Government of Western Australia
Department of Mines, Industry Regulation and Safety

Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	9874/1
Permit type:	Area Permit
Applicant name:	British Hill Pty Ltd
Application received:	1 September 2022
Application area:	2.32 hectares
Purpose of clearing:	Mineral Production and Associated Activities
Method of clearing:	Mechanical Removal
Tenure:	Mining Lease 77/1256
Location (LGA area/s):	Shire of Yilgarn
Colloquial name:	British Hill Project

1.2. Description of clearing activities

British Hill Pty Ltd proposes to clear up to 2.32 hectares of native vegetation within a boundary of approximately 2.32 hectares, for the purpose of mineral production and associated activities. The project is located approximately 44 kilometres south of Marvel Loch, within the Shire of Yilgarn.

The application is to allow for shallow mine excavations and associated activities. The application area originally covered approximately eight hectares of native vegetation and included pits four, five and six which are located adjacent to the application area. The three southern pits and their access tracks (which have not been previously surveyed) were excluded from the application area.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	20 December 2022
Decision area:	2.32 hectares of native vegetation

1.4. Reasons for decision

This clearing permit application was made in accordance with section 51E of the *Environmental Protection Act 1986* (EP Act) and was received by the Department of Mines, Industry Regulation and Safety (DMIRS) on 1 September 2022. DMIRS advertised the application for a public comment for a period of 21 days, and one submission was received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix B), relevant datasets (Appendix E), supporting information provided by the applicant (Appendix A) including the results of a flora and vegetation survey, the clearing principles set out in Schedule 5 of the EP Act (Appendix D), 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; and
- the loss of native vegetation that is suitable habitat for a number of conservation significant fauna.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing can be managed by conditions and is not likely 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 with an observer (fauna spotter) to allow terrestrial fauna to move into adjacent habitat ahead of the clearing and reduce the risk of fauna injury/fatality;

- engage a fauna specialist to undertake clearance surveys for *Dasyurus geoffroii* (Chuditch) and no clearing will be allowed between August and October;
- where clearing occurs between 1 September and 31 January, within two weeks prior to the clearing, engage an environmental specialist to identify active Malleefowl mounds and ensure no clearing occurs within 50 metres of the mound;
- no removal of significant trees (those over 50 centimetres diameter at 1.5 metres from the base of the tree);
- no more than 62 individual plants of identified *Acacia concolorans* are cleared;
- no more than 41 individual plants of identified *Gastrolobium hians* are cleared;
- no more than 306 individual plants of identified *Phebalium tuberculosum* are cleared;
- no more than 70 individual plants of identified *Drummondita wilsonii* are cleared;
- no more than 12 individual plants of identified *Boronia ternata var. promiscua* are cleared; and
- no more than 1 individual plants of identified *Phebalium filifolium* are cleared.

1.5. Site map

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

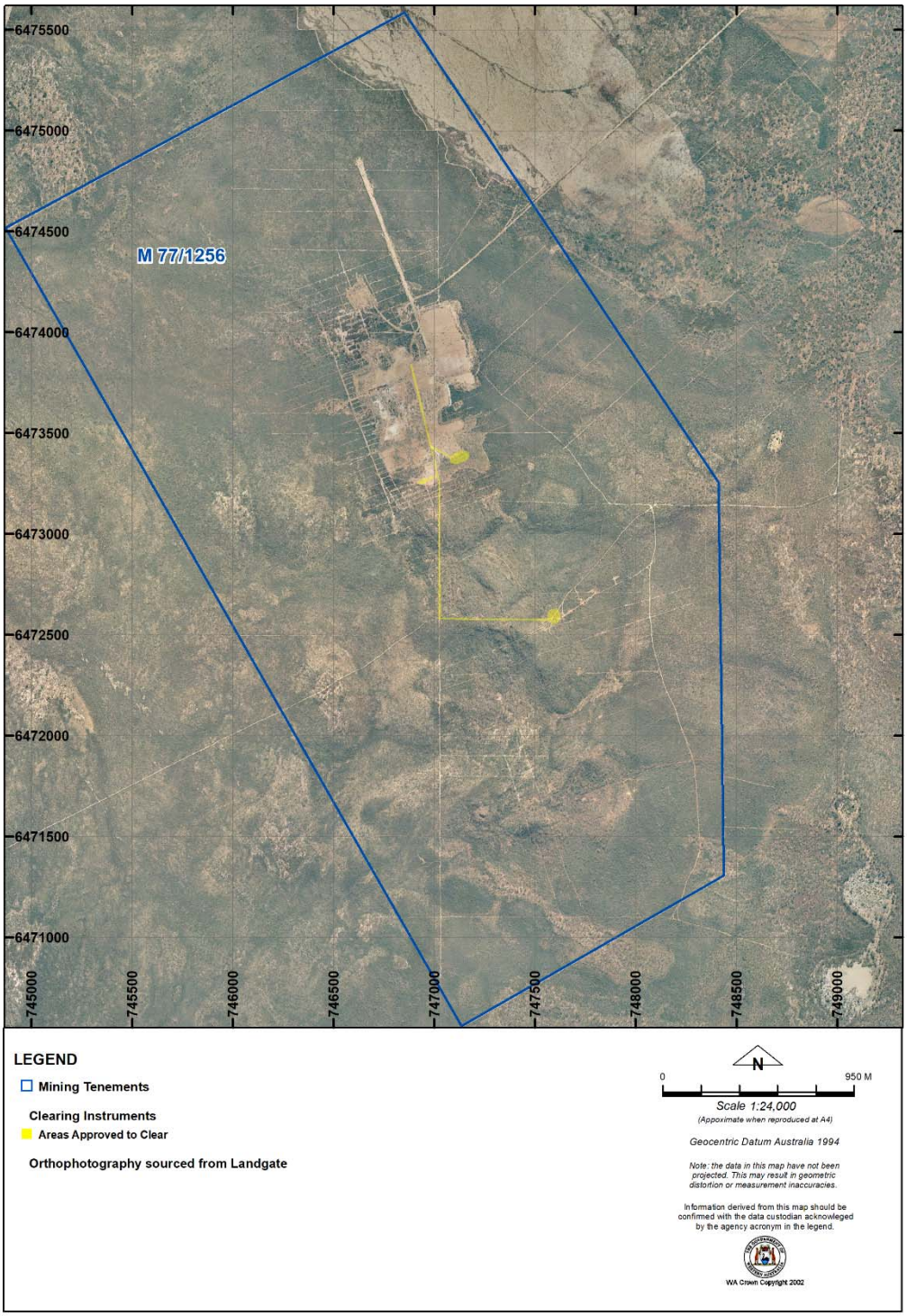

Figure 1. Map of the application area. The yellow area indicates the area within which conditional authorised clearing can occur under the granted clearing permit.

2. Legislative context

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

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

- the precautionary principle

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

Other legislation of relevance for this assessment include:
- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Country Areas Water Supply Act 1947* (WA) (CAWS Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Mining Act 1978* (WA)

The key guidance documents which inform this assessment are:
- *A guide to the assessment of applications to clear native vegetation* (DER, December 2013)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)

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 such as:
- existing cleared areas will be used for road development;
- better quality vegetation was excluded from the application; and
- water carts will be contracted for dust suppression.

3.2. Assessment of impacts on environmental values

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

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

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

Assessment

A flora and vegetation survey undertaken by Western Botanical in 2019 identified a total of 229 species (Western Botanical, 2020). A total 14 vegetation associations have been identified within the tenement (Terratree, 2015a). Desktop reviews conducted by Western Botanical have identified 95 conservation significant flora as occurring within a 50 kilometre radius of the application area (Western Botanical, 2020). The flora and vegetation survey conducted by Western Botanical have identified 18 conservation significant flora species as occurring within the tenement (Western Botanical, 2020).

The following Priority Flora species were identified by Western Botanical (2020) as occurring within the tenement:
- *Acacia concolorans* P2
- *Gastrolobium hians* P1
- *Drummondita wilsonii* P1
- *Boronia ternata* var*. promiscua* P3
- *Balaustion grandibracteatum* subsp*. juncturum* Rye P2
- *Calothamnus brevifolius* P4
- *Hakea pendens* P3
- *Melaleuca grieveana* P1
- *Notisia intonsa* P3
- *Phebalium aff. drummondii* P3
- *Stenanthemum bremerense* P4
- *Stylidium sejunctum* P3
- *Verticordia mitodes* P3
- *Verticordia multiflroa* subsp*. solox* P2
- *Verticordia stenopetala* P3

Several other species recorded within the tenement during the survey were identified as having conservation value:
- *Phebalium tuberculosum* short leaf form (G. Cockerton, S. Cockerton, J. Warden WB40140)
- *Phebalium filifolium* (short leaf form) (M Kirby 219)
- *Eucalyptus salubris glaucous* branchlet form (G. Cockerton & J. Warden WB40196)

Six conservation significant species have been recorded within the application area comprising of one Priority 3 (*Boronia ternata var. promiscua*), one Priority 2 (*Acacia concolorans*), two Priority 1 (*Drummondita wilsonii* and *Gastrolobium hians*), and two potentially new species – *Phebalium filifolium* (short leaf form) and *Phebalium tuberculosum* (short leaf form).

Acacia concolorans is an intricate, sprawling or compact, pungent shrub flowering from July to August which can grow between 0.1 – 0.5 metres high in red/brown loam, clay soils on low lateritic hills and flats (Western Australian Herbarium, 1998-). *Acacia concolorans* was found in the south-eastern part of the central study area within both previously disturbed / rehabilitated areas

and in undisturbed vegetation adjacent (Western Botanical, 2020). The species is known from 18 records at the WA Herbarium and from two loci (near Marvel Lock and Hyden) (Western Australian Herbarium, 1998-). These records represent a 20 kilometre range extension to the south east (DBCA, 2022). The flora and vegetation survey identified approximately 513 plants within the study area, approximately 62 plants may be impacted by the proposed clearing, which may result in a 12 percent impact to the species at a local level. While this impact may be considered significant at a local level it is unlikely considered significant at the species level (DBCA, 2022). Impacts to this species may be managed with a condition limiting the number of individuals to be impacted.

Gastrolobium hians is an erect shrub inhabiting sandy loam or clay soils, it can grow up to 1.7 metres and flowers in September (Western Australian Herbarium, 1998-). The species may be readily confused with *Gastrolobium floribundum* and flowers were not present during the survey to confirm, however the material appears close enough to *Gastrolobium hians* (Western Botanical, 2020). *Gastrolobium hians* is common in disturbed areas such as the airstrip, former exploration tracks and rehabilitation (Western Botanical, 2020). *Gastrolobium hians* is previously known from one population (approximately 200 individuals) west of Norseman on the Hyden road, approximately 167 kilometres from the proposed area, making the population recorded on Mining Lease 77/1256 a significant second population (DBCA, 2022; Western Botanical, 2020). Approximately 626 plants were recorded within tenement M77/1256 and approximately 41 plants may be impacted from the proposed clearing, which may result in a 6.5 percent impact to the species at a local level and 5 percent impact at the species level (Western Botanical, 2020). While this may not be considered significant, as this species was only known from one other population, impacts to this species may be managed with a condition limiting the number of individuals to be impacted.

Phebalium tuberculosum (short leaf form), a potentially new species, is a small, dense, non-lignotuberous geosporous single stemmed shrub which grows between 0.4 metres high with very short leaves growing exclusively with *Allocasuarina acutivalvis, Backea elderiana* and *Aluta appressa* shrubs on laterite soils within the Mining Lease 77/1256 (Western Botanical, 2020). Approximately 30,172 plants were recorded (doubled from 15,086 individuals to make up the estimated 50 percent coverage), during the flora and vegetation and approximately 306 plants may be impacted (doubled from 153 individuals to make up the estimated 50 percent coverage) from the proposed clearing, which may result in a 1% impact to the species at a local level, which is not considered a significant impact.

Drummondita wilsonii is an erect shrub growing between 0.4 – 1 metre high which inhabits areas with sand with gravel and pebbles and flowers between June and August (Western Australian Herbarium, 1998-). *Drummondita wilsonii* is commonly seen in previously cleared tracks and in rehabilitation within areas in lateritic gravely soil (Western Botanical, 2020). The species is closely associated with the hill tops and upper slopes on laterite and ferricrete with a regional distribution of 5 kilometres in diameter based on current knowledge, entirely within Mining Lease 77/1256 and the Parker Range Priority Ecological Community (PEC) (Western Botanical, 2020). The survey technique resulted in an estimated 50 percent coverage (Western Botanical, 2020). The targeted survey undertaken by Western Botanical identified six-sub-populations within Mining Lease 77/1256, with an approximate total individuals of 14,226, (doubled from 7,113 individuals to make up the estimated 50 percent coverage), approximately 70 plants may be impacted (doubled from 35 individuals to make up the estimated 50 percent coverage), which may result in a 0.5 percent impact to the species at a local level, which is not considered a significant impact (Western Botanical, 2020).

Boronia ternata var. promiscua is a spreading shrub which can grow up to 1 metre high (Western Australian Herbarium, 1998-). This species flowers in June, September and October and is found inhabiting yellow sandy clay and laterite soils in the Coolgardie and Avon Wheatbelt IBRA Regions (Western Australian Herbarium, 1998-). This Priority 3 species was recorded in scattered small populations and individuals in rehabilitation and in undisturbed vegetation within the study area (Western Botanical, 2020). The survey technique resulted in an estimated 50% coverage (Western Botanical, 2020). *Boronia ternata var. promiscua* is only known from the Marvel Lock region and 2,730 plants were recorded (doubled from 1,365 individuals to make up the estimated 50 percent coverage), within Mining Lease 77/1256 (Western Botanical, 2020). Approximately 12 plants (doubled from 6 individuals to make up the estimated 50 percent coverage) may be impacted by the proposed clearing, which may result in a 0.4% impact to the species at a local level which is not considered a significant impact.

Phebalium filifolium (short leaf form), a potentially new species, is a single stemmed, geosporous open shrub growing to one metre high, growing under mallees with *Melaleuca* species on sand and clayey sand within Mining Lease 77/1256 (Western Botanical, 2020). It has uniformly short narrow leaves, 6 to 9 millimetres long x 1 millimetres wide, which clearly places it within *Phebalium filifolium*, however, the short leaf form represents one end of a spectrum of leaf size within the group (Western Botanical, 2020). Approximately 1,115 plants were recorded during the flora and vegetation and approximately 1 plant may be impacted from the proposed clearing which is not considered a significant impact.

An additional 12 conservation significant species were recorded within Mining Lease 77/1256, however these species have not been recorded within the application area. The proposed clearing if not likely to cause a significant impact to these conservation significant species.

The application area is located wholly within the Parker Range System Priority Ecological Community (Parker PEC) (GIS Database). The Parker PEC is currently known from 41,725 hectares and clearing of ~2.32 hectares equates to ~0.006 percent of the total area of the Parker PEC (DBCA, 2022). Although Western Botanical (2020) identified four vegetation units in the 2019-2020 study area, the vegetation sampling was not completed, therefore it is not possible to determine the proposed impacts on the PEC. However, given the application area is such a small area of the Parker PEC, the impacts are not considered significant.

Conclusion

Based on the above assessment, the proposed clearing will result in the removal of priority flora. For the reasons set out above, it is considered that the impacts of the proposed clearing on flora can be managed by the mitigation and management strategies provided by the applicant and through flora management conditions.

Conditions

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

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- no more than 62 individual plants of identified *Acacia concolorans* are cleared;
- no more than 41 individual plants of identified *Gastrolobium hians* are cleared;
- no more than 306 individual plants of identified *Phebalium tuberculosum* are cleared;
- no more than 70 individual plants of identified *Drummondita wilsonii* are cleared;
- no more than 12 individual plants of identified *Boronia ternata var. promiscua* are cleared; and
- no more than 1 individual plants of identified *Phebalium filifolium* are cleared.

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

Assessment

The Level 1 vertebrate fauna risk assessment conducted by Terrestrial Ecosystems in 2016 identified six broad fauna habitats over the larger survey area:

- tall shrubs on a sandy substrate;
- scattered trees over tall shrubs with a pebbly or stone clay substrate;
- hill or rock outcrop on a pebbly or stony clay substrate;
- eucalypt woodland with a scattered understory of shrubs;
- eucalypt woodland with an understory of shrubs and smaller trees on a red sandy substrate; and
- highly disturbed or rehabilitate areas (Terrestrial Ecosystems, 2016; 2022).

Based on the records of conservation significant fauna and the site characteristics within the application area, six conservation significant species were considered as potentially occurring within the survey area (Terrestrial Ecosystems, 2016; 2022; DBCA, 2022; GIS Database):

- *Leipoa ocellata* (malleefowl) - Vulnerable
- *Dasyurus geoffroii* (chuditch, western quoll) - Vulnerable
- *Notamacropus Irma* (western bush wallaby) – Priority 4
- *Platycercus icterotis xanthogenys* (western rosella (inland)) – Priority 4
- *Paroplocephalus atriceps* (Lake Cronin snake) – Priority 3
- *Ogyris subterrestris petrina* (Arid bronze azure butterfly) – Critically Endangered

Leipoa ocellata (malleefowl) were recorded on five of the 25 camera traps, four were recorded on the sand plain and one near the rocky hill (Terrestrial Ecosystems, 2016). The Malleefowl is found in semi-arid to arid shrublands and low woodlands, especially those dominated by mallee and/or acacias (DaWE, 2022). This species requires a sandy substrate with an abundance of leaf litter for breeding (DaWE, 2022). Malleefowl is known to occur in the region and may utilise the area for foraging, but it is not likely to represent significant habitat for this species as similar habitat is available to the north, south, east and west of the project area and the current application area has been previously disturbed (Terrestrial Ecosystems, 2016). However, it is known to occur within 0.1 kilometres from the application area and therefore measures should be taken to identify the presence of any active malleefowl mounds.

Dasyurus geoffroii (Chuditch) were recorded on 13 of the 25 camera traps that were installed during the 2016 reconnaissance survey, which determined the mammal is concentrated around the hill in the south-east corner of the application area and forages widely within this area (Terrestrial Ecosystems, 2016). Chuditch are known to inhabit dens and hollow logs, burrows culverts, etc. and are usually active from dusk to dawn (Terrestrial Ecosystems, 2016). Clearing vegetation and mining activity is likely to have a significant effect on resident Chuditch. As similar habitat is available in adjacent areas and the majority of the clearing proposal lies within previously disturbed areas, the proposed vegetation to be cleared is not likely significant to the species and impacts to the species via clearing may be managed with a fauna condition.

Notamacropus Irma (western bush wallaby) were recorded on six of the 25 camera traps and were spread across the application area, but predominantly on the sand plain (Terrestrial Ecosystems, 2016). Clearing vegetation and mining activity is likely to have a significant effect on resident wallaby's. As similar habitat is available in adjacent areas and the majority of the clearing proposal lies within previously disturbed areas, the proposed vegetation to be cleared is not likely significant to the species and impacts to the species via clearing may be managed with a fauna condition with slow directional clearing.

Platycercus icterotis xanthogenys (western rosella (inland)) is found inhabiting Eucalypt and Casuarina woodland and shrublands, especially Wandoo, Flooded Gums and Salmon Gums (Terrestrial Ecosystems, 2016). This species has been recorded within 20 kilometres of the application area (GIS Database). As the application area only contains a small area of tall eucalypt woodland, it is unlikely the species will be present and unlikely to be impacted by the proposed clearing as it will readily move to adjacent areas if disturbed and therefore impacts may be managed with a fauna condition with slow directional clearing.

Paroplocephalus atriceps (Lake Cronin snake) has been recorded within 3.5 kilometres from the application area (GIS Database). The species is found inhabiting a variety of habitats in semi-arid woodland and although not recorded within the application area, as suitable habitat is present, it could potentially occur (Terrestrial Ecosystems, 2016). As similar habitat is available in adjacent areas and the majority of the clearing proposal lies within previously disturbed areas, the proposed vegetation to be cleared is not likely significant to the species and impacts to the species via clearing may be managed with a fauna condition with slow directional clearing.

The application area is located within a high priority survey area for the Arid Bronze Azure Butterfly (ABAB) and habitat has been identified as suitable for the species (DBCA, 2022). Arid bronze azure larvae are myrmecophilous with host ant, *Camponotus sp. nr. terebrans*, which has records nearby the application area (DBCA, 2022). In the absence of surveys to confirm the presence of the host ant, disturbance to (and around) significant trees (those over 50 centimetres diameter at 1.5 metres from the base of the tree) should be avoided as they may provide habitat for the host ant and therefore potentially ABAB (DBCA, 2022).

Conclusion

For the reasons set out above, it is considered that the impacts of the proposed clearing on fauna habitats can be managed by, slow directional clearing to allow fauna to move into adjacent vegetation and searching the area for burrows/dens/logs for *Dasyurus geoffroii* (Chuditch) prior to clearing.

Conditions

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

- slow directional clearing to allow fauna to move into adjacent vegetation ahead of the clearing activity will minimise impact to individuals;
- no removal of significant trees (those over 50 centimetres diameter at 1.5 metres from the base of the tree);
- fauna management (*Dasyurus geoffroii* (Chuditch): preclearance surveys must be conducted prior to clearing and no clearing will be allowed between August and October; and
- fauna management *Leipoa ocellata* (malleefowl): prior to clearing identify active mounds.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 27 September 2022 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. One submission was received in relation to this application.

A public submission was received from the Shire of Yilgarn with questions directed at the intentions within the Shire of Yilgarn of the British Hill Project rather than the native vegetation clearing. The proponent responded to the Shire of Yilgarn outlining the projects intentions and no further comments have been received.

There is one native title claim over the area under application (DPLH, 2022). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are one registered Aboriginal Sites of Significance within the application area (DPLH, 2022). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

Other relevant authorisations required for the proposed land use include:

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

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

End

Appendix A. Additional information provided by applicant

Summary of comments	Consideration of comment
A Level 1 Vertebrate Fauna Risk Assessment was carried out in 2016, the report was submitted to the department on the 19 October 2022. IBSA submission number: IBSASUB-20221019-BF546C35	The results from the report were considered during assessment of the clearing.
New fauna and flora surveys were requested as the southern pits areas have not been previously surveyed.	The applicant decided that the application area will be reduced from 8 hectares to 2.32 hectares to solely include the northern three pits which have previously subject to flora and fauna survey. In the meantime, surveys will be conducted for the southern pits and this area will be subject to a separate application in the future.

Appendix B. Site characteristics

B.1. Site characteristics

Characteristic	Details
Local context	The area proposed to be cleared is located approximately 44 kilometres south from Marvel Loch. The area proposed to be cleared is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia. It is surrounded by pasture to the west and native vegetation to the north, east and south (GIS Database).
Ecological linkage	According to available databases, the application area does not contain any known or mapped ecological linkages (GIS Database).
Conservation areas	There are no conservation areas located within the application area (GIS Database). The Jibadji Nature Reserve is located approximately 1.6 kilometres east of the application area (GIS Database).
Vegetation description	The vegetation of the application area is broadly mapped as the following Beard vegetation association: • 552: Thicket. Wattle, casuarina and teatree (*acacia-allocasuarina-melaleuca* alliance). (GIS Database). Flora and vegetation surveys were conducted over the application area by Western Botanical during October/November 2016, December 2019 and February/March of 2020. The following vegetation associations were recorded within the application area (Western Botanical, 2020): **E1:** *Eucalyptus salmonophloia*, *E. salubris glaucous* branchlet form (WB40196) Woodland over *Daviesia argillaceaea* and Melaleuca spp.; **E2:** *Eucalyptus salmonophloia* and/or *E. salubris sens*. str. Woodland over *Melaleuca pauperiflora* subsp. *fastigiata*, *Acacia merrallii* Shrubland; **E3:** *Eucalyptus salmonophloia* Woodland over *Acacia merrallii*, *Daviesia argillaceaea*, *Santalum acuminatum*; **S1:** *Allocasuarina corniculata, A. spinosissima, Callitris canescens* Shrubland with emergent *Eucalyptus burracoppinensis* mallee; **S2:** *Allocasuarina acutivalvis* subsp. *acutivalvis*, *Baeckea elderiana*, *Aluta appressa*, *Phebalium tuberculosum* short leaf form, *Drummondita wilsonii* P1 Shrubland; **S3:** *Allocasuarina acutivalvis* subsp. *acutivalvis*, *Baeckea elderiana*, *Aluta appressa* Shrubland; **S4:** *Allocasuarina acutivalvis* subsp. *acutivalvis*, *Melaleuca cordata* shrubland on silcrete & laterite; **H1:** *Baeckea elderiana*, Aluta appressa Heath; **S5:** *Allocasuarina acutivalvis* subsp. *acutivalvis* 4m, *Melaleuca cordata* 1.5m, *Hakea francissiana* 3m, *Banksia laevegata* subsp. *fuscolutea* 1.5m, *Banksia elderiana* 2.5m over *Verticordia* sp. 0.6m; **D:** Disturbed, revegetation and regeneration;

<table>
<tr><th>Characteristic</th><th>Details</th></tr>
<tr><td></td><td>M1: Eucalyptus tenera Mallee Woodland;

M2: Eucalyptus tenera Mallee Woodland over Acacia concolorans;

M3: Eucalyptus platycorys, E. comitae-vallis Mallee Woodland; and

M4: Eucalyptus spp. mallee Woodland over Melaleuca lateriflora, Melaleuca phoidophylla, Melaleuca pentagona.</td></tr>
<tr><td>Vegetation condition</td><td>Much of the application area is considered degraded in condition as it has been historically disturbed, with disturbance limited to those areas directly cleared in the past for roads, tracks, drill lines and other previous exploration activities (Western Botanical, 2020). The remaining vegetation is considered Pristine (Western Botanical, 2020).

The full Keighery (1994) condition rating scale is provided in Appendix D.</td></tr>
<tr><td>Climate and landform</td><td>The region experiences a Mediterranean climate with cool winters and hot summers with a mean annual rainfall of 292.8 millilitres.</td></tr>
<tr><td>Soil description</td><td>The soils of the application area are broadly mapped as the following soil type:
261d3: AC1 atlas system. Gently sloping to gently undulating plateau areas, or uplands, on granites, gneisses, and allied rocks, with long gentle slopes and, in places, abrupt erosional scarps.
The following six landforms/soil type associations were recognised in the flora and vegetation surveys (Western Botanical, 2020):<table><tr><th>Summary Soil Type</th><th>Landform Unit</th></tr><tr><td>Clayey dark red-brown soils in depressions and valley floors</td><td>Broad valley floors, perched deposits in depressions on hill slopes</td></tr><tr><td>Aeolian yellow sandsheet</td><td>Broad undulating plains, perched deposits in depressions on hill slopes</td></tr><tr><td>Laterite gravel and ferricrete</td><td>Low rounded hills</td></tr><tr><td>Duplex, shallow yellow sand over Laterite gravel and ferricrete</td><td>Interzonal between Low rounded hills and Broad undulating plains</td></tr><tr><td>Clayey sand</td><td>Broad undulating plains</td></tr><tr><td>Clayey sand over Chert and silcrete subcrop</td><td>Gently inclined hill slope</td></tr></table></td></tr>
<tr><td>Land degradation risk</td><td>The application area occurs within the Merredin sub-region of the Avon Wheatbelt bioregion (GIS Database). The Merredin sub-region is described as an area of active drainage dissecting a Tertiary plateau on the Yilgarn Craton (Beecham, 2001). There is no connected drainage, salt lake chains occur as remnants of ancient drainage systems that only function in very wet years (Beecham, 2001).</td></tr>
<tr><td>Waterbodies</td><td>The desktop assessment and aerial imagery indicated that no watercourses transect the area proposed to be cleared (GIS Database). The closest surface water feature is a non-perennial lake located approximately 1.8 kilometres south-east from the application area (GIS Database).</td></tr>
<tr><td>Hydrogeography</td><td>The application area is located within the proclaimed Westonia groundwater area under the Rights in Water and Irrigation Act 1914 (GIS Database). The mapped groundwater salinity is approximately 14,000 to 35,000 milligrams per litre total dissolved solids which is described as hypersaline (GIS Database).</td></tr>
<tr><td>Flora</td><td>Previous flora and vegetation surveys have identified a total 229 native endemic flora species (Western Botanical, 2020).

A total of 18 conservation significant flora species have been recorded within the tenement and six conservation significant flora were recorded within the application area (Western Botanical, 2020; GIS Database).</td></tr>
<tr><td>Ecological communities</td><td>The application area is located wholly within the Plant assemblages of the Parker Range System Priority Ecological Community (PEC) which is listed by the Department of Biodiversity, Conservation and Attractions in Western Australia as Priority 3 (iii) Vulnerable (GIS Database).

The Eucalypt woodlands of the Western Australian Wheatbelt (Priority 3 PEC) is located approximately 1.4 kilometres to the east of the application area (GIS Database).</td></tr>
</table>

Characteristic	Details
Fauna	The following six broad fauna habitats have been recorded from previous surveys (Terrestrial Ecosystem, 2020): • tall shrubs on a sandy substrate; • scattered trees over tall shrubs with a pebbly or stony clay substrate; • hill or rocky outcrop on a pebbly or stony clay substrate; • eucalypt woodland with a scattered understory of shrubs; • eucalypt woodland with an understory of shrubs and smaller trees on a red sandy substrate; and • highly disturbed or rehabilitated areas. Based on site characteristics, historical records and the Level 1 vertebrate fauna assessment conducted by Terrestrial Ecosystems in 2016, five conservation significant fauna species could potentially occur within the application area (Terrestrial Ecosystem, 2020; GIS Database).

B.2. Vegetation extent

	Pre-European area (ha)	Current extent (ha)	Extent Remaining %	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre-European extent in all DBCA Managed Lands
IBRA Bioregion - Avon Wheatbelt	9,517,109.95	1,761,187.42	18.51	174,980.68	2.42
IBRA Subregion - Merredin	6,524,180.55	1,367,565.48	20.96	126,804.59	2.54
Local Government – Shire of Yilgarn	3,042,759.25	2,480,372.10	81.52	757,286.08	24.94
Beard vegetation associations - State					
Veg Assoc No. 552	33,907.96	31,668.72	93.40	302.34	0.90
Beard vegetation associations - Bioregion					
Veg Assoc No. 552	11,347.16	11,263.12	99.26	0	0
Beard vegetation associations - subregion					
Veg Assoc No. 552	11,347.16	11,263.12	99.26	0	0

Government of Western Australia (2019)

B.3. Flora analysis table

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

Species name	Conservation status	Distance of closest record to application area (km)	Total individuals recorded (survey area)	Number of records predicted to be impacted	Percentage of individuals to be cleared
Acacia concolorans	P2	Recorded within application area	513	62	12%
Gastrolobium hians	P1	Recorded within application area	626	41	6.5%
Phebalium tuberculosum short leaf form (G. Cockerton, S. Cockerton, J. Warden WB40140)	Potential new species	Recorded within application area	30172	306	1%
Drummondita wilsonii	P1	Recorded within application area	14,226	70	0.5%
Boronia ternata var. *promiscua*	P3	Recorded within application area	2,730	12	0.4%
Phebalium filifolium (short leaf form) (M Kirby 219)	Potential new species	Recorded within application area	1,115	1	0.09%

Species name	Conservation status	Distance of closest record to application area (km)	Total individuals recorded (survey area)	Number of records predicted to be impacted	Percentage of individuals to be cleared
Balaustion grandibracteatum subsp. *juncturum* Rye (Previously named *Baeckea* sp. *Crossroads*)	P2	<2	2 locations	0	0%
Calothamnus brevifolius	P4	<2	1	0	0%
Eucalyptus salubris glaucous branchlet form (G. Cockerton & J. Warden WB40196)	Potential new species	<3	50+	0	0%
Hakea pendens	P3	<2	2	0	0%
Melaleuca grieveana	P1	<2	2 locations	0	0%
Notisia intonsa	P3	<2	1 location	0	0%
Phebalium aff. *drummondii*	P3	<2	66	0	0%
Stenanthemum bremerense	P4	<2	14	0	0%
Stylidium sejunctum	P3	<2	32	0	0%
Verticordia mitodes	P3	<2	658	0	0%
Verticordia multiflroa subsp. *solox*	P2	<2	3 locations	0	0%
Verticordia stenopetala	P3	<2	902	0	0%

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

B.4. Fauna analysis table

Species name	Common Names	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)
Leipoa ocellata	malleefowl	VU	Y	~0.1
Dasyurus geoffroii	chuditch, western quoll	VU	Y	~10
Notamacropus irma	western bush wallaby	P4	Y	~8
Platycercus icterotis xanthogenys	western rosella (inland)	P4	Y	~20
Paroplocephalus atriceps	Lake Cronin snake	P3	Y	~3.5
Ogyris subterrestris petrina	arid bronze azure butterfly	EN	Y	<10

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

Appendix C. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."* Assessment: A total of 229 native endemic flora species were recorded during the flora and vegetation assessment which reflects the biodiversity of the Eastern Avon Wheatbelt and western Coolgardie biogeographic regions (Western Botanical, 2020). The application area is located wholly within the Parker Range Priority Ecological Community (PEC) and the Great Western Woodlands which contains a range of locally endemic flora (Western Botanical, 2020).	May be at variance	Yes Refer to Section 3.2.1, above.

Assessment against the clearing principles	Variance level	Is further consideration required?
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 may contain foraging habitat for a number of conservation significant fauna, however, due to the historical clearing/disturbance and presence of similar habitat in the surrounding areas, it is not likely significant habitat for fauna (Western Botanical, 2020; Terrestrial Ecosystems, 2020; GIS Database).	Not likely to be at variance	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 is likely to contain a number of conservation significant flora species (Western Botanical, 2020; GIS Database).	May be at variance	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 the application area (GIS Database). The flora and vegetation survey identified some components of the study area with the description of the Eucalypt Woodlands of the Western Australian Wheatbelt PEC (Western Botanical, 2020). The Eucalypt woodlands of the Western Australian Wheatbelt is a Federally listed TEC, however, in Western Australia it is listed as a Priority Ecological Community (Priority 3) (DBCA, 2022). This TEC is located approximately 1.4 kilometres south east of the application area (GIS Database).	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
Principle (e): *"Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."* Assessment: The application area falls within the Avon Wheatbelt Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 18.51% of the pre-European vegetation still exists in the Avon Wheatbelt, 20.96% exists in Merredin and 81.52% in the Shire of Yilgarn (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation association 552 (GIS Database). This vegetation association has over 93% remaining at a state level and approximately 99% remains at a bioregional level (Government of Western Australia, 2019). The application area has utilised previously disturbed / cleared areas which will reduce the amount of cleared pre-European vegetation.	At variance	No
Principle (h): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."* Assessment: There are no conservation areas located within the application area (GIS Database). The closest conservation area is the Jilbadji Nature Reserve which is located approximately 1.6 kilometres east of the application area (GIS Database). The proposed clearing is not likely to have an impact on the environmental values of this reserve.	Not likely to be at variance	No
Environmental value: land and water resources		
Principle (f): *"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."* Assessment: Given there are no water courses or wetlands recorded within the application area, the proposed clearing is unlikely to impact on- or off-site hydrology and water quality.	Not at variance	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 not susceptible to wind / water erosion (GIS Database). Noting the location of the application area, the proposed clearing is not likely to have an appreciable impact on land degradation.	Not at variance	No
Principle (i): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water."* Assessment: Given no water courses are recorded within the application area and the project involves the excavation of shallow pits where the water table will not be encountered, the proposed clearing is unlikely to impact surface or ground water quality (Western Botanical, 2020; GIS Database).	Not at variance	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 mapped soils and topographic contours in the surrounding area do not indicate the proposed clearing is likely to contribute to increased incidence or intensity of flooding (GIS Database).	Not at variance	No

Appendix D. Vegetation condition rating scale

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

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

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

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

Appendix E. Sources of information

E.1. GIS databases

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

- Aboriginal Heritage Places (DPLH-001)

- Aboriginal Heritage Places (DPLH-001)
- Bush Forever (Regional Scheme) (DPLH-022)
- Clearing Regulations – Schedule One Areas (DWER-057)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments – Catchments (DWER-028)
- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Pre-European Vegetation Statistics
- Interim Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality – Flood Risk (DPIRD-007)
- Soil Landscape Land Quality – Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality – Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality – Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality – Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality – Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality – Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping – Best Available (DPIRD-027)
- Soil Landscape Mapping – Rangelands (DPIRD-064)
- WA Now Aerial Imagery

Restricted GIS Databases used:

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

E.2. References

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Bennelongia (2020b) British Hill Mine: Subterranean Fauna Review. Report prepared for Blue Cap Mining Pty Ltd, July 2020.

British Hill Pty Ltd (2021) British Hill Project application for clearing permit within Mining Lease M77/1256. British Hill Pty Ltd, September 2022.

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Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia – Overview of Methodology and outputs Resource Management Technical Report No. 280. Department of Agriculture.
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4. Glossary

Acronyms:

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

Definitions:

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

T **Threatened species:**

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

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

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

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

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

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

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

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

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

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

Extinct Species:

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

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

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

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

Specially protected species:

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

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

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

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

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

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

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

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

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

P **Priority species:**

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

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

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

P1 **Priority One - Poorly-known species**
Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

P2 **Priority Two - Poorly-known species**
Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

P3 **Priority Three - Poorly-known species**
Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

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

Principles for clearing native vegetation:

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

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

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

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

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

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

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

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

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

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