Department of Energy, Mines, Industry Regulation and Safety

GOVERNMENT OF WESTERN AUSTRALIA

Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	9656/2
Permit type:	Area Permit
Applicant name:	L & G Granite Pty Ltd
Application received:	31 July 2024
Application area:	4.58 hectares
Purpose of clearing:	Quarry Operations
Method of clearing:	Mechanical Removal
Tenure:	Mining Lease 70/1300
Location (LGA area):	Shire of Dowerin
Colloquial name:	Manmanning Quarry

1.2. Description of clearing activities

L & G Granite Pty Ltd proposes to clear up to 4.58 hectares of native vegetation within a boundary of approximately 4.58 hectares, for the purpose of continuing quarrying operations (L & G Granite, 2024b). The project is located approximately 26 kilometres north north-east of Dowerin, within the Shire of Dowerin (GIS Database). The application is to allow for continuing quarrying operations (L & G Granite, 2024b).

A previous clearing permit, CPS 6092/1, was granted by the Department of Mines and Petroleum (now the Department of Energy, Mines, Industry Regulation and Safety) on 12 June 2014 and was valid from 5 July 2014 to 5 July 2019. The permit authorised the clearing of up to 14.291 hectares of native vegetation within a boundary of approximately 15.98 hectares, for the purpose of Quarrying Operations. CPS 6092/1, which expired 5 July 2019, was granted over the quarry operation area within Mining Lease 70/1300 and had exclusion zones over the south-western corner and two small areas along the southern boundary.

Clearing permit CPS 9656/1 was granted by the Department of Mines, Industry Regulation and Safety (now the Department of Energy, Mines, Industry Regulation and Safety) on 25 August 2022 and was valid from 17 September 2022 to 16 September 2024. The permit authorised the clearing of up to 4.58 hectares of native vegetation within a boundary of approximately 4.58 hectares, for the purpose of quarry operations.

On 31 July 2024, the Permit Holder applied to amend CPS 9656/1 to extend the permit duration for an additional two years. The area of clearing authorised and the permit boundaries remained unchanged (L & G Granite, 2024b). No clearing of native vegetation has been carried out under this permit to date (L & G Granite, 2024a).

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	3 September 2024
Decision area:	4.58 hectares of native vegetation

1.4. Reasons for decision

This clearing permit amendment application was submitted, accepted, assessed, and determined in accordance with sections 51O and 51KA(1) of the *Environmental Protection Act 1986* (EP Act). The Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) advertised the application for a public comment for a period of seven 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), photos of the vegetation (Appendix D), the clearing principles set out in Schedule 5 of the EP Act (Appendix B), relevant planning instruments and any other matters considered relevant to the assessment (Section 3.3).

The assessment has not changed since the assessment for CPS 9656/1, except in the case of principles (b) and (f). The Delegated Officer determined that the proposed extension of duration of time is not likely to lead to an unacceptable risk to environmental values. The Delegated Officer decided to grant the amended clearing permit with the existing permit conditions.

1.5. Site map

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

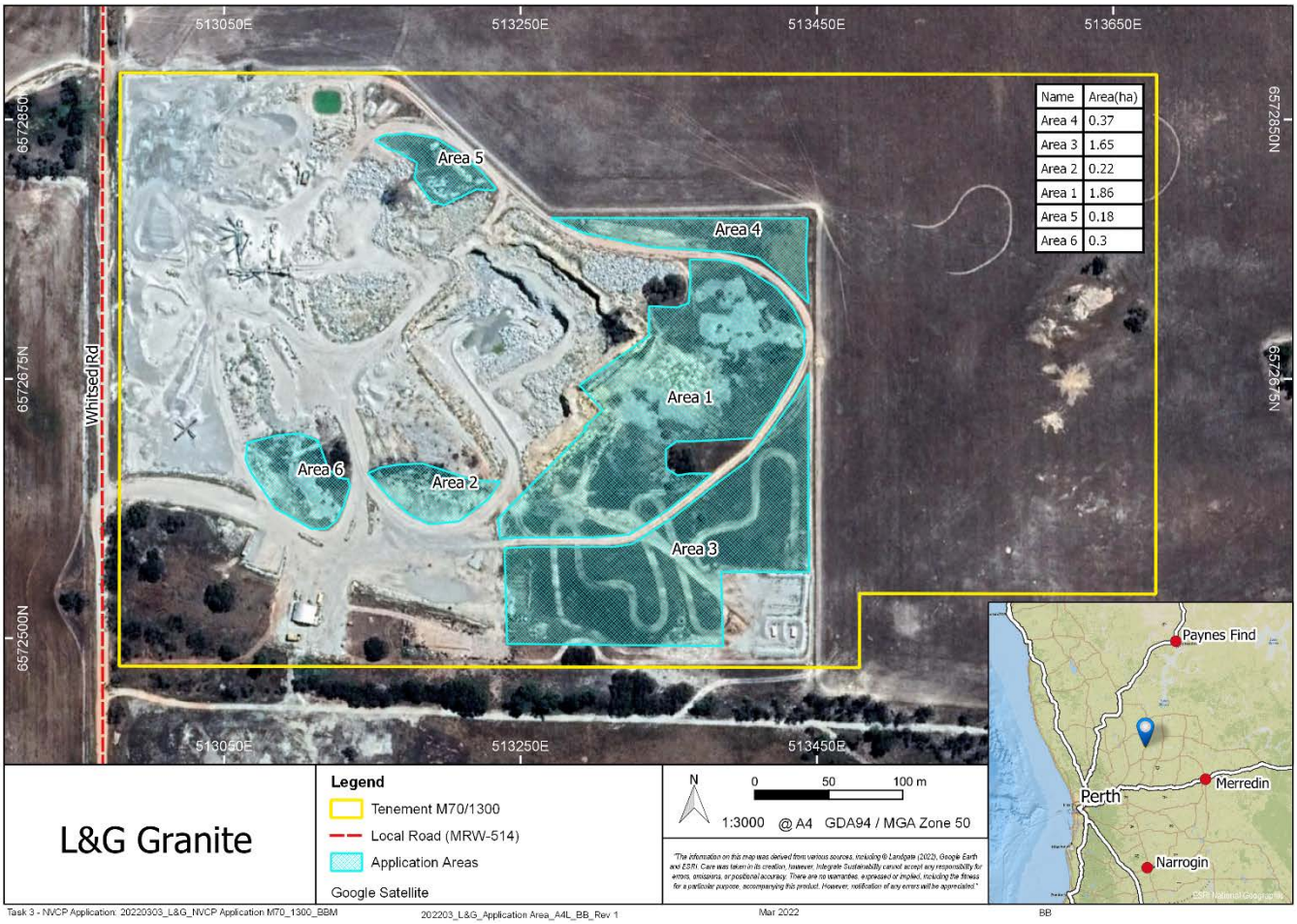

Figure 1. Map of the application area. The blue areas indicate the areas approved to clear under the granted clearing permit.

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)
- *Rights in Water and Irrigation Act 1914* (RIWI Act)

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

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. Spatial information indicated that all remnant vegetation has been excised from the application area (GIS Database).

3.2. Assessment of impacts on environmental values

A review of current environmental information (Appendix A) reveals that the assessment against the clearing principles has not changed significantly from the Clearing Permit Decision Report CPS 9656/1. Based on the current environmental information, the amendment to extend the permit duration is unlikely to change the environmental impacts of the proposed clearing.

No Threatened flora, Threatened Ecological Communities or Priority Ecological Communities have been recorded within or in close proximity to the application area (GIS Database).

Six threatened flora species and seven priority flora species have been recorded within local area (10 kilometres of the application area) (GIS Database; Appendix A.3). No flora and vegetation field survey have been undertaken. Following review of current data, no new species listed as Threatened or Priority flora have been identified in the local area since CPS 9656/1 was granted (GIS Database). Given the highly degraded nature of the site due to historical mining and clearing, suitable habitat for the potential flora species is unlikely to be present.

In addition to the nine fauna species noted in CPS 9656/1, a desktop review revealed records for two additional conservation significant fauna species (malleefowl (*Leipoa ocellata* – VU) and blue-billed duck (*Oxyura australis* - P4)) within 20 kilometres of the proposed clearing area (GIS Database). The vegetation present within the application area is unlikely to provide significant habitat for either of these species. The vegetation within the application area has been subjected to multiple disturbances and was in a generally degraded condition (GIS Database; Appendix D). The small amount of vegetation that is present is generally of low value and is unlikely to support conservation significant fauna species, however there is potential for these species to visit the area.

As the application area falls within the known distribution range of the Carnaby's cockatoo, the potential for foraging, breeding and roosting habitat to be present was considered during the assessment. Aerial imagery indicates that all trees have been excised from the application area, removing potential for Carnaby's breeding and roosting habitat to be present (GIS Database). Therefore, impacts to breeding and roosting habitat for the Carnaby's cockatoo are considered unlikely. A Carnaby's cockatoo confirmed breeding site is recorded less than 15 kilometres from the application area (GIS Database). Foraging habitat within 12 kilometres of breeding habitat is considered important to support breeding effort for this species (DAWE, 2022). Aerial imagery and photos submitted with the application for CPS 9656/1 (Appendix D) indicate that the vegetation within the application area is highly degraded (L & G Granite 2022; GIS Database). Given the application area is greater than 12 kilometres from the nearest confirmed breeding site, trees have been excised from the application area, and the highly degraded nature of the vegetation present, Carnaby's cockatoo foraging habitat would be extremely limited, if at all present (GIS Database).

Peregrine falcon has been recorded within 20 kilometres of the application area. As noted in CPS 9656/1, a review of aerial imagery and site photos (Appendix D) indicate that the application area does not contain any cliff faces or large, dead trees with hollows suitable as nesting sites for the peregrine falcon. Therefore, the application area is unlikely to contain significant habitat for breeding (Birdlife, 2022; GIS Database). However, the area proposed to be cleared may be accessed by transient, non-breeding individuals. Given the large distribution of the peregrine falcon across Australia, the application area is not likely to contain significant habitat crucial to the conservation of the species (Birdlife, 2022).

Given the above, the variance against principle (b) has changed from may be at variance to not likely to be at variance.

The application area is mapped as occurring on the Kwolyin, Kwelkan 1 Phase land system (GIS Database). This land system is generally prone to erosion (GIS Database). However given the relatively small extent of the application area and the condition of the vegetation, the proposed clearing is not likely to have an appreciable impact on land degradation.

The application area intersects an undefined Granite outcrop wetland (Wheatbelt Wetlands Stage 1 (DBCA-021)) (GIS Database). As noted in Appendix B, the supporting information for this spatial layer states "*All granite outcrops have been identified as wetlands on the assumption that all outcrops have the capacity to hold water in the form of one or multiple pools*" (DEC, 2008). The vegetation in the application area appears to be highly degraded and there is no indication that riparian vegetation is present (GIS Database). Given the above, the variance against principle (f) has changed from Not at variance to Not likely at variance. In addition, there are unlikely to be impacts to groundwater and surface water in the application area from removal of native vegetation.

There are no conservation areas within or in close proximity to the application area (GIS Database). The nearest DBCA (formerly DPaW) managed land is the Moonijin Nature Reserve located approximately seven kilometres north of the application area (GIS Database). The proposed amendment is unlikely to impact any conservation areas.

Based on the current environmental information, the amendment to extend the permit duration is unlikely to change the environmental impacts of the proposed clearing. The conditions currently imposed on clearing permit CPS 9656/1 are considered adequate to manage the impacts of the clearing.

3.3. Relevant planning instruments and other matters

The clearing permit amendment application was advertised on 9 August 2024 by the Department of Energy, 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, 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 are no 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.

End

Appendix A. Site characteristics

A.1. Site characteristics

Characteristic	Details
Local context	The application area is located approximately 25 kilometres north of Dowerin (GIS Database). The Manmanning Quarry project site was previously cleared for farming around 1920 (L & G Granite, 2022). Around 1976, approximately 16 hectares was acquired by the Western Australia Government Railway for a quarry reserve (L & G Granite, 2022). The quarry reserve was utilised for two years, then remained idle until L & G Granite Pty Ltd acquired the lease in 2011 (L & G Granite, 2022). A portion of Mining Lease 70/1300 is outside of the fenced quarry area and is still utilised for cropping and sheep grazing (L & G Granite, 2022). The area proposed to be cleared is part of a highly disturbed area which is likely to be mainly weed and crop species with some isolated native trees (Appendix D). It is located in the highly-cleared, intensive land use zone of Western Australia and is surrounded by predominantly crops and some isolated patches of remnant vegetation (GIS Database). There is some remnant vegetation in the south-western corner and in two small patches along the southern boundary of the mining lease. These areas were not included within the application area (GIS Database).
Ecological linkage	The application area is within the Avon Wheatbelt IBRA region (GIS Database). The region has been largely cleared for agricultural purposes and remnant vegetation is highly fragmented across the landscape (GIS Database). There is a small area of less-degraded remnant vegetation at the south-western corner and two small portions of the southern boundary of the quarry site, which may provide a linkage to remnant vegetation on adjacent properties (GIS Database). This remnant vegetation was part of an exclusion condition under CPS 6092/1. The application area for CPS 9656/2 does not include this remnant vegetation (GIS Database).
Conservation areas	The nearest conservation area is the Moonijin Nature Reserve located approximately seven kilometres north of the application area (GIS database). The Manmanning Nature Reserve is located approximately nine kilometres north-west of the application area (GIS Database).
Vegetation description	The vegetation of the application area is broadly mapped as the following Beard vegetation association: • 1024: Shrublands; mallee & casuarina thicket (GIS Database). No flora or vegetation surveys were submitted with the application for CPS 9695/1 or this amendment application.
Vegetation condition	The site photos provided by the applicant (Appendix D) indicate the vegetation within the proposed clearing area is in degraded to completed degraded (Keighery, 1994) condition, described as: • 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. • Completed Degraded: The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs. The full Keighery (1994) condition rating scale is provided in Appendix C. Representative photos are available in Appendix D.
Climate and landform	Climate is semi-arid (dry) warm Mediterranean (CALM, 2002). The application area is mapped with an elevation of 340 metres AHD (GIS Database). The annual average rainfall is 368.0 millimetres (BoM, 2024).
Soil description	The soil is mapped as soil unit Kwolyin, Kwelkan 1 Phase, which is described as gently undulating to undulating rises, chief soils are brown sandy earth, shallow loamy duplex, deep loamy duplex, deep and shallow sand, flora species including York gum, Jam, *Melaleuca* spp., *Acacia* spp., *Tammer* spp., Salmon gum., and Quandong (DPIRD, 2024).
Land degradation risk	The application area has been mapped as: • less than three percent of the map unit having a high to extreme water erosion risk • less than three percent of the map unit having a high to extreme phosphorous export risk

Characteristic	Details
	• between 10 to 30 percent of the map unit having a high to extreme wind erosion risk, and • between 30 to 50 percent of the map unit having a moderate to high salinity risk or is presently saline (GIS Database). • less than three percent of the map unit having a moderate to high flood risk
Waterbodies	The desktop assessment and aerial imagery indicated that an undefined Granite outcrop wetland (Wheatbelt Wetlands Stage 1 (DBCA-021)) intersects with the proposed clearing area (GIS Database).
Hydrogeography	The application area is part of the RIWI Act Avon River System Surface Water Area (GIS Database). The application area is not within any Public Drinking Water Source Areas (PDWSA) (GIS Database). The mapped groundwater salinity is 14,000 to 35,000 milligrams per litre which is considered highly saline (GIS Database).
Flora	There are records of six threatened flora species and seven priority flora species within 10 kilometres of the application area (GIS Database). No conservation significant flora species have been recorded within the application area (GIS Database).
Ecological communities	There are no Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) recorded within the application area (GIS Database). There are 17 Threatened Ecological Community (TEC) records within five kilometres of the application area, with the closest occurring approximately 2 kilometres away. All the records are for Wheatbelt Woodlands which are listed as 'critically endangered' under the EPBC Act and a Priority 3 under the BC Act (GIS Database).
Fauna	There are 11 fauna species of conservation significance recorded within 20 kilometres and a confirmed Carnaby's cockatoo breeding site approximately 14 kilometres north of the application area (GIS Database). No conservation significant fauna species have been recorded within the application area (GIS Database). A desktop review revealed records for two additional conservation significant fauna species (malleefowl (*Leipoa ocellata* – VU) and blue-billed duck (*Oxyura australis* - P4)) within 20 kilometres of the proposed clearing area in addition to the fauna species noted in the assessment of CPS 9656/1 (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 - Avon Wheatbelt Bioregion	9,517,109.95	1,761,187.42	18.51	174,980.68	1.84
IBRA Subregion - Merredin	6,524,180.55	1,367,565.48	20.96	126,804.59	1.94
Local Government - Shire of Dowerin	186,267.96	13,770.43	7.39	1,760.83	0.95
Beard vegetation associations - State					
Veg Assoc No. 1024	742,950.54	87,192.44	11.74	8,762.67	1.18
Beard vegetation associations - Bioregion					
Veg Assoc No. 1024	738,926.59	84,606.91	11.45	0.91	0.90
Beard vegetation associations - subregion					
Veg Assoc No. 1024	670,960.97	77,423.51	11.54	5,056.76	0.75

Government of Western Australia (2019)

A.3. Flora analysis table

With consideration for the site characteristics set out above and relevant datasets (see Appendix E.1), impacts to the following conservation significant flora within 10 kilometres required further consideration.

Species name	Conservation status	Distance of closest record to application area (km)	Number of known records (total)	Suitable habitat features? [Y/N]
Acacia cochlocarpa subsp. *Velutinosa*	T	<3	21	N
Acacia deflexa	P3	<9	42	N
Acacia sp. Manmanning (B.R. Maslin 7711)	P1	<4	15	N
Caladenia drakeoides	T	<10	11	N
Conostylis wonganensis	T	<7	18	N
Cryptandra dielsii	P3	<8	27	N
Daviesia euphorbioides	T	<9	16	N
Eucalyptus recta	T	<5	18	N
Grevillea dryandroides subsp. *hirsuta*	T	<6	20	N
Grevillea rosieri	P2	<9	12	N
Phebalium drummondii	P3	<8	23	N
Styphelia caudata	P3	<3	26	N
Verticordia venusta	P3	<9	92	N

A.4. Fauna analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)
Aganippe castellum (tree-stem trapdoor spider)	P4	N	<17
Zanda latirostris (Carnaby's black cockatoo)	EN	Y	<15
Egernia stokesii badia (western spiny-tailed skink)	VU	N	<17
Falco peregrinus (peregrine falcon)	OS	Y	<11
Idiosoma nigrum (shield-backed trapdoor spider)	EN	N	<9
Isoodon fusciventer (quenda)	P4	N	<17
Leipoa ocellata (malleefowl)	VU	N	<7
Oxyura australis (blue-billed duck)	P4	N	<16
Parartemia contracta (brine shrimp)	P1	N	<11
Pseudomys occidentalis (western mouse)	P4	N	<20
Teyl sp (BY Main 1953/2683, 1984/13) (Minnivale trapdoor spider)	CR	N	<16

Appendix B. 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: Given the history of disturbance from agricultural and quarry activities and the degraded condition of the vegetation, the area proposed to be cleared is unlikely to contain significant flora, fauna, habitats or assemblages of plants.	Not likely to be at variance (as per CPS 9656/1)	No

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 application area may contain some suitable habitat for conservation significant fauna, however given the degraded condition of the area and that all potential remnant vegetation has been excised from the proposed clearing area (GIS database), it is unlikely that the proposed clearing area is considered significant at a local or regional scale to these species.	Not likely to be at variance (changed from CPS 9656/1)	Yes *Refer to Section 3.2 above.*
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: Given the condition of the vegetation and no threatened flora have been recorded, the area proposed to be cleared is unlikely to contain suitable habitat for flora species listed under the BC Act.	Not likely to be at variance (as per CPS 9656/1)	No
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: The area proposed to be cleared is not mapped as a Threatened Ecological Community (TEC), however there are many records of Wheatbelt Woodlands TECs fragmented across the local area (GIS Database). Due to the degraded nature of the vegetation and the size of the application area, it is unlikely to contain species indicative of a TEC.	Not likely to be at variance (as per CPS 9656/1)	No
Environmental value: significant remnant vegetation and conservation areas		
Principle (e): *"Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."* Assessment: The extent of the mapped vegetation type in the local area is below the national objectives and targets for biodiversity conservation in Australia (Commonwealth of Australia, 2001). However, given the degraded condition of the vegetation to be cleared due to quarry operations and weed/crop species, it is considered unlikely to be part of a significant ecological linkage in the local area.	Not likely to be at variance (as per CPS 9656/1)	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: Given the distance to the nearest conservation area (GIS Database), the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.	Not likely to be at variance (as per CPS 9656/1)	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: The application area intersects a granite outcrop wetland which is mapped within the *Wheatbelt Wetlands Stage 1* spatial layer (GIS Database). Supporting information for this spatial layer states "All granite outcrops have been identified as wetlands on the assumption that all outcrops have the capacity to hold water in the form of one or multiple pools" (DEC, 2008). Aerial imagery indicates that no riparian vegetation is present in the application area.	Not likely to be at variance (changed from CPS 9656/1)	Yes *Refer to Section 3.2 above.*

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 highly to extremely susceptible to wind erosion and has a moderate to high salinity risk (GIS Database). Given the relatively small extent of the application area and the condition of the vegetation, the proposed clearing is not likely to have an appreciable impact on land degradation.	Not likely to be at variance (as per CPS 9656/1)	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: The application area intersects a granite outcrop wetland which is mapped within the Wheatbelt Wetlands Stage 1 spatial layer (GIS Database). As noted above, supporting information for this spatial layer states "All granite outcrops have been identified as wetlands on the assumption that all outcrops have the capacity to hold water in the form of one or multiple pools" (DEC, 2008). Given the relatively small extent of the application area and the condition of the vegetation, the proposed clearing is not likely to have a significant impact on surface water. Groundwater in the area is mapped as moderately to highly saline and given the extent of the application area (GIS Database), the proposed clearing is not likely to have an appreciable impact on groundwater quality.	Not likely to be at variance (as per CPS 9656/1)	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 likely to be at variance (as per CPS 9656/1)	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.

Condition	Description
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Appendix D. Photographs of the Vegetation

The following figures were supplied for the assessment of CPS 9656/1.

Figure 1: Photograph of vegetation located at Area 1 as identified on Figure 1, provided by the Applicant.

Figure 2: Photograph of vegetation located at Area 2 as identified on Figure 1, provided by the Applicant.

Figure 3: Photograph of vegetation located at Area 3 as identified on Figure 1, provided by the Applicant. Applicant has advised the mature trees visible in the background are outside of the application area.

Figure 4: Photograph of vegetation located at Area 4 as identified on Figure 1, provided by the Applicant.

Figure 5: Photograph of vegetation located at Area 5 as identified on Figure 1, provided by the Applicant.

Figure 6: Photograph of vegetation located at Area 6 as identified on Figure 1, provided by the Applicant.

Appendix E. Sources of information

E.1. GIS databases

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

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Bush Forever (Regional Scheme) (DPLH-022)
- Cadastre (LGATE-218)
- Contours (DPIRD-073)
- 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 – 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)
- Soil Landscape Mapping – Rangelands (DPIRD-064)
- WA Now Aerial Imagery
- Wheatbelt Wetlands Stage 1 (DBCA-021)

Restricted GIS Databases used:

- Black Cockatoo WTBC Breeding
- Black Cockatoo FRTBC Breeding
- Black Cockatoo BC Roosts
- Black Cockatoo Baudin's Distribution
- Black Cockatoo Forest Red Tail Distribution
- Black Cockatoo Carnaby's Distribution
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities

E.2.References

Birdlife Australia (2022) *Peregrine Falcon*. Available from: https://www.birdlife.org.au/bird-profile/peregrine-falcon (Accessed 13 August 2024).

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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)
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	*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 (2023) 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 the species of fauna that are listed as critically endangered, endangered or vulnerable threatened species.

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

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

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

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

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

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

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

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

Extinct Species:

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

EW **Extinct in the wild species**

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

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

Specially protected species:

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

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

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

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

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

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

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

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

P **Priority species:**

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

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

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

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

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

P1 **Priority One - Poorly-known species – known from few locations, none on conservation lands**
Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, for example, agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation.

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

P2 **Priority Two - Poorly-known species – known from few locations, some on conservation lands**
Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, for example, national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation.

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

P3 **Priority Three - Poorly-known species – known from several locations**
Species that are known from several locations and the species does not appear to be under imminent threat or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat.

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

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

Principles for clearing native vegetation:

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

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

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

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

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

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

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

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

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

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