Department of Mines, Petroleum and Exploration

GOVERNMENT OF WESTERN AUSTRALIA

Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	6824/4
Permit type:	Purpose permit
Applicant name:	Karora (Higginsville) Pty Ltd
Application received:	15 May 2025
Application area:	630 hectares
Purpose of clearing:	Mineral Production
Method of clearing:	Mechanical removal
Tenure:	General Purpose Lease 63/6 Mining Lease 63/366 and 63/516
Location (LGA area):	Shire of Dundas
Colloquial name:	Mt Henry Mine Project

1.2. Description of clearing activities

Karora (Higginsville) Pty Ltd proposes to clear up to 630 hectares of native vegetation within a boundary of approximately 944.47 hectares, for the purpose of mineral production (Karora, 2025). The project is located approximately 15 kilometres south of Norseman, within the Shire of Dundas (GIS Database).

Clearing permit CPS 6824/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Petroleum and Exploration) on 24 December 2015 and was valid from 16 January 2016 to 31 January 2021. The permit authorised the clearing of up to 470 hectares of native vegetation within a boundary of approximately 477 hectares, for the purpose of mineral production.

CPS 6824/2 was granted on 30 March 2017, amending the permit to increase the amount of clearing authorised to 630 hectares, increase the permit boundary, and adding General Purpose Lease 63/6. On 15 August 2020, the Permit Holder applied to amend CPS 6824/2 to extend the permit duration by five years.

CPS 6824/3 was granted on 15 October 2020, amending the permit to extend the permit duration, no other changes were made.

On 15 May 2025, the permit holder applied to amend CPS 6824/3 to extend the permit duration and update the company name, no other changes were made. No clearing has been reported under this permit to date.

The proposed clearing is for the development of new open pits, waste dumps, roads, stockpiles, run of mine, office areas, lay downs, workshop and other required supporting infrastructure. Vegetation and topsoil will be stockpiled for rehabilitation.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	27 January 2026
Decision area:	630 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 Mines, Petroleum and Exploration (DMPE) advertised the application for a public comment for a period of 7 days, and no submissions were received.

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

The assessment identified that the proposed clearing may result in:

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

- impacts to conservation significant flora;
- the loss of native vegetation that is suitable habitat for conservation significant flora;
- the loss of native vegetation that is suitable habitat for conservation significant fauna;
- potential sedimentation into Lake Dundas due to the removal of vegetation cover; and
- potential land degradation in the form of wind and water erosion.

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

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

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity;
- commence construction no later than three months after undertaking clearing to reduce the risk of erosion;
- watercourse management to avoid riparian vegetation and maintain existing water flow;
- a fauna management (malleefowl) condition requiring areas proposed to be cleared between 1 September and 31 January are inspected to identify active (in use) malleefowl mounds, and to maintain a 200 metre buffer around identified active mounds;
- a fauna management (western rosella and central long-eared bat) condition requiring areas proposed to be cleared to be surveyed to identify hollow trees suitable for habitation by this species, and no clearing within 10 metres of identified hollow trees;
- a fauna management (ABAB) condition requiring areas proposed to be cleared to be surveyed to identify potential critical habitat, ant colonies and ABAB individuals, and no clearing within 100 metres of ant colonies; and
- a fauna management (inland hairstreak butterfly) condition requiring areas proposed to be cleared to be surveyed to identify potential critical habitat and inland hairstreak individuals, and no clearing within 50 metres of inland hairstreak butterfly host plants.

The assessment has not changed since the assessment for CPS 6824/3, except in the case of principle (c) that have considered recently updated information on species, guidance documents, records and the impacts to priority species. The Delegated Officer determined that the proposed extension of the permit duration is not likely to lead to an unacceptable risk to environmental values.

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
- the polluter pays principle.

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* (Cath) (EPBC Act)
- *Mining Act 1978* (WA)
- *Rights in Water and Irrigation Act 1914* (RIWI Act)

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 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. The applicant has stated the minimal area required for mining disturbance will be cleared (Karora, 2025). Further impacts to environmental values can be managed under conditions.

3.2. Assessment of impacts on environmental values

A review of current environmental information (Appendix A) reveals that the assessment against the clearing principles has not changed significantly from the clearing permit decision report CPS 6824/4, except for principle (c) which require further consideration. Updated information on flora and fauna species known within 20 kilometres of the application area has been incorporated into this assessment.

3.2.1. Biological values (flora) - Clearing principles (a) and (c)

Assessment

Threatened flora
No threatened flora has previously been recorded within the application area; however, the application area contains suitable habitat for two threatened species; *Allocasuarina globosa* and *Bossiaea arcuata*, which known to occur within the local surrounds (20 kilometres) (GIS Database, WA Herbarium, 1998-).

Allocasuarina globosa occurs in red-brown clays, loams and sandy clay loams on laterite and greenstone ridges, hills and slopes, often in thickets of *Allocasuarina globosa* and *A. campestris* or open mallee woodland or shrublands (WA Herbarium, 1998-). Suitable habitat is present within the application area, and records of this species have been identified within 10 kilometres (GIS Database). Given the application area's proximity to records of this species, and its isolation from majority of other records, if this species were to be present within the application area, clearing of this species would be significant at a local and regional scale.

Bossiaea arcuata was upgraded from a Priority 1 species to a Threatened species in July 2025, because of its restricted area of occupancy and limited number of known locations (DBCA, 2025). *Bossiaea arcuata* is confined to the southern portion of the Coolgardie Eastern Goldfield IBRA Subregion where it is restricted to the Picnic Lake, Keys Rock area southwest of Norseman in the Great Western Woodlands (DCCEEW, 2025). The application area is situated within an area mapped as where this species or its habitat may occur and was previously considered likely to occur within the application area (DCCEEW, 2025; Mattiske, 2013). *Bossiaea arcuata* occurs in deep white sand on the perimeter of salt lakes, often associated with *Melaleuca acuminata* subsp*. acuminata*, *M. exuvia, M. hamulosa, Eucalyptus loxophleba*, *E. prolixa*, *E. yilgarnensis*, *Carpobrotus modestus*, *Santalum acuminatum*, *Conostephium drummondii, Persoonia helix, Scaevola spinescens*, and *Alyxia buxifolia* (DCCEEW, 2025). The application area contains some suitable vegetation, and habitat features for this species to occur.

Given this species recent upgraded conservation status and the presence of potentially suitable habitat within the application area, there is potential this species could be present within the application area. If this species were to be present the clearing of this species would have a significant local and regional impact on this species.

Priority flora
The following priority flora species have known locations within the application area and were conditioned for protection within the previous clearing permit (Mattiske, 2013):

- *Eucalyptus jimberlanica;*
- *Philotheca apiculata;*
- *Cyathostemin* sp. Salmon Gums*;*
- *Eremophila purpurascens;*
- *Eucalyptus brockwayi; and*
- *Goodenia laevis* subsp. *laevis*.

Priority flora species *Cyathostemin* sp. Salmon Gums and *Goodenia laevis* subsp. *laevis* were previously considered in previous decision reports, however it is noted that since the granting of CPS 6824/3, these priority flora species have since been removed from the Department of Biodiversity, Conservation and Attractions (DBCA) list of priority flora species. Given these species are now considered not threatened, avoidance of these species is no longer required, however the clearing of native vegetation should be avoided and minimised where practicable.

During the assessment of this application the delegated officer identified 11 additional priority flora species as potentially occurring in the application area (Appendix A.3). Of these, the following three species are considered to be significantly impacted if they were to be present and removed as a result of the clearing.

> *Angianthus newbeyi* (P2) is known from few records, one recent record at Lake Dundas and two historic (1979 and 1980) within conservation estate, this species is known from saline soils adjacent to salt lakes, often with chenopod scrub. Given there are few recent records of this species, if present within the application area, the clearing of this species would likely have a significant impact to this species at a local and regional level.

Bossiaea aurantiaca (P1) is known from thirteen records from Norseman and Lake Cowan areas, with no known records within conservation estate (WA Herbarium, 1998-; GIS Database). This species inhabits red sand, red clay loam in low-lying, winter-damp areas, and was previously considered likely to occur (Mattiske, 2013; WA Herbarium, 1998-). Given this species appears to be restricted in range and has no records within conservation estate, if this species were to be present within the application area, the clearing of this species would likely impact this species at a local and regional level.

Cryptandra exserta (P1) is known from three records from Dundas and Lake Grace areas, with no known records within conservation estate (WA Herbarium, 1998-; GIS Database). This species inhabits sandy soil with laterite gravel, red sand over clay on gentle mid-slopes and plains (WA Herbarium, 1998-; GIS Database). Given this species appears to be restricted in range and has no records within conservation estate, if this species were to be present within the application area, the clearing of this species would likely impact this species at a local and regional level.

Conclusion

The area proposed to be cleared contains suitable habitat for several conservation significant flora species (Section A.3), and the proposed clearing is likely to have a significant impact on these species if present within the application area.

Conditions regarding priority flora species known to occur within the application area will be retained on the permit for the conservation of these species. Given the age of the flora surveys, (more than 10 years) there is potential for additional conservation significant flora species to have dispersed into the application area, recent reviews have identified the requirement for pre-clearance flora surveys to be undertaken prior to clearing to accurately identify the potential risks of the proposed clearing.

Conditions

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- no clearing occurs within ten metres of priority flora species locations provided in Appendix E of the report titled ‘Flora and Vegetation Survey of the Mt Henry Survey Area, September 2013’ and within Appendix 6 of the report titled ‘Level 1 Flora and Vegetation Survey of the Mt Henry Project, December 2016’; and
- flora management measures to carry out a pre-clearance flora survey to demarcate and avoid the clearing of priority and threatened species.

3.2.2. Biological values (fauna) - Clearing principle (b)

Assessment

Central long eared bat (*Nyctophilus major tor*, P3)
The central long-eared bat inhabits dry woodlands and shrublands in arid and semi-arid regions (Menkhorst & Knight, 2011), this species mainly roosts within tree hollows or under loose bark and in other crevices (Menkhorst & Knight, 2011). Acoustic recordings from the application area and surrounds identified calls from *Nyctophilus* sp. but could not be identified beyond a genus level, however, the central long-eared bat likely occurs within eucalyptus woodlands of the application area (Western Wildlife, 2013).

Western Brush Wallaby (*Notamacropus Irma,* P4)
The Western Brush Wallaby may occur in woodland and shrubland habitats, however, the application area represents the extreme eastern edge of this species range (Western Wildlife, 2021). These species may utilise the application area for foraging, but it is not likely to represent significant habitat for this species.

Western Rosella (inland) (*Platycercus icterotis xanthogenys*, P4)
The western rosella (inland) has a patchy distribution within the Great Western Woodlands; this species is now primarily recorded along its south-western edge and south and east of Norseman. Within its range, this species inhabits drier eucalypt and sheoak woodlands and nests in tree hollows, showing a preference for marri (*Corymbia calophylla*), wandoo (*Eucalyptus wandoo*), york gum (*E. loxophleba*), flooded gum (*E. rudis*), and salmon gum (*E. salmonophloia*) (DEC, 2009). Preferred nesting trees, york gum (*E. loxophleba* subsp. *lissophloia* and subsp. *loxophleba*), are present within Woodlands 1 and Shrublands 2 vegetation communities, in addition to various eucalypt species (NVS, 2016).

Western Wildlife (2013) recorded multiple occurrences of the western rosella during the 2013 fauna survey, and determined the western rosella is likely a widespread breeding resident of eucalypt woodlands within the application area. Eucalypts within the application area were considered likely to provide suitable tree hollows for hollow nesting species, including the western rosella (Western Wildlife, 2013). Modelling of seasonal western rosella distribution indicates in non-breeding seasons western rosellas may move around the landscape, however during breeding season restrict themselves to breeding territories (Fox et al., 2016). Given this species known presence within the application area, likelihood of being a breeding resident and patchy distribution, hollow availability should be assessed, and hollows should be retained for the conservation of this species.

Malleefowl (*Leipoa ocellata*, VU)
Malleefowl occur in semi-arid to arid shrublands and low woodlands dominated by mallee, with sandy or loamy substrates and abundant leaf litter for the construction of mounds (National Malleefowl Recovery Team, 2016). The application area contains suitable habitat for malleefowl within shrubland and woodland habitats; however, it is unknown whether this species is still extant within the application area (Western Wildlife, 2013). Seven old malleefowl mounds were previously recorded in the Western Wildlife (2013) fauna survey area. Given that malleefowl are known to previously occur within the application area and large areas of suitable foraging and breeding habitat are still present within the application area, a fauna management condition is recommended to minimise the potential impact of the proposed clearing on this species.

Peregrine falcon (*Falco peregrinus*, OS)
The Peregrine falcon was recorded within a tree above the existing open pit at Mt Henry, and this species likely forages throughout open parts of the application area (Western Wildlife, 2013). The Peregrine falcon nests on ledges of cliffs, rocky outcrops, quarries, and tall trees, and may potentially nest within the application area (Australian Museum, 2019; Western Wildlife, 2013). However, suitable foraging and breeding habitat is not restricted to the application area.

Shorebirds and waterbirds
Lake Dundas is known to support the hooded plover (*Thinornis cucullatus*) and red-necked stint (*Calidris ruficollis*) and may support other waterbirds such as the crested shrike-tit – *Falcunculus whitei* (previously recorded within the application area) and blue billed duck – *Oxyura australis* during winter (Western Wildlife, 2013). Approximately 205 hectares of Lake Dundas intersects the application area, given the size of Lake Dundas, approximately 28,000 hectares, it is unlikely that the proposed clearing will significantly impact habitat for these species.

Arid bronze azure butterfly (*Ogyris petrina*, CR)
Since the granting of CPS 6824/3, the arid bronze azure butterfly (ABAB) has been listed as critically endangered under the *Biodiversity Conservation Act 2016*. ABAB populations are severely fragmented, restricted in geographic range, and sensitive to clearing and habitat disturbance (DBCA, 2020). ABAB has an obligate association with the sugar ant *Camponotus* sp. nr. *terebrans* (DBCA, 2020). Habitat where this species has previously been described is vegetation of mature mixed gimlet (*Eucalyptus salubris*), salmon gum woodlands on red-brown loam soils, with an open understorey (DBCA, 2020). In addition to gimlet and salmon gum, other smooth-barked eucalyptus wandoo, smooth-barked york gum (*E. loxophleba* subsp. *lissophloia)* and ribbon barked mallee (*E. sheathiana*) at these sites had basal ant colonies. The application area is known to contain salmon gums (NVS, 2016). These areas of undisturbed open eucalypt woodland, which are present within the application area, may provide suitable habitat for this species, as information regarding this species is limited the precautionary principle should be applied.

Inland hairstreak (*Jalmenus aridus*, P2)
Since the granting of CPS 6824/3, the inland hairstreak has been listed as Priority 2 under DBCA Priority fauna list. The inland hairstreak inhabits open woodlands with a mixture of young and mature *Senna artemisioides* subsp. *filifolia* shrubs, a variety of flowering shrubs (*Eremophila* sp., *Scaevola* sp., and *Maireana* sp.), some scattered taller vegetation (*Allocasuarina* sp., *Santalum* sp.) and open areas of exposed, well-drained ground adjoining *Senna* hostplants (Eastwood et al., 2023). Most breeding sites have been found on clay loam on relatively flat ground or adjoining seasonal floodplains (Eastwood et al., 2023). The application area contains *Senna artemisioides* subsp. *filifolia, Eremophila* spp., *Maireana* spp., *Allocasuarina* spp., and *Santalum* spp. within shrubland and woodland habitats (NVS, 2016). The inland hairstreak has a mutualistic association with *Froggattella kirbii* ants, these ants are often found at the base of *Senna* hostplants (Eastwood et al., 2023), however the presence of *F. kirbii* within the application area is unknown. As the application area contains suitable vegetation for this species the presence of *Froggattella kirbii* ants should be investigated to determine if the application area contains critical habitat for this species.

Rainbow bee-eater (*Merops ornatus*, LC)
The rainbow bee-eater was previously considered in earlier amendments of CPS 6824, it is noted that since the granting of CPS 6824/3, the rainbow bee-eater has since been removed from the list of migratory species under section 209 of the EPBC Act in 2016 and is no longer listed as a migratory bird by the Japan-Australia Migratory Bird Agreement (JAMBA). However, this species is listed as a marine species under section 248 of the EPBC Act. Given this bird's migratory habits, the widespread nature of this species, and the expanse of native vegetation surrounding the application area, it is unlikely that the proposed clearing will significantly impact the conservation status of this species.

Conclusion
The area proposed to be cleared contains suitable habitat for the following fauna species and the proposed clearing is likely to have an impact on these species if present within the application area;

- central long-eared bat (*Nyctophilus major tor*)
- western rosella (inland) (*Platycercus icterotis xanthogenys*)
- malleefowl (*Leipoa ocellata*)
- inland hairstreak (*Jalmenus aridus*)

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;
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity;
- a fauna management (malleefowl) condition requiring areas proposed to be cleared between 1 September and 31 January are inspected to identify active (in use) malleefowl mounds, and to maintain a 200 metre buffer around identified active mounds;
- a fauna management (western rosella and central long-eared bat) condition requiring areas proposed to be cleared to be surveyed to identify hollow trees suitable for habitation by these species, and no clearing within 10 metres of identified hollow trees;
- a fauna management (ABAB) condition requiring areas proposed to be cleared to be surveyed to identify potential critical habitat, ant colonies and ABAB individuals, and no clearing within 100 metres of ant colonies; and
- a fauna management (inland hairstreak butterfly) condition requiring areas proposed to be cleared to be surveyed to identify potential critical habitat and inland hairstreak individuals, and no clearing within 50 metres of inland hairstreak butterfly host plants.

3.3. Relevant planning instruments and other matters

The clearing permit amendment application was advertised on 22 July 2025 by the Department of Mines, Petroleum and Exploration inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim (Ngadju - WAD6020/1998) over the area under application (DPLH, 2025). This claim has 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 are one 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 malleefowl (*Leipoa ocellata*), which are a protected matter under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). The proponent may be required to refer the project to the (Commonwealth) Department of Climate Change, Energy, the Environment and Water for environmental impact assessment under the EPBC Act. The proponent is advised to contact the Department of Climate Change, Energy, the Environment and Water for further information regarding notification and referral responsibilities under the EPBC Act.

Other relevant authorisations required for the proposed land use include:

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

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

End

Appendix A. Site characteristics

A.1. Site characteristics

Characteristic	Details
Local context	The area proposed to be cleared is part of a tract of native vegetation adjacent to the Mt Henry Mine and Lake Dundas within the extensive land use zone of Western Australia (GIS Database). The predominant land use in the Eastern Goldfields subregion (COO3) is UCL, Crown reserves, grazing-native pasture leasehold, freehold, conservation and mining leases (CALM, 2002).
Ecological linkage	According to available databases, the application area does not contain any known or mapped ecological linkages (GIS Database).
Conservation areas	Within the local surrounds (20 kilometres) there are two conservation areas; Brockway Timber Reserves, directly north of the application area, and Dundas Nature Reserve approximately 11 kilometres east of the application area (GIS Database).
Vegetation description	The application area occurs within the IBRA Coolgardie bioregion in the Eastern Goldfields Eastern Murchison subregion (COO3) (GIS Database). The vegetation of the application area is broadly mapped as the following Beard vegetation associations: • **Dundas 125:** Bare areas; salt lake; • **Dundas 221:** Succulent steppe; saltbush & bluebush; and • **Dundas 3106:** Medium woodland; salmon gum & Dundas blackbutt (Government of Western Australia, 2019; GIS Database). A flora and vegetation survey was conducted over the application area by Mattiske during October 2012 and June 2013, a flora survey was also undertaken by Native Vegetation Solutions (NVS) during March 2015, February and August 2016. The following vegetation associations were recorded within the application area (Mattiske, 2013; NVS, 2016): **Shrublands** • **S1:** Open low shrubland of *Eremophila scoparia*, *Scaevola spinescens* and *Eremophila glabra* subsp. *glabra* over *Atriplex vesicaria*, *Tecticornia* spp., *Frankenia desertorum* and *Disphyma crassifolium* subsp. *clavellatum* with emergent *Eucalyptus* spp. on orange-brown sandy clay loam on flats, lower slopes and mid slopes of salt lake margins. • **S2:** Open low shrubland to low shrubland of *Tecticornia* spp., *Lawrencia squamata*, *Hemichroa diandra*, *Atriplex nana*, *Frankenia* spp. and *Disphyma crassifolium* subsp. *clavellatum* on pale sands on flats around salt lake margins. • **S3**: Scrub of *Acacia jibberdingensis*, *Melaleuca uncinata*, *Grevillea anethifolia*, *Allocasuarina campestris* and *Acacia ?burkittii* over *Beyeria sulcata* var. *brevipes* and *Alyxia buxifolia* with occasional emergent *Eucalyptus loxophleba* subsp. *lissophloia* over sparse mixed herbs on orange sandy loams around granite outcropping on slopes, flats and micro channels. The community changes to an open low woodland of *Eucalyptus loxo*phleba subsp. *lissophloia* in areas associated with micro channels and between the granite outcropping and salt lake. • **S4:** Open scrub to scrub of *Acacia burkittii* and *Allocasuarina campestris* with occasional *Acacia neurophylla* subsp. *neurophylla* and occasional emergent *Eucalyptus griffithsii* over *Dodonaea microzyga* var. *acrolobata*, *Trymalium myrtillus* subsp. *myrtillus*, *Scaevola spinescens* and *Dampiera latealata* over *Lepidosperma* sp. aff. *lyonsii* and small annual and perennial herbs on red to brown clayey loam on flats, slopes, valleys and micro channels. **Woodlands** • **W1:** Woodland to open woodland of *Eucalyptus dundasii*, *Eucalyptus torquata* and other mixed *Eucalyptus* spp. over *Melaleuca sheathiana*, *Exocarpos aphyllus*, *Scaevola spinescens*, *Alyxia buxifolia*, *Eremophila glabra* subsp. *glabra* and *Pomaderris forrestiana* over *Westringia rigida* and *Ptilotus obovatus* on orange-brown clayey loam with gravel on slopes and ridges. • **W2:** Woodland of *Eucalyptus urna*, *Eucalyptus lesouefii* and *Eucalyptus oleosa* subsp. *oleosa* and other mixed *Eucalyptus* spp. over *Melaleuca sheathiana*, *Exocarpos aphyllus*, *Scaevola spinescens* and *Eremophila scoparia* over *Olearia muelleri* and *Westringia rigida* on orange sandy clayey loam on flats and slopes. Variation exists within the midstorey and understorey of this community, ranging in foliage cover from very sparse and almost non-existent to thickets. Generally, where thickets of *Melaleuca sheathiana* occur, other understorey species become sparse. Small pockets of dense *Cratystylis conocephala* also exist throughout the community. • **W3**: Woodland to open woodland of *Eucalyptus kumarlensis* and *Eucalyptus griffithsii* over *Bossiaea walkeri*, *Alyxia buxifolia*, *Trymalium myrtillus* subsp. *myrtillus*, *Grevillea acuaria sens lat, Beyeria lechenaultii* and *Scaevola spinescens* over *Hibbertia ?pungens*, *Lepidosperma sanguinolentum* and *Rytidosperma setaceum* on orange sand and sandy loam-gravel on upper slopes with ironstone outcropping. **Salt Lakes** • **SL:** This vegetation group code did not contain any vegetation, as it represented bare salt lakes.

Characteristic	Details
Vegetation condition	The vegetation survey (NVS, 2016) and aerial imagery indicate the vegetation within the proposed clearing area is in Excellent to Degraded (Keighery, 1994) condition, described as • **Excellent:** Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species. to • **Degraded:** The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs. The full Keighery (1994) condition rating scale is provided in Appendix C.
Climate and landform	The climate for the Eastern Goldfields subregion is arid to semi-arid, the average annual rainfall is 280 millimetres record at Norseman Aero (BoM, 2025; CALM, 2002). The application area is mapped within elevation areas of 260 to 340 metres Australian height datum (GIS Database).
Soil description	The soil is mapped as a part of the following land systems (DPIRD, 2025; GIS Database): • **Dundas Land System (268Du):** Gently undulating calcareous plains, with occasional stony rises, supporting eucalypt and melaleuca woodlands over false bluebush shrublands; • **Halbert Lakebed Subsystem (246Ha):** Lake bed; • **Halbert System (246Ha):** Level to gently undulating plain with numerous salt lakes within a paleo valley on Tertiary marine sediments (Plantagenet and Werrilup formations). Soils are alkaline grey shallow sandy duplex soils and salt lake soils; • **Johnston Land System (268Jn):** Gently undulating plains with occasional granite rises, supporting eucalypt woodlands and non-halophytic shrublands; • **Noganyer Land System (268Ng):** Low ridges of dolerite, metasedimentary and ironstone rocks, supporting dense eucalypt woodlands; and • **Sedgeman Land System (268Sd):** Low granite domes and outcrop with gritty-surfaced plains, supporting eucalypt stands and acacia-dominated shrublands.
Land degradation risk	The land systems within the application area are described as the following in regard to land degradation risk (Waddell and Galloway, 2023): • **Dundas Land System (268Du):** This land system is generally not susceptible to erosion, although drainage tracts may become vulnerable when perennial shrub cover is substantially reduced, • **Halbert System (246Ha):** Lack of slope makes most of this land system resistant to water erosion. Loss of stabilising perennial shrubs may exacerbate wind erosion of lake margins; • **Johnston Land System (268Jn):** Alluvial fans and drainage tracts are moderately susceptible to erosion and loamy sheetwash plains are mildly susceptible. Obstruction of natural water flows can cause water starvation and consequent loss of vigour in vegetation downslope. Soil surface disturbance on these landforms may initiate erosion; and • **Noganyer Land System (268Ng):** This land system is generally not susceptible to erosion where stony mantles and dense vegetation remain intact. • **Sedgeman Land System (268Sd):** This land system is generally not susceptible to erosion.
Waterbodies	The desktop assessment and aerial imagery indicated that Lake Dundas a non-perennial salt lake, intersects the application area (GIS Database). There are numerous named and unnamed non-perennial lakes, waterbodies and watercourses within the local surrounds (20 kilometres) (GIS Database).
Hydrogeography	The application area is located within the Goldfields Groundwater Area proclaimed under the *Rights in Water and Irrigation Act 1914* (GIS Database). The closest Public Drinking Water Source Areas is Salmon Gums Catchment Area approximately 65 kilometres southwest of the application area (GIS Database). There are no Wetlands of International Importance or Nationally Important Wetlands that occur within the application area or in the local surrounds (20 kilometres) (GIS Database). The mapped groundwater salinity is between approximately 14,000 to 35,000 milligrams per litre total dissolved solids which is described as saline (GIS Database).
Flora	There are 23 records of conservation significant flora within the local surrounds (20 kilometres) (GIS Database) (Appendix A.3).
Ecological communities	There is one Priority Ecological Community (PEC) within the local surrounds (20 kilometres): *Allocasuarina globosa* assemblages on greenstone rock, approximately 7.6 kilometres north of the application area (GIS Database). No Threatened Ecological Communities are known within the local surrounds (20 kilometres) (GIS Database).
Fauna	There are records of ten fauna of conservation significance within the local surrounds (20 kilometres) (GIS Database). The following conservation significant fauna have previously been recorded within the application area (Western Wildlife, 2013); • Crested Shrike-tit (*Falcunculus whitei*) – Priority 3 • Inland Western Rosella (*Platycercus icterotis xanthogenys*) – Priority 4 One old malleefowl (*Leipoa ocellata*) mound has also been previously recorded within the application area (Western Wildlife, 2013).

Characteristic	Details
Fauna habitat	Seven fauna habitats were identified within the survey area, in addition to disturbed habitat (Western Wildlife, 2013): • Salt lake; • Samphire on sandy lake edges; • Chenopod shrubland on lake edges; • Saltpans; • Shrubland on rocky ridges; • Eucalypt woodland on rocky ridges; • Eucalypt woodland on plains; • Eucalypt woodland on sandy saltpan edges; and • Granite outcrops.

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 - Coolgardie	12,912,204.35	12,648,491.39	97.96	2,114,349.37	16.37
Beard vegetation associations - State					
Veg Assoc 125.	3,485,785.49	3,146,487.22	90.27	265,740.10	7.62
Veg Assoc 221.	63,720.06	59,923.05	94.04	10,781.79	16.92
Veg Assoc 3106.	52,660.80	51,602.81	97.99	4,028.21	7.65
Beard vegetation associations - Bioregion					
Veg Assoc 125.	545,717.86	506,802.71	92.87	35,661.49	6.53
Veg Assoc 221.	19,497.70	19,304.66	99.01	1,976.93	10.14
Veg Assoc 3106.	52,659.62	51,601.68	97.99	4,028.21	7.65

Government of Western Australia (2019)

A.3. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix D.1), and biological survey information (Mattiske, 2013; NVS, 2016; WA Herbarium, 1998-; GIS Database), impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)
Acacia ancistrophylla var. *perarcuata*	3	Y	<10	28
Acacia truculenta	3	Y	<15	12
Allocasuarina eriochlamys subsp. *grossa*	3	Y	<5	28
Allocasuarina globosa	T	Y	<10	33
Angianthus newbeyi	2	Y	<5	4
Aotus sp. Dundas (M.A. Burgman 2835)	2	Y	<5	26
Atriplex lindleyi subsp. *conduplicata*	3	N	<20	5
Bossiaea arcuata	T	Y	<15	12
Bossiaea aurantiaca	1	Y	<15	13
Cryptandra exserta	1	Y	<20	3
Eremophila purpurascens	3	Y	<0	37

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)
Eucalyptus brockwayi	3	Y	0	79
Eucalyptus histophylla	3	Y	<20	48
Eucalyptus jimberlanica	1	Y	0	30
Isolepis australiensis	3	N	<5	10
Melaleuca coccinea	3	Y	<5	35
Melaleuca macronychia subsp. *trygonoides*	3	Y	<1	22
Micromyrtus papillosa	1	Y	<10	16
Myriophyllum petraeum	4	N	<10	58
Philotheca apiculata	1	Y	0	28
Triglochin sp. Condingup (R. Davis 10877)	2	N	<10	5
Verticordia sp. *Dundas* (C.A. Gardner 2848)*	1	N	<15	3

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

*dated records from 1990's no longer occurring within the area

A.4. Fauna analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix D.1), and biological survey information (Commonwealth of Australia, 2008; Western Wildlife, 2013; GIS Database), impacts to the following conservation significant fauna required further consideration.

Species name	Common Name	Conservation status	Distance of closest record to application area (km)	Suitable habitat features? [Y/N]
Actitis hypoleucos	common sandpiper	MI	<30	N
Calidris ferruginea	curlew sandpiper	CR	<40	Y
Calidris ruficollis	red-necked stint	MI	<0.5	Y
Charadrius cucullatus	hooded plover, hooded dotterel	P4	<5	N
Falco peregrinus	peregrine falcon	OS	<5	Y
Leipoa ocellata	malleefowl	VU	<5	Y
Notamacropus irma	western brush wallaby	P4	<25	Y
Nyctophilus major tor	Central long-eared bat	P3	<80	Y
Oxyura australis	blue-billed duck	P4	<15	N
Platycercus icterotis xanthogenys	western rosella (inland)	P4	0	Y
Zanda latirostris	Carnaby's cockatoo	EN	<25	N
Ogyris subterrestris petrina	Arid bronze azure butterfly	CR	<175	Y
Jalmenus aridus	Inland hairstreak	P2	<165	Y

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority; OS: other specially protected

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		

Assessment against the clearing principles	Variance level	Is further consideration required?
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 habitats that may support conservation significant flora and fauna and are restricted in distribution.	May be at variance (as per from CPS 6824/3)	Yes *Refer to Section 3.2.1, 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: The area proposed to be cleared contains suitable foraging, roosting, breeding habitat for conservation significant fauna.	May be at variance (as per from CPS 6824/3)	Yes *Refer to Section 3.2.2, above.*
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: The area proposed to be cleared may contain flora species listed under the BC Act.	May be at variance (changed from CPS 6824/3)	Yes *Refer to Section 3.2.1, above*
Principle (d): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."* Assessment: There are no known Threatened Ecological Communities (TECs) located within or within close proximity (20 kilometres) to the application area (GIS Database) and flora and vegetation surveys did not identify any TECs (Mattiske, 2013; NVS, 2016). The area proposed to be cleared does not contains species that can indicate a threatened ecological community.	Not at variance (as per from CPS 6824/3)	No
Environmental value: significant remnant vegetation and conservation areas		
Principle (e): *"Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."* Assessment: The extent of the mapped vegetation type is consistent with the national objectives and targets for biodiversity conservation in Australia (Commonwealth of Australia, 2001). The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area (GIS Database).	Not at variance (as per from CPS 6824/3)	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: The application area is not located within or adjacent to any conservation areas (GIS Database). An un-named Timber Reserve abuts the northern boundary of the application. This reserve is vested with the Conservation Commission of Western Australia and managed by the Department of Parks and Wildlife. The closest conservation area (Dundas Nature Reserve) is situated approximately 14 kilometres east (GIS Database). Given that the local area is well vegetated, with large amounts of intact native vegetation remaining, the proposed clearing is unlikely to impact on the environmental values of adjacent or nearby conservation areas.	Not likely to be at variance (as per from CPS 6824/3)	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 the application area intersects Lake Dundas and one minor non-perennial watercourses the proposed clearing is likely to impact on vegetation growing on lake margins and within watercourses. Shoreline vegetation associated with Lake Dundas is Shrubland 1 and Shrubland 2 vegetation. Potential impacts to vegetation associated with this watercourse can be minimised by the continued implementation of a watercourse management condition.	At variance (as per from CPS 6824/3)	No

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The mapped soils are susceptible to wind and water erosion, when vegetation cover is removed or stony mantle is disturbed (Waddell and Galloway, 2023). Noting the extent of the application area and the condition of the vegetation outside of disturbed areas, the proposed clearing is likely to have an appreciable impact on land degradation. Potential erosion impacts as a result of the proposed clearing can be minimised by the continued implementation of a staged clearing condition. Additionally, the watercourse management condition will be retained to minimise impacts of wind erosion on lake margins.	May be at variance (as per from CPS 6824/3)	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: Lake Dundas extends along the eastern boundary of the application area, where a large portion of the application area (~205 hectares) lies within the lake. (GIS Database). The proposed clearing may result in increased sedimentation into Lake Dundas. Potential impacts to surface water quality as a result of the proposed clearing may be minimised by the continued implementation of a staged clearing condition, to ensure large areas are not void of vegetation cover for extended periods. Additionally, the watercourse management condition will be retained to minimise impacts of erosion and sedimentation on lake margins.	Not likely to be at variance (as per from CPS 6824/3)	No
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 Eastern Goldfields subregion is described as arid to semi-arid receiving 280 millimetres of rain annually, usually in winter (CALM, 2002; BoM, 2025). Extensive clearing of native vegetation may increase the potential for small scale, localised flooding events, however given the climate of the region and sloping topography towards Lake Dundas, it is unlikely the proposed clearing will contribute to increased incidence or intensity of flooding.	Not likely to be at variance (as per from CPS 6824/3)	No

Appendix C. Vegetation condition rating scale

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

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

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

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.

Condition	Description
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Appendix D. Sources of information

D.1. GIS datasets

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

- Cadastre (Polygon) (LGATE-217)
- 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)
- Directory of Important Wetlands in Australia - Western Australia (DBCA-045)
- Great Western Woodlands
- Groundwater Salinity Statewide (DWER-026)
- IBRA Vegetation Statistics
- IBSA Survey Details (DWER-118)
- Local Government Area (LGA) Boundaries (LGATE-233)
- Localities (LGATE-234)
- Medium Scale Topo Contour (Line) (LGATE-015)
- Native Title Determination Outcomes (NNTT)
- Native Title (Determination) (LGATE-066)
- Native Title (NNTT) (LGATE-004)
- Native Vegetation Extent (DPIRD-005)
- Pre-European Vegetation (DPIRD-006)
- Public Drinking Water Source Areas (DWER-033)
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping - Best Available (DPIRD-027)
- Soil Landscape Mapping - Systems (DPIRD-064)
- Townsites (LGATE-248)
- WA Now Aerial Imagery
- WRIMS - Groundwater Areas (DWER-085)

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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Glossary

Acronyms:

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

Definitions:

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

Threatened species

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

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

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

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

CR **Critically endangered species**

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

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

EN **Endangered species**

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

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

VU **Vulnerable species**

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

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

Extinct species

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

EX **Extinct species**

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

EW **Extinct in the wild species**

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

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

Specially protected species

SP **Specially protected species**

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

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

MI **Migratory species**

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

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

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

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

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

OS **Other specially protected species**

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

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

Priority species

P **Priority species**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as a conservation dependent specially protected species.

(c) Species that have been removed from the list of threatened species or lists of conservation dependent or other specially protected species, during the past five years for reasons other than taxonomy.

(d) Other species in need of monitoring.

Principles for clearing native vegetation:

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

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

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

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

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

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

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

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

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

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