deployment of the acoustic recording units, the night parrot is considered unlikely to occur within the application area (Biota, 2025a; 2025c).

The spectacled hare-wallaby (mainland) (*Lagorchestes conspicillatus leichardti*), Priority 4, inhabits spinifex grasslands in the Pilbara (Burbidge, 1992). They require unburnt spinifex in areas without predation from feral cats (Burbidge, 1992). Predation from cats and changes to fire regimes has made them very rare in the mainland Pilbara (Burbidge, 1992). The nearest records to the application area were recorded in 1960 and 1983, 39 kilometres south and 37 kilometres east, respectively (GIS Database). As feral cats were recorded during the surveys of the application area it is unlikely that the spectacled-hare wallaby occurs within the application area (Biota, 2025a; 2025c).

Oriental plover (*Charadrius veredus*), Migratory, forages on inland grasslands on claypans (Commonwealth of Australia, 2008). The oriental plover may be an occasional visitor to the application area, especially if inundated following periods of heavy rain (Biologic, 2013).

Oriental pratincole (*Glareola maldivarum*), Migratory, is widespread in the Pilbara and Kimberley, inhabiting grasslands and plains near wetlands in inland areas (Commonwealth of Australia, 2008). The oriental pratincole may be an occasional visitor to the application area (Biologic, 2013).

### **No habitats**

Fork-tailed swift (*Apus pacificus*), Migratory, is an aerial species that may occur over the application area (Commonwealth of Australia, 2008). As it is not reliant on terrestrial habitats, the proposed clearing is unlikely to impact the species.

### **Conclusion**

#### **Gorge/gully/breakaway habitat – including caves and waterholes**

Due to it being critical habitat for many of the conservation significant fauna species potentially inhabiting this area, and being relatively restricted within the application area, this habitat as well as caves and waterholes have been excised from the application area (BHP, 2025a; Biologic, 2013).

#### **Sandplain habitats**

Impacts to the species inhabiting sandplain habitats (greater bilby and brush-tailed mulgara) can be managed by maintaining the existing fauna management condition (GoWA, 2018b). The sandplain habitat is unlikely to be critical to the survival of the northern short-tailed mouse.

#### **Major drainage lines**

The clearing of this habitat within the application area is unlikely to significantly impact conservation significant species.

#### **Disturbed areas – mine pit**

As the pit does not contain native vegetation, the clearing of native vegetation is not likely to impact this habitat (Pilbara Flora, 2009). Other potential impacts to this habitat are not considered under this assessment (DER, 2014).

#### **Crest/ slope/ undulating low hills habitat**

As this habitat is common in the region, the proposed clearing is unlikely to significantly impact the conservation status of the western pebble-mound mouse, however the applicant has committed to reduce the impact to this species by avoiding identified active mounds using a 10 metre buffer, where practicable.

#### **(Spinifex) grassland habitats**

The oriental plover and oriental pratincole are unlikely to be significantly impacted by the proposed clearing of this habitat. Other species of conservation significance (night parrot and spectacled hare-wallaby) are unlikely to occur, and therefore unlikely to be impacted by the proposed clearing.

#### **No habitats**

As the fork-tailed swift does not utilise terrestrial habitats, it is unlikely to be impacted by the proposed clearing.

The applicant may have notification responsibilities under the EPBC Act for impacts to greater bilby, northern quoll, ghost bat, PLNB, POP and migratory birds, and their habitats, as set out in the EPBC Act. The applicant has been advised to contact the federal Department of Climate Change, Energy, the Environment and Water (DCCEEW) to discuss EPBC Act referral requirements.

#### Conditions

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

- avoid, minimise and reduce impacts and extent of clearing;
- retain cleared vegetation and topsoil and rehabilitate cleared areas within 12 months of clearing to ensure fauna habitat is not permanently lost;
- a fauna management condition for *Macrotis lagotis* (greater bilby) and *Dasycercus blythi* (brush-tailed mulgara);
- a fauna management condition for *Pseudomys chapmani* (western-pebble mound mouse).

### **3.3. Relevant planning instruments and other matters**

The clearing permit amendment application was advertised on 27 June 2025 by the Department of Energy, Mines, Industry Regulation and Safety (now the Department of Mines, Petroleum and Exploration) inviting submissions from the public. No submissions were received in relation to this application.

There are two native title claims (WCD2010/001 - Ngarla People (Mount Goldsworthy Lease Proceeding) and WCD2007/003 - Ngarla and Ngarla #2 (Determination Area A)) over the area under application (DPLH, 2025). These claims have been determined by the Federal Court on behalf of the claimant group. The mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There is one registered Aboriginal Site of Significance (Place 9225 - Pardoo Creek Burial) 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 greater bilby, northern quoll, ghost bat, Pilbara leaf-nosed bat, Pilbara olive python, migratory birds, and their habitats, which are protected matters under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). The proponent may be required to refer the project to the (Commonwealth) Department of Climate Change, Energy, the Environment and Water for environmental impact assessment under the EPBC Act. The proponent is advised to contact the Department of Climate Change, Energy, the Environment and Water for further information regarding notification and referral responsibilities under the EPBC Act.

Other relevant authorisations required for the proposed land use include:

- A Programme of Work approved under the *Mining Act 1978*
- A Mining Proposal / Mine Closure Plan / Mining Development and Closure Proposal approved under the *Mining Act 1978*

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

**End**



## Appendix A. Additional information provided by applicant

Summary of comments	Consideration of comment
Additional flora and vegetation surveys were provided in support of this application (Biota, 2025b; Spectrum, 2025; Umwelt, 2025).	Information received from the applicant is considered in the assessment of Principle (a).
Additional fauna surveys were provided in support of this application (Biota, 2025a; 2025c).	Information received from the applicant is considered in the assessment of Principles (a) and (b).
Based on the results of the surveys provided, the applicant has proposed additional avoidance and mitigation measures.	Avoidance and mitigation measures are considered in Section 3.1.
The applicant provided maps showing the locations of conservation significant fauna, flora and vegetation recorded within the application area.	Information received from the applicant is considered in the assessment of Principles (a) and (b). Maps are provided in Appendix D (significant flora and vegetation) and Appendix E (significant fauna).
The applicant informed the Department that they intend to surrender CPS 5045/2 once CPS 5572/3 is granted.	The Department considers that this amendment is an amalgamation of the clearing permits CPS 5572/2 and CPS 5045/2.

## Appendix B. Site characteristics

### B.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 Chichester and Roebourne subregions of the Pilbara bioregion (GIS Database).		
Conservation areas	The nearest legislated conservation area is the 80 Mile Beach Marine Park, approximately 26 kilometres northeast of the application area (GIS Database).		
Soil description	The soils within the application area are broadly mapped as the following (DPIRD, 2025b; GIS Database):		
	System	Area of application area (ha)	Description
	Capricorn (281Cp)	2,848.0 (42%)	Rugged sandstone hills, ridges, stony footslopes and interfluves supporting low acacia shrublands or hard spinifex grasslands with scattered shrubs
	Nita (281Nt)	1,789.8 (26%)	Sandplains supporting shrubby spinifex grasslands with occasional trees
	Horseflat (281Hf)	1,221.6 (18%)	Gilgaied clay plains supporting Roebourne Plains grass grasslands and minor grassy snakewood shrublands
	Paradise (281Pd)	675.6 (10%)	Alluvial plains supporting soft spinifex grasslands and tussock grasslands
	Boolgeeda (281Bg)	219.8 (3%)	Stony lower slopes and plains below hill systems supporting hard and soft spinifex grasslands or mulga
	Billygoat (117BI)	61.8 (1%)	Dissected plains and gravelly slopes supporting hard spinifex grasslands
Land degradation risk	<p>The Capricorn, Billygoat and Boolgeeda land systems are not generally susceptible to erosion (van Vreeswyk et al., 2004).</p> <p>The Horseflat and Paradise systems have a moderate to high risk of erosion, particularly in drainage lines (Van Vreeswyk et al., 2004).</p> <p>Within the Nita system, wind erosion is known to occur after fires, however it is usually stabilised rapidly following rain and consequent regeneration of vegetation (Van Vreeswyk et al., 2004). Therefore, should the land be left cleared for a prolonged period of time, wind erosion may occur.</p>		
Waterbodies	<p>Pardoo Creek, a major, non-perennial watercourse, intercepts the application area. Several minor tributaries of Pardoo Creek also occur within the application area (GIS Database). Four waterholes, associated with these creeks were located in surveys (Biologic, 2013). These waterholes have been excised from the application area (BHP, 2025a).</p> <p>In the west of the application, two minor creeks occur, tributaries of the De Grey River, which occurs 1.4 kilometres west of the application area (GIS Database).</p>		

Characteristic	Details
	The historic Goldsworthy iron ore mine includes a large flooded pit, which is located within the application area (Biologic, 2013; GIS Database).
Hydrogeography	<p>The application area is located approximately four kilometres southeast of the nearest Public Drinking Water Source Area (PDWSA), the De Grey River Water Reserve (GIS Database).</p> <p>The application area is located within the Canning-Kimberley and Pilbara Groundwater Areas proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (GIS Database). The groundwater salinity within the application area is mapped as 1,000-3,000 milligrams per litre of total dissolved solids (TDS) (GIS Database).</p>
Vegetation types	<p>The following vegetation types were recorded within the application area in the Spectrum (2025) flora and vegetation survey:</p> <ul style="list-style-type: none"> <li>• P1;</li> <li>• C1;</li> <li>• C2;</li> <li>• C3;</li> <li>• C4;</li> <li>• C5;</li> <li>• S1;</li> <li>• S2;</li> <li>• S3;</li> <li>• G1;</li> <li>• D1; and</li> <li>• Cleared.</li> </ul> <p>Descriptions and representative photographs of these vegetation types are provided in Appendix F.</p>
Fauna habitat	<p>A fauna habitat survey was conducted by Biologic (2013) over the application area during the period 16 to 23 August 2012 and recorded the following habitats:</p> <ul style="list-style-type: none"> <li>• Gorge/gully/breakaway systems;</li> <li>• Major drainage line;</li> <li>• Crests and slopes;</li> <li>• Gibber plain;</li> <li>• Sandplain with pindan;</li> <li>• Sandplain with hummock grass;</li> <li>• Gilgai with tussock grass; and</li> <li>• Disturbed areas (including old pit, waste dumps and townsite) (Biologic, 2013).</li> </ul> <p>Other habitat features recorded, to note were:</p> <ul style="list-style-type: none"> <li>• Caves;</li> <li>• Waterholes; and</li> <li>• Flooded mine pit (Biologic, 2013).</li> </ul>

## B.2. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix G.1), and biological survey information (Biota, 2025b; Onshore, 2013; Pilbara Flora, 2009; Spectrum, 2025; Umwelt, 2025), impacts to the following conservation significant flora required further consideration.

The likelihood of occurrence for these species were determined by potentially suitable habitat within the application area, species distribution, and known regional records (BHP, 2025a; Biota, 2025b; Onshore, 2013; Pilbara Flora, 2009; Spectrum, 2025; Umwelt, 2025; Western Australian Herbarium, 1998-; GIS Database).

A map of the locations of significant flora recorded within the application area is provided in Appendix D.

Species name	Conservation status	Suitable habitat? [Y, N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N]	Likelihood of occurrence
<i>Euphorbia clementii</i>	P3	Y	0	Y	Recorded – discussed in Section 3.2.1
<i>Rothia indica</i> subsp. <i>australis</i>	P3	Y	0	Y	Recorded – discussed in Section 3.2.1
<i>Euphorbia inappendiculata</i> var. <i>inappendiculata</i>	P3	Y	0	Y	Recorded – discussed in Section 3.2.1
<i>Euphorbia inappendiculata</i> var. <i>queenslandica</i>	P3	Y	0	Y	Recorded – discussed in Section 3.2.1

Species name	Conservation status	Suitable habitat? [Y, N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N]	Likelihood of occurrence
<i>Polymeria</i> sp. indet.	-	Y	0	Y	Recorded – discussed in Section 3.2.1
<i>Heliotropium murinum</i>	P3	Y	<23	Y	Possible
<i>Triodia degreyensis</i>	P1	Y	<28	Y	Possible
<i>Euploca parviantrum</i>	P1	Y	<30	Y	Possible
<i>Corchorus</i> sp. Yarrie (J. Bull & D. Roberts CAL 01.05)	P1	Y	<31	Y	Possible
<i>Ptilotus mollis</i>	P4	Y	<32	Y	Possible
<i>Nicotiana umbratica</i>	P3	Y	<44	Y	Possible
<i>Euploca mutica</i>	P3	Y	<46	Y	Possible
<i>Triodia chichesterensis</i>	P3	Y	<48	Y	Possible
<i>Gymnanthera cunninghamii</i>	P3	Y	<49	Y	Possible

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

### B.3. 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, 2025; Australian Museum, 2020; Biologic, 2013; Biota, 2025a; 2025c; Birdlife International, 2022; Burbidge, 1992; CALM, n.d.; Commonwealth of Australia, 2008; 2020; Crew, 2014; DCCEEW, 2023a; Garnet & Crowley, 2000; GBIF, 2023; Theischinger & Endersby, 2009; TSSC, 2019; GIS Database).

As the 50 kilometre search radius included the coastline, many coastal species were recorded in the desktop search. These species are unlikely to occur within the application area, as it is not coastal (Commonwealth of Australia, 2008; 2020; GBIF, 2023; GIS Database). Therefore, these species do not require further discussion.

A map of the locations of significant fauna recorded within the application area is provided in Appendix E.

Species name	Conservation status		Restricted to coastal distribution? [Y/N]	Suitable habitat? [Y/N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N]	Likelihood of occurrence
	WA	EPBC					
Greater bilby ( <i>Macrotis lagotis</i> )	VU	VU	N	Y	0	Y	Recorded – discussed in Section 3.2.2
Peregrine falcon ( <i>Falco peregrinus</i> )	OS	-	N	Y	0	Y	Recorded – discussed in Section 3.2.2
Sharp-tailed sandpiper ( <i>Calidris acuminata</i> )	MI	MI	N	Y	0	Y	Recorded – discussed in Section 3.2.2
Swinhoe's snipe ( <i>Gallinago megala</i> )	MI	MI	N	Y	0	Y	Recorded – discussed in Section 3.2.2
Wood sandpiper ( <i>Tringa glareola</i> )	MI	MI	N	Y	0	Y	Recorded – discussed in Section 3.2.2
Western pebble-mound mouse ( <i>Pseudomys chapmani</i> )	P4	-	N	Y	0	Y	Recorded – discussed in Section 3.2.2
Northern quoll ( <i>Dasyurus hallucatus</i> )	EN	EN	N	Y	0	Y	Recorded – discussed in Section 3.2.2
Ghost bat ( <i>Macroderma gigas</i> )	VU	VU	N	Y	0	Y	Recorded – discussed in Section 3.2.2

Species name	Conservation status		Restricted to coastal distribution? [Y/N]	Suitable habitat? [Y/N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N]	Likelihood of occurrence
	WA	EPBC					
Pilbara leaf-nosed bat ( <i>Rhinonictis aurantia</i> (Pilbara form))	VU	VU	N	Y	0	Y	Recorded – discussed in Section 3.2.2
Brush-tailed mulgara ( <i>Dasycercus blythi</i> )	P4	-	N	Y	0	Y	Recorded – discussed in Section 3.2.2
Grey falcon ( <i>Falco hypoleucos</i> )	VU	-	N	Y	3.6	Y	Likely – discussed in Section 3.2.2
Oriental plover ( <i>Charadrius veredus</i> )	MI	MI	N	Y	10.6	Y	Likely – discussed in Section 3.2.2
Oriental pratincole ( <i>Glareola maldivarum</i> )	MI	MI	N	Y	13.3	Y	Likely – discussed in Section 3.2.2
Pilbara olive python ( <i>Liasis olivaceus barroni</i> )	VU	VU	N	Y	13.4	N	Likely – discussed in Section 3.2.2
Barn swallow ( <i>Hirundo rustica</i> )	MI	MI	N	Y	20.1	Y	Likely – discussed in Section 3.2.2
Fork-tailed swift ( <i>Apus pacificus</i> )	MI	MI	N	Y	30.3	Y	Likely – discussed in Section 3.2.2
Common greenshank ( <i>Tringa nebularia</i> )	MI	MI	N	Y	1.3	Y	Possible – discussed in Section 3.2.2
Osprey ( <i>Pandion haliaetus</i> )	MI	MI	N	Y	1.3	Y	Possible – discussed in Section 3.2.2
Common sandpiper ( <i>Actitis hypoleucos</i> )	MI	MI	N	Y	1.7	Y	Possible – discussed in Section 3.2.2
Red-necked stint ( <i>Calidris ruficollis</i> )	MI	MI	N	Y	1.7	Y	Possible – discussed in Section 3.2.2
Gull-billed tern ( <i>Gelochelidon nilotica</i> )	MI	MI	N	Y	5.1	Y	Possible – discussed in Section 3.2.2
Pilbara dragonfly ( <i>Antipodogomphus hodgkini</i> )	P3	-	N	Y	10.6	N	Possible – discussed in Section 3.2.2
Northern short-tailed mouse ( <i>Leggadina lakedownensis</i> )	P4	-	N	Y	20.1	Y	Possible – discussed in Section 3.2.2
Curlew sandpiper ( <i>Calidris ferruginea</i> )	CR	CR & MI	N	Y	26.0	Y	Possible – discussed in Section 3.2.2
Night parrot ( <i>Pezoporus occidentalis</i> )	CR	EN	N	Y	2.9	Y	Unlikely – discussed in Section 3.2.2
Spectacled hare-wallaby (mainland) ( <i>Lagorchestes conspicillatus leichardti</i> )	P4	-	N	Y	36.6	Y	Unlikely – discussed in Section 3.2.2
White-winged black tern	MI	MI	N	N	5.1	Y	Unlikely

Species name	Conservation status		Restricted to coastal distribution? [Y/N]	Suitable habitat? [Y/N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N]	Likelihood of occurrence
	WA	EPBC					
<i>(Chlidonias leucopterus)</i>							
Dampierland plain slider <i>(Lerista separanda)</i>	P2	-	N	Y	39.1	Y	Unlikely
Glossy ibis <i>(Plegadis falcinellus)</i>	MI	MI	N	Y	1.3	Y	Unlikely
Little curlew <i>(Numenius minutus)</i>	MI	MI	Y	N	10.6	Y	Unlikely
Caspian tern <i>(Hydroprogne caspia)</i>	MI	MI	Y	N	17.8	Y	Unlikely
Black-tailed godwit <i>(Limosa limosa)</i>	MI	MI	Y	N	18.4	Y	Unlikely
Marsh sandpiper <i>(Tringa stagnatilis)</i>	MI	MI	Y	N	18.4	Y	Unlikely
Little tern <i>(Sternula albifrons)</i>	MI	MI	Y	N	22.0	Y	Unlikely
Whimbrel <i>(Numenius phaeopus)</i>	MI	MI	Y	N	23.2	Y	Unlikely
Eastern curlew <i>(Numenius madagascariensis)</i>	CR	CR & MI	Y	N	23.2	Y	Unlikely
Greater sand plover <i>(Charadrius leschenaultii)</i>	VU	VU & MI	Y	N	23.2	Y	Unlikely
Northern coastal free-tailed bat <i>(Ozimops cobourgianus)</i>	P1	-	Y	Y	21.3	Y	Unlikely
Ruddy turnstone <i>(Arenaria interpres)</i>	MI	MI	Y	N	23.2	Y	Unlikely
Great knot <i>(Calidris tenuirostris)</i>	CR	CR & MI	Y	N	25.8	Y	Unlikely
Terek sandpiper <i>(Xenus cinereus)</i>	MI	MI	Y	N	25.8	Y	Unlikely
Broad-billed sandpiper <i>(Calidris falcinellus)</i>	MI	MI	Y	N	26.0	Y	Unlikely
Bar-tailed godwit <i>(Limosa lapponica)</i>	MI	MI	Y	N	26.3	Y	Unlikely
Grey-tailed tattler <i>(Tringa brevipes)</i>	P4 & MI	MI	Y	N	26.3	Y	Unlikely
Lesser sand plover <i>(Charadrius mongolus)</i>	EN	EN & MI	Y	N	26.3	Y	Unlikely
Red knot <i>(Calidris canutus)</i>	EN	EN & MI	Y	N	30.1	Y	Unlikely
Crested tern <i>(Thalasseus bergii)</i>	MI	MI	Y	N	30.3	Y	Unlikely
Lesser frigatebird <i>(Fregata ariel)</i>	MI	MI	Y	N	34.9	Y	Unlikely
Airlie Island ctenotus <i>(Ctenotus angusticeps)</i>	P3	-	Y	N	39.6	Y	Unlikely
Grey plover <i>(Pluvialis squatarola)</i>	MI	MI	Y	N	41.0	Y	Unlikely
Brown booby	MI	MI	Y	N	44.2	Y	Unlikely



Species name	Conservation status		Restricted to coastal distribution? [Y/N]	Suitable habitat? [Y/N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N]	Likelihood of occurrence
	WA	EPBC					
<i>(Sula leucogaster)</i>							
Sanderling ( <i>Calidris alba</i> )	MI	MI	Y	N	44.2	Y	Unlikely
Red-tailed tropicbird ( <i>Phaethon rubricauda</i> )	P4 & MI	MI	Y	N	45.4	Y	Unlikely
Common tern ( <i>Sterna hirundo</i> )	MI	MI	Y	N	45.9	Y	Unlikely
Pacific golden plover ( <i>Pluvialis fulva</i> )	MI	MI	Y	N	46.1	Y	Unlikely

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

### Appendix C. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
<b>Environmental value: biological values</b>		
<p><u>Principle (a):</u> "Native vegetation should not be cleared if it comprises a high level of biodiversity."</p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared contains conservation significant flora, fauna and habitats.</p>	May be at variance (Changed from CPS 5572/2)	Yes <i>Refer to Section 3.2.1 and Section 3.2.2, above.</i>
<p><u>Principle (b):</u> "Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."</p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared contains habitat for conservation significant fauna.</p>	May be at variance (As per CPS 5572/2)	Yes <i>Refer to Section 3.2.2, above.</i>
<p><u>Principle (c):</u> "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."</p> <p><u>Assessment:</u></p> <p>No threatened flora are known to occur within a 50 kilometre radius of the application area. Therefore, threatened flora species are unlikely to occur within the application area.</p>	Not likely to be at variance (As per CPS 5572/2)	No
<p><u>Principle (d):</u> "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."</p> <p><u>Assessment:</u></p> <p>The flora and vegetation assessments over the application area did not detect any vegetation associations representative of a Threatened Ecological Community (TEC) (Biota, 2025b; Onshore, 2013; Spectrum, 2025; Umwelt, 2025). The application area is unlikely to support TECs known to the Pilbara (Biota, 2025b; DBCA, 2023).</p>	Not likely to be at variance (As per CPS 5572/2)	No
<b>Environmental value: significant remnant vegetation and conservation areas</b>		
<p><u>Principle (e):</u> "Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."</p> <p><u>Assessment:</u></p> <p>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).</p>	Not at variance (As per CPS 5572/2)	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Principle (h):</u> “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.”</p> <p><u>Assessment:</u></p> <p>Given the distance to the nearest conservation area (approximately 26 kilometres), the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.</p> <p>As the 80 Mile Beach Marine Park was proclaimed in 2014, this was not considered in the original permit assessment (DPIRD, 2025a).</p>	<p>Not likely to be at variance</p> <p>(Changed from CPS 5572/2)</p>	No
<b>Environmental value: land and water resources</b>		
<p><u>Principle (f):</u> “Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</p> <p><u>Assessment:</u></p> <p>Given one major and several minor watercourses are recorded within the application area, the proposed clearing is likely to result in the clearing of riparian vegetation.</p> <p><u>Condition</u></p> <p>To address the above impact, the following management measure will be required as a condition on the clearing permit:</p> <ul style="list-style-type: none"> <li>• where practicable, avoid clearing riparian vegetation.</li> </ul>	<p>At variance</p> <p>(As per CPS 5572/2)</p>	No
<p><u>Principle (g):</u> “Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</p> <p><u>Assessment:</u></p> <p>Clearing of riparian vegetation may lead to increased risk of erosion, particularly within the Horseflat and Paradise land systems (van Vreeswyk et al., 2004).</p> <p>Wind erosion may occur within the Nita land system, should the land be left cleared for a prolonged period of time (van Vreeswyk et al., 2004).</p> <p><u>Condition</u></p> <p>To address the above impact, the following management measure will be required as a condition on the clearing permit:</p> <ul style="list-style-type: none"> <li>• where practicable, avoid clearing riparian vegetation; and</li> <li>• a staged clearing condition to minimise erosion.</li> </ul>	<p>May be at variance</p> <p>(As per CPS 5572/2)</p>	No
<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>Advice received in relation to CPS 5572/1 indicates that the water quality of the De Grey River Water Reserve was unlikely to deteriorate due to clearing authorised under that permit (Department of Water, 2013). As the area of clearing allowed under CPS 5572/3 has not increased from previous versions of the permit, the impact is unlikely to have changed.</p> <p>The scale of the proposed clearing (110 hectares within a boundary of 6,817 hectares) is unlikely to result in significant salinisation.</p> <p>As three land systems within the application area susceptible to erosion, siltation of watercourses may occur, leading to a deterioration of surface water quality (van Vreeswyk et al., 2004).</p> <p><u>Condition</u></p> <p>To address the above impact, the following management measure will be required as a condition on the clearing permit:</p> <ul style="list-style-type: none"> <li>• where practicable, avoid clearing riparian vegetation; and</li> <li>• a staged clearing condition to minimise erosion.</li> </ul>	<p>May be at variance</p> <p>(Changed from CPS 5572/2)</p>	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>Not likely to be at variance</p> <p>(As per CPS 5572/2)</p>	No

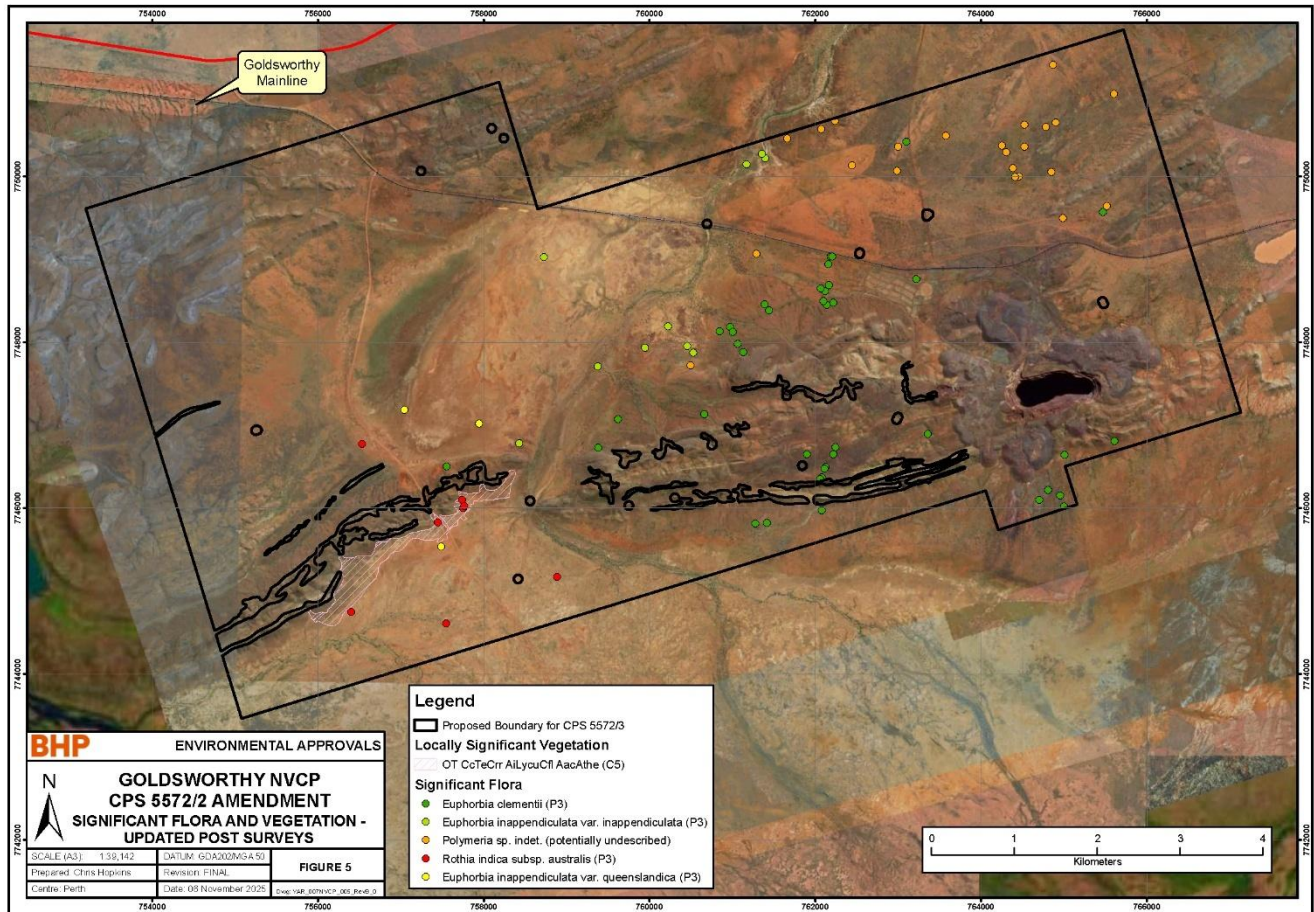
## Assessment against the clearing principles

Variance level

Is further consideration required?

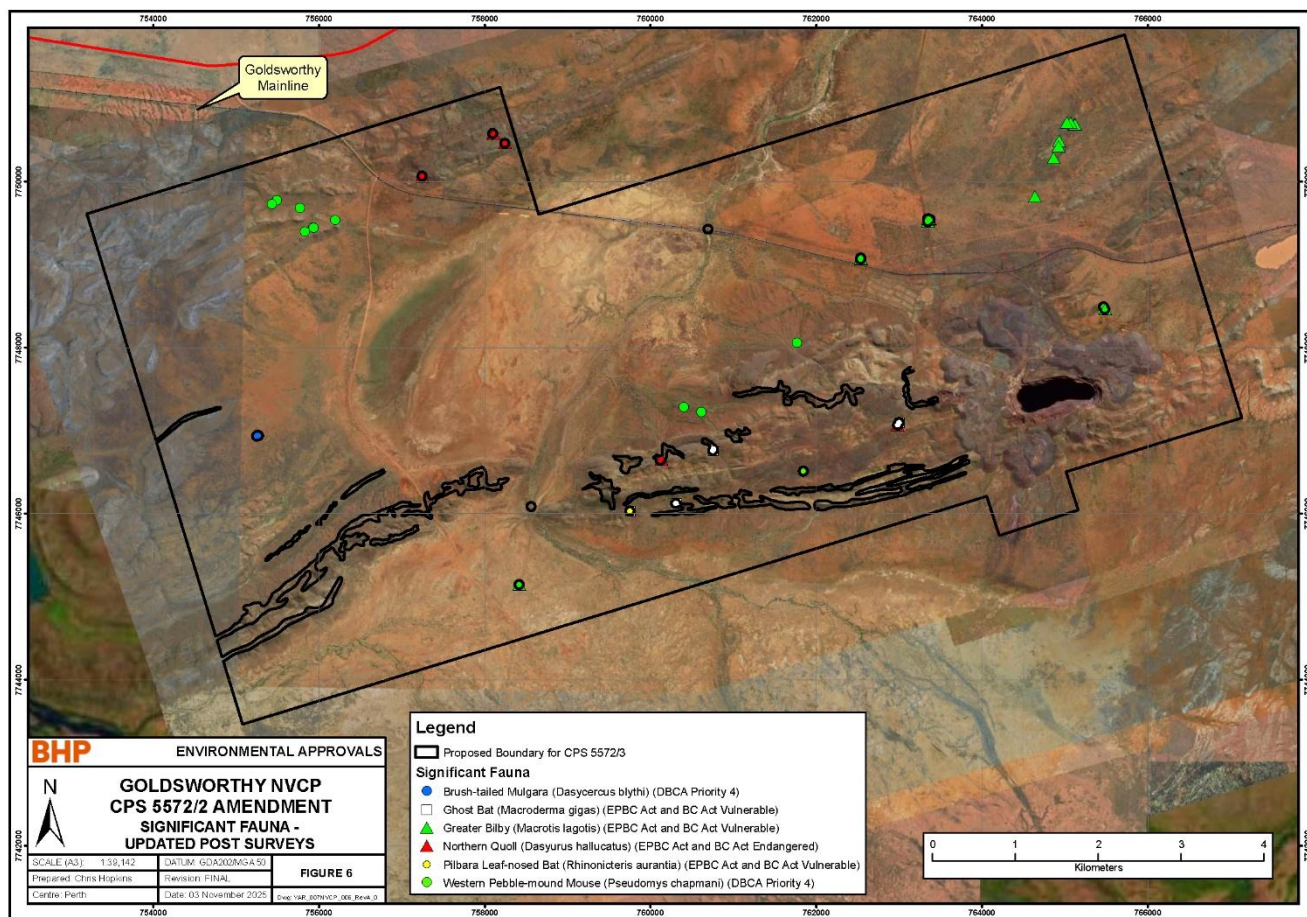
The scale of the proposed clearing (110 hectares within a boundary of 6,817 hectares) is unlikely to increase the risk of flooding.

## Appendix D. Map of significant flora and vegetation recorded within the application area









## Appendix E. Map of significant fauna recorded within the application area









## Appendix F. Spectrum (2025) vegetation types recorded within the application area

Vegetation type	Vegetation description	Associated species	Landform and condition	Representative photo
P1	<p><b>BHP: SA TeBeBuba AtpAanc Grwh</b></p> <p><i>Triodia epactia</i> Open Hummock Grassland with <i>Bonamia erecta</i> Low Open Shrubland with <i>Bulbostylis barbata</i> Scattered Sedges with <i>Acacia tumida</i> var. <i>pilbarensis</i>, <i>Acacia ancistrocarpa</i> Shrubland over <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> Open Shrubland on red, sandy plains.</p> <p><b>NVIS:</b> <i>Acacia tumida</i> var. <i>pilbarensis</i>, <i>Acacia ancistrocarpa</i> tall sparse shrubland, over <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> mid sparse shrubland, over <i>Triodia epactia</i> low open hummock grassland with <i>Bonamia erecta</i> low sparse shrubland with <i>Bulbostylis barbata</i> low isolated sedges.</p>	<p><i>Afrohybanthus aurantiacus</i>, <i>Bonamia linearis</i>, <i>Corchorus sidoides</i> subsp. <i>vermicularis</i>, <i>Eragrostis eriopoda</i>, <i>Goodenia microptera</i>, <i>Ptilotus fusiformis</i>, <i>Trianthema pilosum</i>, <i>Trigastrotheca molluginea</i>.</p>	<p>Red sandy pindan plains</p> <p>Excellent to Poor condition</p>	

C1	<p><b>BHP: GP TeErsErgg PtgoTrt</b>  <i>Triodia epactia</i> Open Hummock Grassland with <i>Eragrostis setifolia</i>, <i>Eriachne glauca</i> var. <i>glauca</i> Very Open Tussock Grassland over <i>Ptilotus gomphrenoides</i>, <i>Trianthema triquetrum</i> Very Open Herbs on clay to clay loam plains.</p> <p><b>NVIS:</b> <i>Eragrostis setifolia</i>, <i>Eriachne glauca</i> var. <i>glauca</i> low sparse tussock grassland with <i>Triodia epactia</i> low sparse hummock grassland, over <i>Ptilotus gomphrenoides</i>, <i>Trianthema triquetrum</i> low sparse forbland with <i>Fimbristylis dichotoma</i> low sparse sedgeland.</p>	<p><i>Aeschynomene indica</i>, *<i>Cenchrus ciliaris</i>, *<i>Cenchrus setiger</i>, <i>Dichanthium sericeum</i> subsp. <i>humilius</i>, <i>Eriachne benthamii</i>, <i>Eucalyptus victrix</i>, <i>Ipomoea coptica</i>, <i>Neptunia xanthanema</i>, <i>Pluchea tetranthera</i>, <i>Senna artemisioides</i> subsp. <i>oligophylla</i>. <i>Rothia indica</i> subsp. <i>australis</i> (P3)</p>	<p>Clay to clay loam plains.</p> <p>Very Good to Poor condition.</p>	
C2	<p><b>BHP: GP ErbErfcCybi StkLupAlno Seca</b>  <i>Eriachne benthamii</i>, <i>Eriachne flaccida</i> Tussock Grassland with <i>Cyperus bifax</i> Very Open Sedges over <i>Stemodia kingii</i>, <i>Ludwigia perennis</i>, <i>Alternanthera nodiflora</i> Very Open Herbs with <i>Sesbania cannabina</i> Open Shrubland on cracking clay gilgai plains.</p> <p><b>NVIS:</b> <i>Sesbania cannabina</i> mid sparse shrubland, over <i>Eriachne benthamii</i>, <i>Eriachne flaccida</i> mid tussock grassland with <i>Cyperus bifax</i> low sparse sedgeland, over <i>Stemodia kingii</i>, <i>Ludwigia perennis</i>, <i>Alternanthera nodiflora</i> low sparse forbland.</p>	<p><i>Bergia pedicellaris</i>, <i>Eragrostis setifolia</i>, <i>Eragrostis tenellula</i>, <i>Ipomoea diamantinensis</i>, <i>Marsilea hirsuta</i>, <i>Mimulus gracilis</i>, <i>Neptunia xanthanema</i>, <i>Euphorbia inappendiculata</i> var. <i>queenslandica</i> (P3)</p>	<p>Cracking clay gilgai plain</p> <p>Very Good to Poor condition.</p>	
C3	<p><b>BHP: OT TrtPtgoSif ChpErs</b>  <i>Trianthema triquetrum</i>, <i>Ptilotus gomphrenoides</i>, <i>Sida fibulifera</i> Open Herbs with <i>Chloris pectinata</i>, <i>Eragrostis setifolia</i> Very Open Tussock Grassland on red-brown cracking clay plains.</p> <p><b>NVIS:</b> <i>Eragrostis setifolia</i>, <i>Chloris pectinata</i> low sparse tussock grassland, over <i>Trianthema triquetrum</i>, <i>Ptilotus gomphrenoides</i>, <i>Sida fibulifera</i> low sparse forbland.</p>	<p><i>Abutilon malvifolium</i>, <i>Arivela viscosa</i>, <i>Boerhavia coccinea</i>, <i>Corchorus tridens</i>, <i>Dichanthium sericeum</i> subsp. <i>humilius</i>, <i>Iseilema vaginiflorum</i>, <i>Rhynchosia minima</i>, <i>Sporobolus australasicus</i>, <i>Streptoglossa odora</i>, <i>Euphorbia inappendiculata</i> var. <i>queenslandica</i> (P3)</p>	<p>Red-brown cracking clay plains.</p> <p>Poor condition.</p>	
C4	<p><b>BHP: OT SpauDarXb PtgoTrtAlm</b>  <i>Sporobolus australasicus</i>, <i>Dactyloctenium radulans</i>, <i>Xerochloa barbata</i> Open Tussock Grassland with <i>Ptilotus gomphrenoides</i>, <i>Trianthema triquetrum</i>, <i>Alysicarpus muelleri</i> Open Herbs on clay plains.</p> <p><b>NVIS:</b> <i>Sporobolus australasicus</i>, <i>Dactyloctenium radulans</i>, <i>Xerochloa barbata</i> low sparse tussock grassland, over <i>Alysicarpus muelleri</i>, <i>Ptilotus</i></p>	<p><i>Arivela viscosa</i>, <i>Euphorbia coghlanii</i>, <i>Heliotropium ammophilum</i>, <i>Heliotropium crispatum</i>, <i>Indigofera linifolia</i>, <i>Senna artemisioides</i> subsp. <i>oligophylla</i>, <i>Urochloa distachyos</i>, <i>Euphorbia inappendiculata</i></p>	<p>Clay plain</p> <p>Very Good to Poor condition.</p>	



	<i>gomprenoides</i> , <i>Trianthema triquetrum</i> low open forbland.	var. <i>queenslandica</i> (P3)		
C5	<p><b>BHP: OT CcTeCrr AiLycuCfl AacAthe</b></p> <p>*<i>Cenchrus ciliaris</i> Tussock Grassland with <i>Triodia epactia</i> Very Open Hummock Grassland over <i>Crotalaria ramosissima</i> Very Open Herbs with <i>Acacia inaequilatera</i>, <i>Lysiphyllum cunninghamii</i>, <i>Corymbia flavescens</i> Low Woodland over <i>Acacia acradenia</i>, <i>Atalaya hemiglauc</i> Open Shrubland on the sandy clay fringes of clay plains.</p> <p><b>NVIS:</b> <i>Lysiphyllum cunninghamii</i>, <i>Corymbia flavescens</i>, <i>Acacia inaequilatera</i> low open woodland, over <i>Atalaya hemiglauc</i>, <i>Acacia acradenia</i> mid sparse shrubland, over *<i>Cenchrus ciliaris</i> low open tussock grassland with <i>Triodia epactia</i> low sparse hummock grassland with <i>Crotalaria ramosissima</i> low sparse forbland.</p>	<p><i>Boerhavia coccinea</i>, <i>Carissa lanceolata</i>, <i>Euphorbia coghlanii</i>, <i>Hakea lorea</i> subsp. <i>lorea</i>, <i>Indigofera colutea</i>, <i>Josephinia eugeniae</i>, <i>Tribulopsis angustifolia</i>. <i>Rothia indica</i> subsp. <i>australis</i> (P3), <i>Euphorbia clementii</i> (P3)</p>	<p>Sandy clay fringe of clay plains.</p> <p>Very Good to Poor condition</p>	
S1	<p><b>BHP: UH TeAhiAaa GrwhAi</b></p> <p><i>Triodia epactia</i> Open Hummock Grassland with <i>Acacia hilliana</i>, <i>Acacia adoxa</i> var. <i>adoxa</i> Low Open Shrubland with <i>Grevillea wickhamii</i> subsp. <i>hispidula</i>, <i>Acacia inaequilatera</i> Open Shrubland on low, undulating hills with granite and ironstone.</p> <p><b>NVIS:</b> <i>Grevillea wickhamii</i> subsp. <i>hispidula</i>, <i>Acacia inaequilatera</i> mid sparse shrubland, over <i>Acacia adoxa</i> var. <i>adoxa</i>, <i>Acacia hilliana</i> low sparse shrubland with <i>Triodia epactia</i> low open hummock grassland</p>	<p><i>Bonamia pilbarensis</i>, <i>Bulbostylis barbata</i>, <i>Dolichocarpa crouchiana</i>, <i>Eriachne pulchella</i> subsp. <i>dominii</i>, <i>Polygala glaucifolia</i>, <i>Ptilotus calostachyus</i>, <i>Tribulus hirsutus</i>. <i>Euphorbia clementii</i> (P3)</p>	<p>Low undulating hills with granite and ironstone</p> <p>Excellent to Very Good condition.</p>	
S2	<p><b>BHP: HS TeTwAaa EoCh Aac</b></p> <p><i>Triodia epactia</i>, <i>Triodia wiseana</i> Hummock Grassland with <i>Acacia adoxa</i> var. <i>adoxa</i> Low Open Shrubland with <i>Eucalyptus odontocarpa</i> Very Open Mallee with <i>Corymbia hamersleyana</i> Scattered Low Trees over <i>Acacia acradenia</i> Low Scattered Shrubs on low, undulating hills with granite and ironstone.</p> <p><b>NVIS:</b> <i>Corymbia hamersleyana</i> low isolated trees with <i>Eucalyptus odontocarpa</i> mid open mallee woodland, over <i>Acacia acradenia</i> low isolated shrubs, over <i>Acacia adoxa</i> var. <i>adoxa</i> low sparse shrubland with <i>Triodia epactia</i>, <i>Triodia wiseana</i> low hummock grassland</p>	<p><i>Bonamia pilbarensis</i>, <i>Bulbostylis barbata</i>, <i>Indigofera monophylla</i>, <i>Polycarpaea holtzei</i>, <i>Nellica maderaspatensis</i> (now <i>Phyllanthus maderaspatensis</i>).</p>	<p>Low undulating hills with granite and ironstone.</p> <p>Excellent condition.</p>	

S3	<p><b>BHP: UH TeBubaFidi AmApyp</b>  <i>Triodia epactia</i> Open Hummock Grassland with <i>Bulbostylis barbata</i>, <i>Fimbristylis dichotoma</i> Very Open Sedges with <i>Acacia monticola</i>, <i>Acacia pyrifolia</i> var. <i>pyrifolia</i> Shrubland on low, undulating hills with granite and ironstone.</p> <p><b>NVIS:</b> <i>Acacia monticola</i>, <i>Acacia pyrifolia</i> var. <i>pyrifolia</i> mid sparse shrubland, over <i>Triodia epactia</i> low sparse hummock grassland with <i>Bulbostylis barbata</i> and <i>Fimbristylis dichotoma</i> low sparse sedgeland.</p>	<p><i>Bonamia pilbarensis</i>, <i>Eriachne mucronata</i>, <i>Senna notabilis</i>, <i>Tribulus hirsutus</i>, <i>Triumfetta propinqua</i>.</p>	<p>Low undulating hills with granite and ironstone</p> <p>Excellent condition.</p>	
G1	<p><b>BHP: GU TeciAiEhss</b>  <b>TeErmuCc Calc</b>  <i>Terminalia circumalata</i>, <i>Acacia inaequilatera</i>, <i>Ehretia saligna</i> var. <i>saligna</i> Low Woodland over <i>Triodia epactia</i> Open Hummock Grassland with <i>Eriachne mucronata</i>, <i>*Cenchrus ciliaris</i> Very Open Tussock Grassland with <i>Carissa lanceolata</i> Scattered Shrubs on gullies and ridges with banded ironstone outcropping.</p> <p><b>NVIS:</b> <i>Terminalia circumalata</i>, <i>Ehretia saligna</i> var. <i>saligna</i>, <i>Acacia inaequilatera</i> low woodland, over <i>Carissa lanceolata</i> mid isolated shrubs, over <i>Eriachne mucronata</i>, <i>*Cenchrus ciliaris</i> low sparse tussock grassland with <i>Triodia epactia</i> low sparse hummock grassland.</p>	<p><i>Abutilon lepidum</i>, <i>Afrohybanthus aurantiacus</i>, <i>Bulbostylis barbata</i>, <i>Corchorus parviflorus</i>, <i>Evolvulus alsinoides</i> var. <i>villosicalyx</i>, <i>Sida macropoda</i>, <i>Trachymene oleracea</i> subsp. <i>oleracea</i>.</p>	<p>Gullies and ridges with banded ironstone outcropping.</p> <p>Excellent to Very Good condition.</p>	
D1	<p><b>BHP: MI AacAtpGrwh TeBe</b>  <b>EoCh</b>  <i>Acacia acradenia</i>, <i>Acacia tumida</i> var. <i>pilbarensis</i>, <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> Open Heath over <i>Triodia epactia</i> Open Hummock Grassland with <i>Bonamia erecta</i> Low Open Shrubland with <i>Eucalyptus odontocarpa</i> Very Open Mallee with <i>±Corymbia hamersleyana</i> Low Open Woodland on minor drainage lines between hills.</p> <p><b>NVIS:</b> <i>±Corymbia hamersleyana</i>, <i>Eucalyptus odontocarpa</i> low open woodland, over <i>Acacia tumida</i> var. <i>pilbarensis</i>, <i>Grevillea wickhamii</i> subsp. <i>hispidula</i>, <i>Acacia acradenia</i> mid shrubland, over <i>Bonamia erecta</i> low sparse shrubland with <i>Triodia epactia</i> low open hummock grassland</p>	<p><i>Acacia inaequilatera</i>, <i>Acacia monticola</i>, <i>Afrohybanthus aurantiacus</i>, <i>Eriachne pulchella</i> subsp. <i>dominii</i>, <i>Polycarpaea holtzei</i>, <i>Ptilotus calostachyus</i>, <i>Trigastrotheca molluginea</i>.</p>	<p>Minor drainage lines between hills.</p> <p>Excellent to Good condition</p>	
Cleared	<p>Completely degraded land within the Survey Area with little to no vegetation structure</p>	-	<p>Completely Degraded</p>	-

## Appendix G. Sources of information

### G.1. GIS datasets

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

- CAWSA Part 2A Clearing Control Catchments (DWER-004)
- Clearing Instruments Activities (Areas Approved to Clear) (DWER-076)
- Clearing Instruments Conditions (Areas Subject to Conditions) (DWER-077)
- Clearing Instruments Proposals (Areas Applied to Clear) (DWER-075)
- 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)
- EPA Referred Schemes Pending (DWER-121)
- EPA Referred Significant Proposals (DWER-120)
- EPA Referred Significant Proposals Pending (DWER-103)
- Groundwater Salinity Statewide (DWER-026)
- IBRA Vegetation Statistics
- Local Government Area (LGA) Boundaries (LGATE-233)
- Localities (LGATE-234)
- Native Title (Determination) (LGATE-066)
- Native Title (Fed Court) (LGATE-005)
- Native Title (ILUA) (LGATE-067)
- Native Title (NNTT) (LGATE-004)
- Native Vegetation Extent (DPIRD-005)
- Pre-European Vegetation (DPIRD-006)
- Public Drinking Water Source Areas (DWER-033)
- Regional Parks (DBCA-026)
- Reserves (LGATE-227)
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Rivers (DWER-036)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping - Best Available (DPIRD-027)
- Soil Landscape Mapping - Systems (DPIRD-064)
- Surface Water Management Areas (DWER-041)
- Surface Water Management Subareas (DWER-042)
- Townsites (LGATE-248)
- WA Now Aerial Imagery

Restricted GIS Databases used:

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

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## 4. Glossary

### Acronyms:

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



**Definitions:**

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

**Threatened species**

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

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

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

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

**CR Critically endangered species**

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

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

**EN Endangered species**

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

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

**VU Vulnerable species**

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

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

**Extinct species**

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

**EX Extinct species**

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

**EW Extinct in the wild species**

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

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

**Specially protected species****SP Specially protected species**

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

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

**MI Migratory species**

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that

binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

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

**CD Species of special conservation interest (conservation dependent fauna)**

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

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

**OS Other specially protected species**

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

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

**Priority species**

**P Priority species**

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

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

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

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

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

**P1 Priority One - Poorly-known species – known from few locations, none on conservation lands**

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, for example, agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation.

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

**P2 Priority Two - Poorly-known species – known from few locations, some on conservation lands**

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

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

**P3 Priority Three - Poorly-known species – known from several locations**

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

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

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

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

**Principles for clearing native vegetation:**

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