



# Clearing Permit Decision Report

## 1. Application details and outcomes

### 1.1. Permit application details

Permit number:	10282/1
Permit type:	Purpose Permit
Applicant name:	Urban Resources Pty Ltd
Application received:	26 July 2023
Application area:	23.117 hectares
Purpose of clearing:	Mineral production
Method of clearing:	Mechanical Removal
Tenure:	Mining Lease 70/1284
Location (LGA area/s):	City of Wanneroo
Colloquial name:	Hawkins Road Sand Mine

### 1.2. Description of clearing activities

Urban Resources Pty Ltd proposes to clear up to 23.117 hectares of native vegetation within a boundary of approximately 23.117 hectares, for the purpose of mineral production. The project is located approximately 1.5 kilometres northeast of Jandabup, within the City of Wanneroo.

The application is to allow for extraction of basic raw materials.

### 1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	21 September 2023
Decision area:	23.117 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 26 July 2023. DMIRS advertised the application for a public comment for a period of 21 days, and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix A), relevant datasets (Appendix E), the clearing principles set out in Schedule 5 of the EP Act (Appendix C), proposed avoidance and minimisation measures (Section 3.1), relevant planning instruments and any other matters considered relevant to the assessment (Section 3.3). The Delegated Officer also took into consideration the previous function of the application area as a pine plantation.

The assessment identified that the proposed clearing may result in:

- the potential introduction and spread of weeds and dieback into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values; and
- potential land degradation in the form of wind erosion.

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

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

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback; and
- commence activities related to the permit no later than three months after undertaking clearing to reduce the risk of erosion.

## 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)
- *Mining Act 1978* (WA)

The key guidance documents which inform this assessment are:

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

## 3. Detailed assessment of application

### 3.1. Avoidance and mitigation measures

All mining areas were purposely designed to be limited to previously cleared pine plantation and avoid disturbance to local remnant native vegetation, Bush Forever sites and geomorphic wetlands (Urban Resources, 2023).

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

### 3.2. Assessment of impacts on environmental values

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

The assessment against the clearing principles (see Appendix B) identified the impacts of the proposed clearing are limited and able to be managed to be environmentally acceptable with standard avoid and minimise, hygiene, and staged clearing management conditions.

### 3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 22 August 2023 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

The permit area is within the South West Native Title Settlement area (DPLH, 2023). This settlement resolves Native Title rights and interests over an area of approximately 200,000 square kilometres within the south west of Western Australia. The mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (DPLH, 2023). It is the proponent's responsibility to comply with the *Aboriginal Cultural Heritage Act 2021* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

Other relevant authorisations required for the proposed land use include:

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

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

**End**

## Appendix A. Site characteristics

### A.1. Site characteristics

Characteristic	Details
Local context	The area proposed to be cleared is a 23.117 hectare isolated patch of native vegetation in the intensive land use zone of Western Australia. It is surrounded by native vegetation, mining developments, and it is located close to an urban area (GIS Database).
Ecological linkage	The application area has been previously cleared and does not form any formal or informal ecological linkages (GIS Database).
Conservation areas	The application area is located within the Gngangara-Moore River State Forest which is Crown Land managed by the Department of Biodiversity, Conservation and Attractions (DBCA) (GIS Database). There is also a Bush Forever site located 60 metres to the east of the application area (GIS Database).
Vegetation description	The vegetation of the application area is broadly mapped as the following Southwest vegetation complexes: 43: Low open forest and low woodland and sedgeland; and 45: Low open forest and low woodland (GIS Database).
Vegetation condition	Desktop assessment and aerial imagery indicate the vegetation within the proposed clearing area is in Degraded to Completely Degraded (Keighery, 1994) condition.  The full Keighery (1994) condition rating scale is provided in Appendix C. Representative photos of the vegetation in the application area are available in Appendix D.
Climate and landform	The application area is located in a winter dominant zone which is characterised by wet winters and dry summers and where the average annual rainfall (Wanneroo Station) is of 789.8 millimetres (BoM, 2023).
Soil description	The soil within the application area is mapped as soil unit Cb39 (GIS Database). Soil unit Cb39 is described as coastal lowlands: undulating area of various leached sands with a clay D horizon and other undescribed soils especially in the low-lying swampy areas (Northcote et al., 1960-68).
Land system	The application area is located within the Bassendean land system which covers the Swan Coastal Plain from Busselton to Jurien. It contains sand dunes and sandplains with pale deep sand, semi-wet and wet soil. Banksia-paperbark woodlands and mixed heaths (DPIRD, 2023).
Waterbodies	The desktop assessment and aerial imagery indicated that no watercourses transect the area proposed to be cleared (GIS Database).
Hydrogeography	The application area is located within the Gngangara Groundwater Area which is legislated by the <i>R/WW Act 1914</i> and contains a mapped groundwater salinity of less than 500 milligrams per litre total dissolved solids which is described as good quality drinking water (GIS Database).
Flora	There are no records of conservation significant flora within the application area. There are records of 20 Priority flora and one Threatened flora species within a 10 kilometre radius from the application area (GIS Database).
Ecological communities	The application area intersects the buffer area for Priority 3 Ecological Community 'Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region' (GIS Database).
Fauna	There are no records of conservation significant fauna within the application area. There are records of 33 conservation significant fauna species within a 10 kilometre radius from the application area (GIS Database).

### A.2. Vegetation extent

	Pre-European area (ha)	Current extent (ha)	Extent Remaining %	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre-European extent in all DBCA Managed Lands
IBRA Bioregion - Swan Coastal Plain	865,681	262,810	~34%	61,163	~15%
IBRA Subregion - Perth	1,117,757	466,143	~42%	183,164	~16%
Local Government - Wanneroo	67,517	30,151	~45%	16,037	~24%
Southwest vegetation complexes - Bioregion					
43	79,057	56,660	~72%	30,559	~39%

45	20,857	18,553	~89%	11,321	~54%
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Government of Western Australia (2019)

### A.3. Land degradation risk table

Risk categories	Land Unit 1
Wind erosion	H2: >70% of the map unit has a high to extreme wind erosion risk
Water erosion	L2: 3-10% of the map unit has a high to extreme water erosion risk
Salinity	L1: 30-50% of the map unit has a moderate to high salinity risk or is presently saline
Subsurface Acidification	L1: <3% of the map unit has a high subsurface acidification risk or is presently acid
Flood risk	L1: <3% of the map unit has a moderate to high flood risk
Water logging	L1: <3% of the map unit has a moderate to very high waterlogging risk
Phosphorus export risk	H2: >70% of the map unit has a high to extreme phosphorous export risk

(GIS Database)

### Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
<b>Environmental value: biological values</b>		
<p><u>Principle (a):</u> "Native vegetation should not be cleared if it comprises a high level of biodiversity."</p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared is unlikely to contain conservation significant vegetation, flora, or fauna due the completely degraded condition (Keighery, 1994) of the vegetation. Even though the buffer area of a PEC intersects the application area (GIS Database), there was no vegetation representative of the PEC within the area proposed to be cleared. The application area was cleared of its original native vegetation in the late 1960's for the establishment of the Gnangara Pine Plantation. Pine trees were progressively harvested by the Forest Products Commission between 2007 and 2010 (JBS&amp;G, 2023).</p> <p>Since the pines were harvested, a mixture of weeds and native disturbance opportunist species started colonising the area (JBS&amp;G, 2023). The application area is located in a dieback risk zone (GIS Database). Weeds and dieback have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed and dieback management condition.</p>	Not likely to be at variance	No
<p><u>Principle (b):</u> "Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."</p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared is unlikely to contain vegetation that forms part of significant habitat for fauna. Even though there are records of conservation significant fauna in the local area, the application area does not contain suitable foraging or breeding habitat for conservation significant fauna. The area proposed to be cleared lacks suitable habitat features for fauna of the region (see Appendix D). The completely degraded nature of the application area, including lack of structural species and limited shelter, means the area is very unlikely to provide a significant habitat for any fauna species (JBS&amp;G, 2023; Keighery, 1994).</p>	Not likely to be at variance	No
<p><u>Principle (c):</u> "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."</p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared is unlikely to contain habitat for Threatened flora species. There are no records of Threatened flora within the application area (GIS Database).</p>	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Principle (d):</u> <i>“Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community.”</i></p> <p><u>Assessment:</u></p> <p>The application area is not located within a known or mapped Threatened Ecological Community (TEC) (GIS Database). The vegetation in the proposed clearing area is not representative of any TEC (JBS&amp;G, 2023).</p>	Not likely to be at variance	No
<b>Environmental value: significant remnant vegetation and conservation areas</b>		
<p><u>Principle (e):</u> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u></p> <p>The application area falls within the Swan Coastal Plain Bioregion and the Perth subregion of the Interim Biogeographic Regionalisation for Australia (GIS Database). Approximately 34 percent of the pre-European vegetation still exists in the Swan Coastal Plain Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as southwest vegetation complexes 43 and 45 (GIS Database). These vegetation complexes have not been extensively cleared. The full vegetation extent can be found in section A.2.</p> <p>Assessment of aerial imagery and supporting information (JBS&amp;G, 2023; GIS Database) confirms that the proposed clearing is within a degraded area and that the clearing of native vegetation will be predominately regrowth from a Pine (<i>Pinus pinaster</i>) plantation that was cleared from 2007 to 2010. Further clearing will not reduce the ecological linkages within the local area, and is unlikely to impact the conservation significance of the pre-European vegetation remaining within the local and regional area. The area proposed to be cleared is not considered to be remnant vegetation.</p>	Not at variance	No
<p><u>Principle (h):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.”</i></p> <p><u>Assessment:</u></p> <p>Given the application area is located within the Gngangara-Moore River State Forest comment from DBCA was requested. DBCA indicated that they had no comment for this application (pers. comm., DBCA, September 2023).</p>	Not likely to be at variance	No
<b>Environmental value: land and water resources</b>		
<p><u>Principle (f):</u> <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p> <p><u>Assessment:</u></p> <p>Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact vegetation growing in, or in association with, an environment associated with a watercourse or wetland (GIS Database).</p>	Not likely to be at variance	No
<p><u>Principle (g):</u> <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</i></p> <p><u>Assessment:</u></p> <p>The mapped soils in the application area are sandy and are not susceptible to water erosion but are highly susceptible to wind erosion (DPIRD, 2023; GIS Database). Noting the location of the application area, the proposed clearing is likely to cause appreciable land degradation. Potential impacts from the proposed clearing likely to result in land degradation can be managed by placing a staged clearing condition on the clearing permit to prevent cleared areas from being exposed for long period of time.</p>	At variance	No
<p><u>Principle (i):</u> <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.”</i></p> <p><u>Assessment:</u></p> <p>There are no water courses or wetlands within the application area. The area proposed to be cleared is located within a Priority 1 Public Drinking Water Source Area (GIS Database). However, mining operations are compatible with conditions in</p>	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
P1 areas (DWER, 2021b). Therefore, it is not likely that the proposed clearing will cause deterioration in the quality of surface or underground water.		
<p><u>Principle (j):</u> "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."</p> <p><u>Assessment:</u></p> <p>Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to cause, or exacerbate, the incidence or intensity of flooding (GIS Database).</p>	Not likely to be at variance	No

### Appendix C. Vegetation condition rating scale

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

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

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

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



Figure 1: Minimal regrowth vegetation in the eastern portion of the proposed clearing area. Trees in the background do not form part of this clearing permit application (JBS&G, 2023).

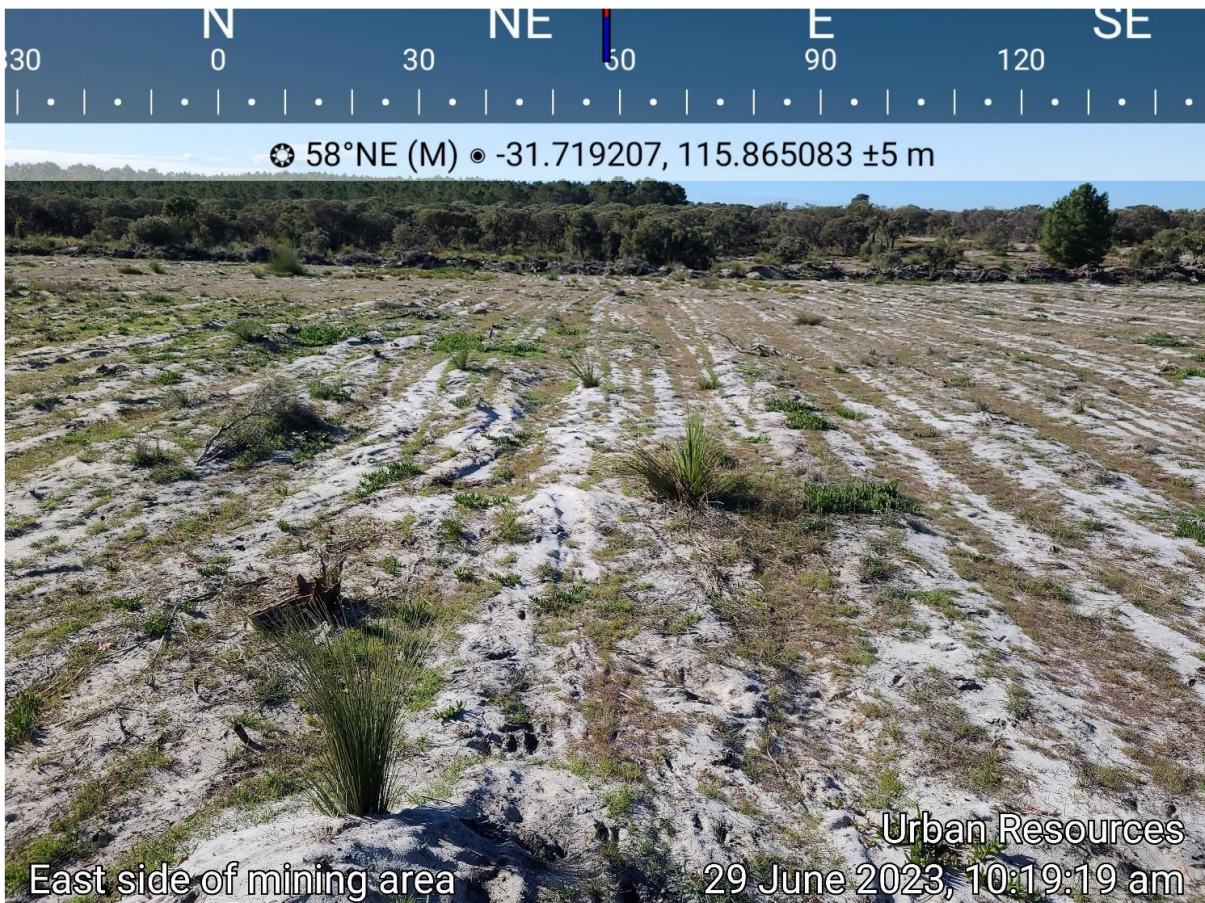
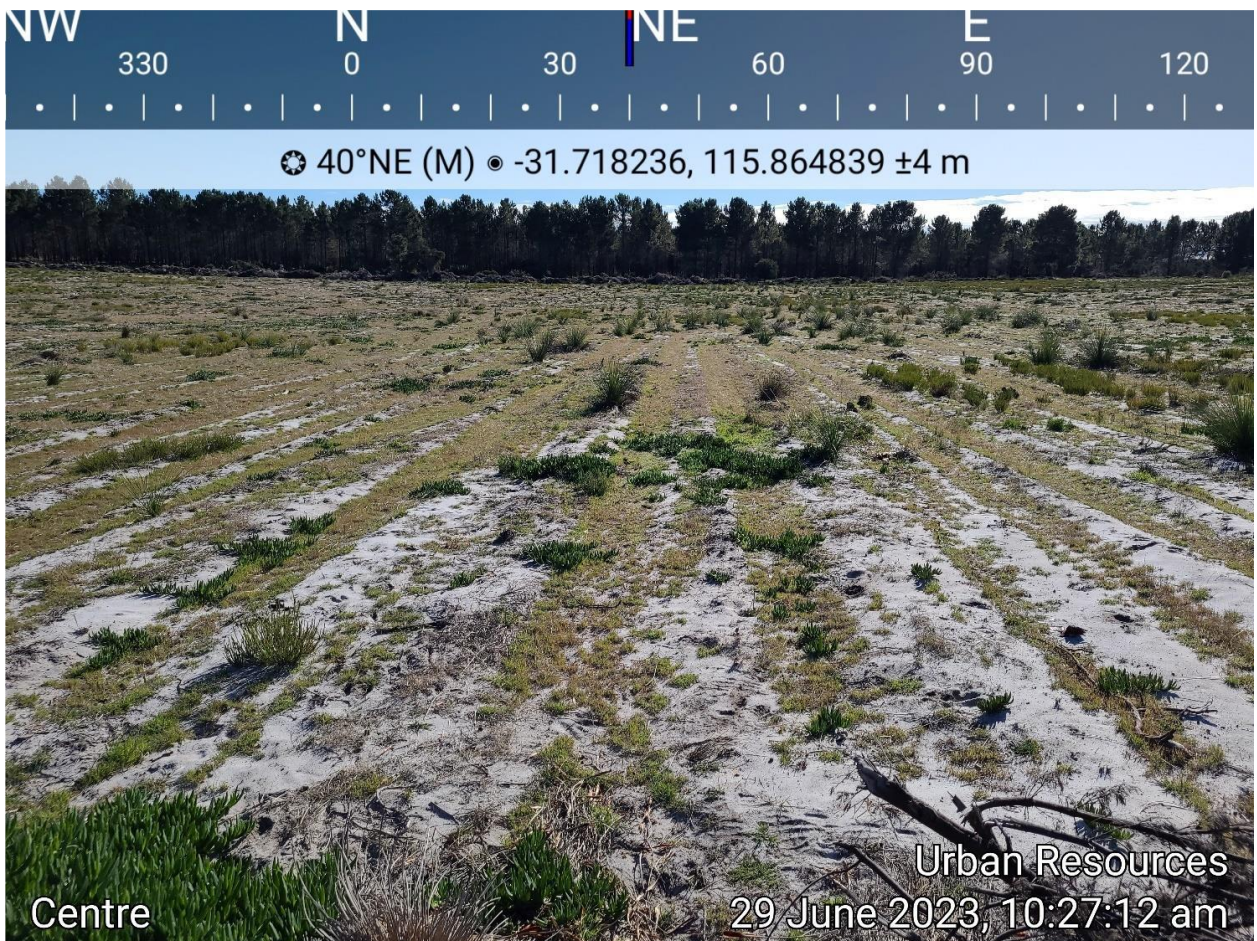


Figure 2: Minimal regrowth vegetation in the eastern portion of the proposed clearing area. Trees in the background do not form part of this clearing permit application (JBS&G, 2023).



**Figure 3:** View from the centre of the application area, noting minimal ground level regrowth vegetation (JBS&G, 2023).



**Figure 4:** View from the centre of the application area. Note the trees in the background do not form part of this clearing permit application (JBS&G, 2023).





**Figure 5:** Northwest corner of the application area, looking east. Note the trees in the background do not form part of this clearing permit application (JBS&G, 2023).

## Appendix E. Sources of information

### E.1. GIS databases

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

- 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)
- Environmentally Sensitive Areas (DWER-046)
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments – Catchments (DWER-028)
- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- IBRA Vegetation Statistics
- Pre-European Vegetation Statistics
- 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 – Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality – Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping – Best Available (DPIRD-027)
- WA Now Aerial Imagery

Restricted GIS Databases used:

- Black Cockatoo WTBC Breeding
- Black Cockatoo BC Roosts
- Black Cockatoo BC Feeding SCP
- Black Cockatoo Feeding Areas Buffered

- Black Cockatoo Baudins Distribution
- Black Cockatoo Carnabys Distribution
- 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

- Bureau of Meteorology (BoM) (2023) Bureau of Meteorology Website – Climate Data Online, Wanneroo Station. Bureau of Meteorology. <http://www.bom.gov.au/climate/data/> (Accessed 29 August 2023).
- Department of Environment Regulation (DER) (2014) *A guide to the assessment of applications to clear native vegetation*. Perth. Available from: [https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2\\_assessment\\_native\\_veg.pdf](https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf)
- Department of Planning, Lands and Heritage (DPLH) (2023) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 30 August 2023).
- Department of Primary Industries and Regional Development (DPIRD) (2023) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. URL: <https://dpiird.maps.arcgis.com/apps/webappviewer/index.html?id=662e8cbf2def492381fc915aaf3c6a0f> (Accessed 29 August 2023).
- Department of Water and Environmental Regulation (DWER) (2021a) Procedure: Native vegetation clearing permits. Joondalup. Available from: [https://dwer.wa.gov.au/sites/default/files/Procedure\\_Native\\_vegetation\\_clearing\\_permits\\_v1.pdf](https://dwer.wa.gov.au/sites/default/files/Procedure_Native_vegetation_clearing_permits_v1.pdf)
- Department of Water and Environmental Regulation (DWER) (2021b) Water Quality Protection Note No. 25: Land use compatibility tables for public drinking water source areas (WQPN 25), August 2021.
- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- JBS&G (2023) Native Vegetation Clearing Permit Application Supporting Documentation – Hawkins Road Sand Mine – Mining Lease 70/1284. Report prepared for Urban Resource Pty Ltd by JBS&G Australia Pty Ltd, August 2023.
- Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68) *Atlas of Australian Soils, Sheets 1 to 10, with explanatory data*. CSIRO and Melbourne University Press: Melbourne.
- Urban Resources Pty Ltd (2023) Clearing permit application form, CPS 10282/1, received 26 July 2023.

## 4. Glossary

### Acronyms:

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