



Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	10419/1
Permit type:	Purpose Permit
Applicant name:	MGM Bulk Pty Ltd
Application received:	22 November 2023
Application area:	65.1 hectares
Purpose of clearing:	Sand and limestone extraction and associated activities
Method of clearing:	Mechanical Removal
Tenure:	Mining Lease 70/1409 Miscellaneous Licence 70/227
Location (LGA area):	Shire of Waroona
Colloquial name:	Myalup Stage 3 North Site Project

1.2. Description of clearing activities

MGM Bulk Pty Ltd proposes to clear up to 65.1 hectares of native vegetation within a boundary of approximately 65.1 hectares, for the purpose of mining related infrastructure (MGM Bulk Pty Ltd, 2023). The project is located approximately 6.5 kilometres south east of Preston Beach, within the Shire of Waroona (GIS Database).

The application is to allow for the installation of an access road and excavation activities within an existing juvenile pine plantation (approximately six years of age) consisting of opportunistic native vegetation regrowth (Accendo, 2023a).

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	13 February 2024
Decision area:	65.1 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 Energy, Mines, Industry Regulation and Safety (DEMIRS) on 22 November 2023. DEMIRS 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 public comment (Appendix A), site characteristics (Appendix B), relevant datasets (Appendix E), supporting information provided by the applicant, 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 assessment identified that the proposed clearing may result in:

- 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 construction no later than three months after undertaking clearing to reduce the risk of erosion.

Site map

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

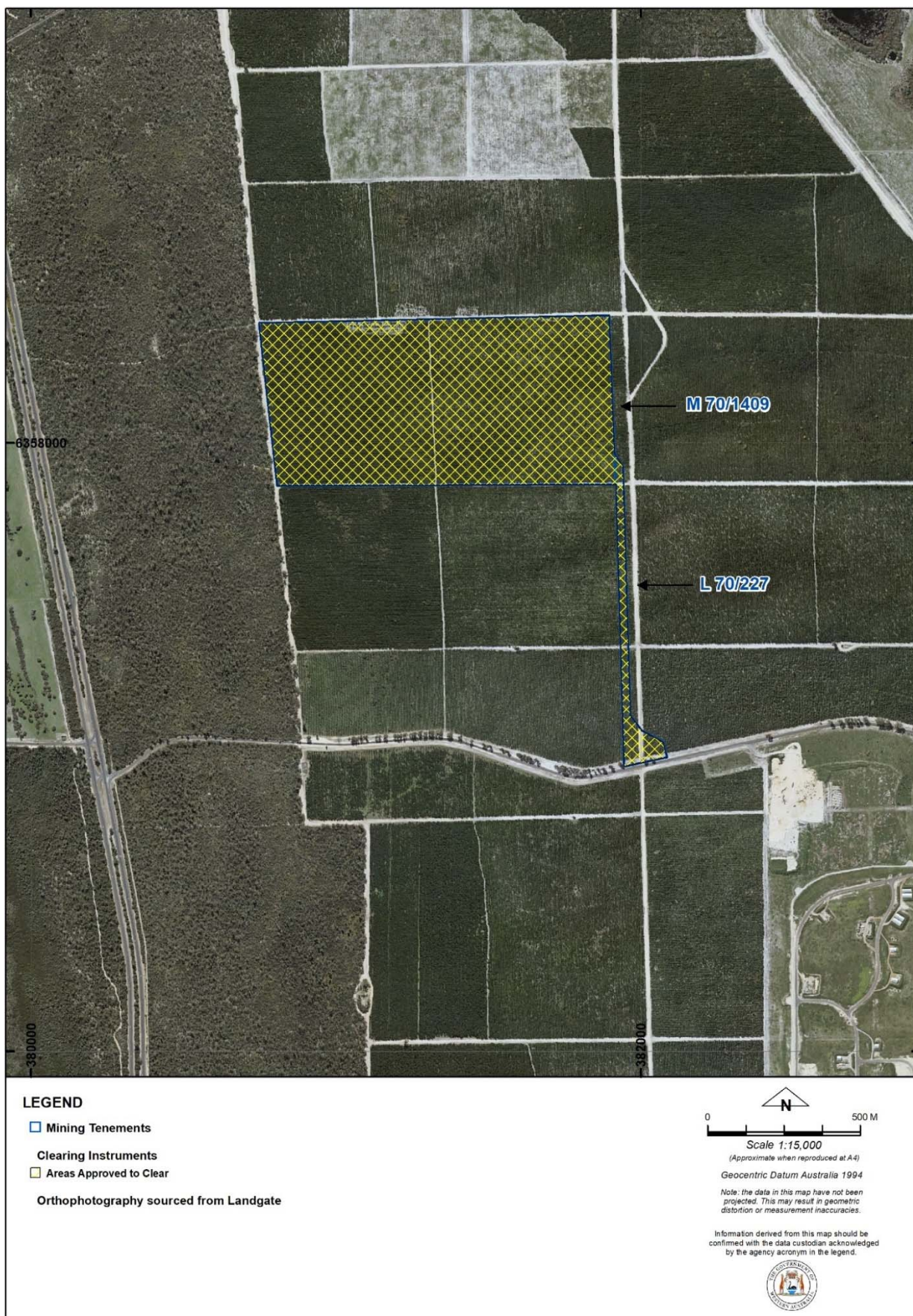


Figure 1. Map of the application area. The yellow area indicates the area within which conditional authorised clearing can occur under the granted clearing permit.

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)
- *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 2014)
- *Procedure: Native vegetation clearing permits* (DWER, October 2021)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

MGM Bulk Pty Ltd have outlined they will maintain, but not limited to, the following avoidance and mitigation measures:

- restrict access to areas outside of the excavation area to reduce the spread of weeds into or out of the subject site;
- avoid moving surface material or fill material from weed infested areas to non-infested areas;
- machinery and vehicles used to conduct clearing will be inspected for weeds and cleaned where appropriate prior to the commencement of works;
- weeds within the cleared area are to be sprayed as required in autumn prior to the winter rains;
- spot spraying and hand pulling of emergent weed species within revegetation areas will be carried out to gradually deplete seed stocks and reduce or eliminate any new colonies generated by quarry operations;
- exposed areas for future excavation or rehabilitation will be stabilised (e.g. with hydro mulch or polymer) to prevent erosion and dust emissions. If deemed necessary, problematic areas will be sown with sterile oats to further promote stabilisation;
- stockpiles will be configured to accommodate easy access for watering/dust minimisation if required;
- access roads and immediate extraction areas will be watered as required with water trucks;
- topsoil stockpiles will be watered and stabilised as required. Stabilisation techniques that will be considered depending on environmental conditions will include hydro-mulching;
- timing of earthworks (daily and seasonally) will coincide with periods of low wind velocity as far as practicable;
- truck loads to be covered by tarpaulins or similar;
- clearing will be undertaken on an as needs basis and clearing areas will be progressively rehabilitated (Accendo, 2023a).

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

3.2.1. Biological values (fauna) - Clearing Principle (b)

The area proposed to be cleared consists of juvenile pine species (approximately six years of age) with an understory of opportunistic and sparse re-grown native vegetation (Accendo, 2023a). The application area is almost solely comprised of a pine plantation which has been under rotation for 30 years, the vegetation condition is deemed 'Completely Degraded' (Accendo, 2023a).

The juvenile pine plantation does not provide a suitable habitat type for the conservation significant fauna species listed in Appendix B and therefore their occurrence within the application area is considered unlikely. It is however, considered possible that the conservation significant species *Zanda baudinii* (Baudin's Cockatoo) and *Zanda latirostris* (Carnaby's Cockatoo) have potential to occur within the application area, should the pines be retained until they reach maturity. A further assessment to determine the likelihood of these species occurring is provided below.

The Carnaby's black cockatoo, *Zanda latirostris* (Endangered) and Baudin's Cockatoo *Zanda baudinii* (Endangered) are a large cockatoo species that is endemic to, and widespread in the south-west of Western Australia (DCCEEW, 2024). These species occur in native eucalypt woodlands (e.g. those that contain salmon gum and wandoo, and in shrubland or kwongan heathland

dominated by hakea, dryandra, banksia and grevillea species) (DCCEEW, 2024). The application area is located within the modelled distribution of these species and *Zanda latirostris* has been recorded within 500 metres of the application area (DCCEEW, 2024; GIS Database).

The proposed area to be cleared does not provide any suitable roosting or breeding habitat due to the absence of the abovementioned tree species, however, pine plantations are recognised as an important food resource for the species (DAWE, 2022). When foraging in pine plantations, these species remove the pine cone from the tree and then tear the outer bracts off, extracting the seeds beneath (DAWE, 2022). The pine plantation within the application area is approximately six years of age (Accendo, 2023). Typically, pine trees only produce their first cones at seven years of maturity (Finn, H., et al, 2009), denoting that the pine plantation within the application area is currently unlikely to provide a foraging resource for these species. In addition, following the completion of extraction of the minable resources from the application area, the quarry will be returned to a safe and stable landform, planted with native species with a focus on providing food resources for Carnaby's Cockatoos and subsequently managed by DBCA as determined in consultation with the Forest Products Commission (FPC), DBCA, DMIRS and local government authorities (Accendo, 2023b).

Conclusion

For the reasons set out above, it is considered that the impacts of the proposed clearing on fauna can be managed by the conditions listed below.

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; and
- slow direction clearing to allow fauna to move into adjacent habitat.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 12 December 2023 by the Department of Energy, Mines, Industry Regulation and Safety inviting submissions from the public. One submission was received in relation to this application.

The permit area is within the South West Native Title Settlement area (DPLH, 2024). 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 is one registered Aboriginal Sites of Significance within the application area (DPLH, 2024). 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.

Under section 19 of the *Mining Act 1978*, the Minister for Mines (the Minister) may exempt land from the operation of any part or all of the Mining Act. While an area is so exempted, the Minister may call for applications (Request for Expressions of Interest) for the grant of a mining tenement over that land and the person applying to the Minister for the grant of a mining tenement must do so in such manner as the Minister directs. On receiving an application, the Minister may grant the mining tenement applied for subject to such terms and conditions as he thinks fit or he may refuse the application. However, section 19(8) requires the Minister to comply with section 24 of the Mining Act which relates to mining on State Forest. In this case, the Minister for Mines has obtained concurrence of the Minister for Environment. In 2023, MGM Bulk Pty Ltd received a Minister's (Minister for Mines) letter of invitation for Mining Lease 70/1409 and Miscellaneous Licence 70/227 as the successful respondent in the Expression of Interest process to extract basic raw materials at the Myalup Stage 3 North Site (within Myalup State Forest). The Request for Expressions of Interest documents issued by DMIRS states that at the end of mining it is anticipated that a void will remain from where the basic raw materials has been removed, however, the final end-of-mining landform will need to be reviewed through time as the extraction operations proceeds, noting the required closure objectives and outcomes with input from the land manager. Following the completion of extraction of the minable resources from the Site, the quarry will be returned to a safe and stable landform, planted with native species with a focus on providing food resources for Carnaby's Cockatoos and subsequently managed by DBCA as determined in consultation with the FPC, DBCA, DMIRS and local government authorities (Accendo, 2023b).

End

Appendix A. Details of public submissions

Summary of comments	Consideration of comment
Comments received from the Shire of Waroona regarding concerns of potential fringe effects on nearby remnant native vegetation.	Comments were considered during the assessment.

Appendix B. Site characteristics

B.1. Site characteristics

Characteristic	Details
Local context	The area proposed to be cleared has historically been cleared of native vegetation and re-planted with pine species (Accendo, 2023a). It is mapped within the intensive land use zone of Western Australia (GIS Database). The area is located within the Perth subregion of the Swan Coastal Plain Interim Biogeographic Regionalisation for Australia (IBRA) bioregion (GIS Database). The application area is mapped within the dieback risk zone (GIS Database). The area is surrounded by pine plantations to the north, east and south of the application area and is adjacent to a patch of native remnant vegetation to the west, currently separated via a track corridor (Accendo, 2023a; GIS Database).
Ecological linkage	The application area is not within an ecological linkage, the proposed clearing is not likely to restrict the movement of fauna across the landscape (GIS Database).
Conservation areas	The proposed clearing is within the Myalup State Forest which is managed by the Department of Biodiversity, Conservation and Attractions (DBCA) (Accendo, 2023a). The vegetated area immediately to the west of the subject site will be included in the Yalgorup National Park managed by DBCA (Accendo, 2023a).
Vegetation description	The vegetation of the application area is broadly mapped as the following Beard vegetation association: <ul style="list-style-type: none"> 6: Medium woodland; tuart and jarrah (GIS Database). <p>As the area proposed to be cleared has historically been cleared of native vegetation and re-planted with pine species, the area is not considered to be representative of this vegetation association (Accendo, 2023a). The current vegetation consists of juvenile pine species (approximately six years of age) with an understorey of opportunistic and sparse re-grown native vegetation (Accendo, 2023a). The application area is almost solely comprised of a pine plantation which has been under rotation for 30 years, the vegetation condition is deemed 'Completely Degraded' (Accendo, 2023a).</p>
Vegetation condition	The proposed clearing consists of almost solely pine plantation which has been under rotation for 30 years, the vegetation is considered to be in 'Completely Degraded' condition, described as: <ul style="list-style-type: none"> 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 (Keighery, 1994). <p>The full Keighery (1994) condition rating scale is provided in Appendix D.</p>
Climate and landform	The region experiences hot, dry summers and mild winters with an annual rainfall average of approximately 608.3 millimetres (BoM, 2024).
Soil description and Land degradation	The soils within the application area are mapped as: <ul style="list-style-type: none"> Spearwood S1c phase: Dune ridges with deep bleached grey sands with yellow-brown subsoils, and slopes up to 15%; Spearwood S2a phase: Lower slopes (1-5%) of dune ridge with moderately deep to deep siliceous yellow-brown sands or pale sands with yellow-brown subsoils and minor limestone outcrop; and Spearwood S3 phase: Inter-dunal swales and depressions with gently inclined side slopes and deep rapidly drained siliceous yellow-brown sands (DPIRD, 2024). <p>The Spearwood Dune System is characterised by leached sand at the surface with yellow to reddish brown sand at greater depths underlain by limestone (Accendo, 2023a). The topography of the subject site is variable and ranges from 20 metres Australian Height Datum (AHD) in the southwest corner to 52 metres AHD in the north eastern corner (Accendo, 2023a).</p>
Waterbodies	The desktop assessment and aerial imagery indicated that there are no surface water bodies within the application area which can be attributed to the porosity and permeability of the sand and limestone (Accendo, 2023a; GIS Database). <p>The Yalgorup Lakes System (AW 0000095), listed under the Directory of Important Wetlands in Australia, is located approximately one kilometre west of the application area (GIS Database). Approximately 1.2 kilometres east of the application lies an unnamed Lake listed under the geomorphic wetlands of the Swan Coastal Plain managed by DBCA (GIS Database).</p>

Characteristic	Details
Hydrogeography	The application area is partially mapped within the Priority 1 Preston Beach Water Reserve proclaimed Public Drinking Water Source Area (PDWSA) and the South West Coastal Groundwater Area, proclaimed under the <i>Rights in Water Irrigation (RIWI) Act 1914</i> (GIS Database).
Flora	There are 31 records of conservation significant flora species within a 10 kilometre radius of the application area (GIS Database). No conservation significant flora species have been recorded within the application area (GIS Database).
Ecological communities	The application area is not mapped within a Threatened Ecological Community (TEC) (GIS Database). The application area is partially mapped within the 'Tuart (<i>Eucalyptus gomphocephala</i>) woodlands and forests of the Swan Coastal Plain' (Priority 3) Priority Ecological Community (PEC) (GIS Database).
Fauna	There are 33 records of conservation significant fauna species within a 10 kilometre radius of the application area (GIS Database). No conservation significant fauna species have been recorded within the application area (GIS Database). The juvenile pine plantation with an understory of opportunistic and sparse re-grown native vegetation in 'Completely Degraded' condition is not considered suitable habitat for these fauna species.

B.2. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix E.1), impacts to the following conservation significant flora required further consideration (Western Australian Herbarium, 1998-; GIS Database;).

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)
<i>Acacia semitrullata</i>	P4	N	~0.7	88
<i>Alyogyne</i> sp. Rockingham (G.J. Keighery 14463)	P2	N	~3.6	5
<i>Angianthus drummondii</i>	P3	N	~9.9	19
<i>Blennospora doliiformis</i>	P3	N	~2.3	16
<i>Boronia capitata</i> subsp. <i>gracilis</i>	P3	N	~8.6	29
<i>Caladenia huegelii</i>	T	N	~9.4	43
<i>Caladenia speciosa</i>	P4	N	~1.4	62
<i>Carex tereticaulis</i>	P3	N	~9.8	18
<i>Conostylis pauciflora</i> subsp. <i>pauciflora</i>	P4	N	~4	15
<i>Dillwynia dillwynioides</i>	P3	N	~9.1	40
<i>Diuris brevis</i>	P2	N	~8.6	2
<i>Diuris micrantha</i>	T	N	~2.5	9
<i>Diuris purdiei</i>	T	N	~4.8	26
<i>Drakaea elastica</i>	T	N	~9.9	18
<i>Galium leptogonium</i>	P3	N	~2.3	20
<i>Hakea oligoneura</i>	P2	N	~2.7	17
<i>Haloragis aculeolata</i>	P2	N	~8.9	7
<i>Haloragis scoparia</i>	P1	N	~2.2	7
<i>Hemigenia microphylla</i>	P3	N	~5.3	26
<i>Hibbertia leptotheca</i>	P3	N	~5.2	39
<i>Lasiopetalum membranaceum</i>	P3	N	~3.9	35
<i>Pimelea calcicola</i>	P3	N	~4.5	31
<i>Platysace ramosissima</i>	P3	N	~3.3	16
<i>Pterostylis frenchii</i>	P2	N	~1.9	6
<i>Schoenus natans</i>	P4	N	~5.3	66
<i>Schoenus</i> sp. Waroona (G.J. Keighery 12235)	P3	N	~6	12
<i>Sphaerolobium calcicola</i>	P3	N	~1.4	21
<i>Stylidium longitubum</i>	P4	N	~2.1	51
<i>Stylidium maritimum</i>	P3	N	~4.5	50
<i>Stylidium paludicola</i>	P3	N	~9.2	36

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)
<i>Stylidium trudenii</i>	P3	N	~9.3	6

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

B.3. Fauna analysis table

Species name	Common Name	Conservation status	Distance of closest record to application area (km)	Suitable habitat features? [Y/N]
<i>Actitis hypoleucos</i>	common sandpiper	MI	~1.3	N
<i>Arenaria interpres</i>	ruddy turnstone	MI	~5.2	N
<i>Calidris acuminata</i>	sharp-tailed sandpiper	MI	~4	N
<i>Calidris alba</i>	sanderling	MI	~5.6	N
<i>Calidris ferruginea</i>	curlew sandpiper	CR	~2.9	N
<i>Calidris ruficollis</i>	red-necked stint	MI	~1.3	N
<i>Calidris tenuirostris</i>	great knot	CR	~2.9	N
<i>Calyptorhynchus banksii naso</i>	forest red-tailed black cockatoo	VU	~4.3	N
<i>Charadrius leschenaultii</i>	greater sand plover	VU	~4.5	N
<i>Dasyurus geoffroii</i>	chuditch, western quoll	VU	~2.6	N
<i>Falco peregrinus</i>	peregrine falcon	OS	~3.5	N
<i>Falsistrellus mackenziei</i>	western false pipistrelle	P4	~1.9	N
<i>Hydromys chrysogaster</i>	water-rat, rakali	P4	~5.1	N
<i>Idiosoma sigillatum</i>	Swan Coastal Plain shield-backed trapdoor spider	P3	~9	N
<i>Isodon fusciventer</i>	quenda, southwestern brown bandicoot	P4	~1.8	N
<i>Lerista lineata</i>	Perth slider, lined skink	P3	~5.6	N
<i>Notamacropus irma</i>	western brush wallaby	P4	~8.2	N
<i>Numenius madagascariensis</i>	eastern curlew	CR	~7.9	N
<i>Numenius phaeopus</i>	whimbrel	MI	~8.3	N
<i>Oxyura australis</i>	blue-billed duck	P4	~1.3	N
<i>Phascogale tapoatafa wambenger</i>	south-western brush-tailed phascogale, wambenger	CD	~6.6	N
<i>Plegadis falcinellus</i>	glossy ibis	MI	~1.2	N
<i>Pluvialis fulva</i>	Pacific golden plover	MI	~8.3	N
<i>Pluvialis squatarola</i>	grey plover	MI	~5.6	N
<i>Pseudocheirus occidentalis</i>	western ringtail possum, ngwayir	CR	~0.7	N
<i>Synemon gratiosa</i>	graceful sunmoth	P4	~5.6	N
<i>Thalassarche chlororhynchos</i>	Atlantic yellow-nosed albatross	VU	~8.5	N
<i>Thalasseus bergii</i>	crested tern	MI	~7.8	N
<i>Thinornis rubricollis</i>	hooded plover, hooded dotterel	P4	~2.5	N
<i>Tringa nebularia</i>	common greenshank	MI	~2.9	N
<i>Zanda baudinii</i>	Baudin's cockatoo	EN	~1.3	N
<i>Zanda latirostris</i>	Carnaby's cockatoo	EN	~0.4	N

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

Appendix C. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<p><u>Principle (a):</u> <i>“Native vegetation should not be cleared if it comprises a high level of biodiversity.”</i></p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared is not likely to contain significant flora, fauna, habitats or assemblages of plants (Accendo, 2023a; GIS Database). A portion of the application area is mapped within the ‘Tuart (<i>Eucalyptus gomphocephala</i>) woodlands and forests of the Swan Coastal Plain’ (Priority 3) Priority Ecological Community (PEC) (GIS Database). However, as the area proposed to be cleared has historically been cleared of native vegetation and re-planted with pine species, the area is not considered to be representative of this PEC (Accendo, 2023a).</p> <p>There are 31 conservation significant flora species that have been recorded within 10 kilometres of the application area (GIS Database). It is considered that these species are unlikely to occur within the application area as the area has been cleared and under rotation for the past 30 years, resulting in continued disturbances to soil and potential associated soil acidification and reductions in nutrient availability (Williams, M.C. & Wardle, G.M., 2007).</p> <p>The proposed clearing consists of almost solely pine plantation which has been under rotation for 30 years, with an understory of opportunistic and sparse re-grown native vegetation in ‘Completely Degraded’ condition and is not considered to comprise a high level of biodiversity (Accendo, 2023a).</p>	Not likely to be at variance	No
<p><u>Principle (b):</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 significant habitat for fauna.”</i></p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared (juvenile pine plantation) does not contain significant habitat for conservation significant fauna (GIS Database).</p>	Not likely to be at variance	Yes <i>Refer to Section 3.2.1, above.</i>
<p><u>Principle (c):</u> <i>“Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</i></p> <p><u>Assessment:</u></p> <p>There are no known records of Threatened flora within the application area. The application area is not likely to contain suitable habitat for Threatened flora given the degraded and sparse nature of regrowth within the pine plantation (GIS Database).</p>	Not likely to be at variance	No
<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>There are no known Threatened Ecological Communities (TECs) located within the application area (GIS Database).</p>	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
<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 consists of a pine plantation that has been under rotation for 30 years (Accendo, 2023a). The area was recently cleared approximately six years ago, resulting in the current vegetation consisting of solely pine plantation in ‘Completely Degraded’ condition, therefore not representative of remnant native vegetation that has been extensively cleared (Accendo, 2023a).</p>	Not likely to be 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 distance to the nearest conservation area (Yalgorup National Park, located directly adjacent to the application area), the proposed clearing may have an impact</p>	May be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
on the environmental values of the adjacent conservation area (GIS Database). The proponent has provided sufficient avoidance and mitigation measures that will be undertaken to prevent the possible impacts (e.g. edge effects) on the adjacent vegetation (Accendo, 2023a). Potential impacts to the adjacent conservation area as a result of the proposed clearing may be minimised by the implementation of a weed, dieback and a staged clearing condition on the permit.		
Environmental value: land and water resources		
<p>Principle (f): <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>There are no permanent watercourses or wetlands within the area proposed to be cleared (GIS Database). The proposed clearing is not considered to impact the nearby wetlands of conservation significance as all rainfall and surface runoff will be collected in the active quarry area (Accendo, 2023a).</p>	Not likely to be at variance	No
<p>Principle (g): <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 are highly susceptible to wind erosion (GIS Database). Noting the location of the application area, the proposed clearing may have an appreciable impact on land degradation. Potential impacts to land degradation as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition.</p>	May be at variance	No
<p>Principle (i): <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>Given the application area is mapped within a Public Drinking Water Source Area (PDWSA), the proposed clearing may impact surface or ground water quality (GIS Database). The risk associated with the proposed clearing within the Priority 1 PDWSA is considered low given that there will be no use or storage of chemicals onsite, and the proponent will maintain a three metre separation distance between groundwater and the pit floor within the PDWSA and a two metre separation distance between groundwater and the pit floor outside of the PDWSA at all times (Accendo, 2023a).</p>	May be at variance	No
<p>Principle (j): <i>“Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.”</i></p> <p><u>Assessment:</u></p> <p>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).</p>	Not likely to be 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.

Condition	Description
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)
- Contours (DPIRD-073)
- 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)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments – Catchments (DWER-028)
- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- IBRA Vegetation Statistics
- 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 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

- Accendo (2023a) Clearing Permit Application. M70/1409 & L70/227 Myalup Stage 3 North. Report prepared for MGM Bulk Pty Ltd, November 2023.
- Accendo (2023b) Mine Closure Plan Stage 3 North Mining Lease M70/1409 Miscellaneous Licence L70/227 MGM Bulk Pty Ltd. Report prepared for MGM Bulk Pty Ltd, February 2023
- Bureau of Meteorology (BoM) (2024) Bureau of Meteorology Website – Climate Data Online, Weather Station (Mandurah – 009977). Bureau of Meteorology. <https://reg.bom.gov.au/climate/data/> (Accessed 7 February 2024).
- DAWE (2022) Referral guideline for 3 WA threatened black cockatoo species: Carnaby's Cockatoo, Baudin's Cockatoo and the Forest Red-tailed Blackcockatoo, Department of Agriculture, Water and the Environment, Canberra, February.
- Department of Climate Change, Energy, the Environment and Water (DCCEEW) (2024) Species Profile and Threats Database (SPRAT). Available from <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl> (Accessed 12 February 2024).
- 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

- Department of Mines, Industry Regulation and Safety (DMIRS) (2020) Request for Expressions of Interest To Access Sand and Other Materials Myalup State Forest - Stage 3 Release. Issued by The Department of Mines, Industry Regulation and Safety On behalf of the Minister for Mines and Petroleum, August 2020.
- Department of Planning, Lands and Heritage (DPLH) (2024) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 7 February 2024).
- Department of Primary Industries and Regional Development (DPIRD) (2024) 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 7 February 2024).
- Department of Water and Environmental Regulation (DWER) (2021) Procedure: Native vegetation clearing permits. Joondalup. Available from: https://dwer.wa.gov.au/sites/default/files/Procedure_Native_vegetation_clearing_permits_v1.pdf
- Finn, H., Stock, W., & Valentine, L. (2009). Pines and the ecology of Carnaby's Black-Cockatoos (*Calyptorhynchus latirostris*) in the Gngangara Sustainability Strategy Area. Western Australian Department of Environment and Conservation.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- MGM Bulk Pty Ltd (2023) Clearing permit application form, CPS 10419/1, received 22 November 2023.
- Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions, Western Australia. <https://florabase.dpaw.wa.gov.au/> (Accessed 7 February 2024).
- Williams, M.C. & Wardle, G.M. (2007). *Pinus radiata* invasion in Australia: Identifying key knowledge gaps and research directions. *Austral Ecology*. 32. 721 - 739.

4. Glossary

Acronyms:

BC Act	<i>Biodiversity Conservation Act 2016</i> , Western Australia
BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DCCEEW	Department of Climate Change, Energy, the Environment and Water, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DEMIRS	Department of Energy, Mines, Industry Regulation and Safety
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia (now DEMIRS)
DMP	Department of Mines and Petroleum, Western Australia (now DEMIRS)
DoEE	Department of the Environment and Energy (now DCCEEW)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora (now known as Threatened Flora)
DWER	Department of Water and Environmental Regulation, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPA	Environmental Protection Authority, Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (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	<i>Rights in Water and Irrigation Act 1914</i> , 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.