

### **CLEARING PERMIT**

Granted under section 51E of the Environmental Protection Act 1986

**Purpose Permit number:** CPS 10188/1

**Permit Holder:** Great Southern Lime Partnership

**Duration of Permit:** From 30 January 2024 to 30 January 2029

The permit holder is authorised to clear *native vegetation* subject to the following conditions of this permit.

### PART I – CLEARING AUTHORISED

### 1. Clearing authorised (purpose)

The permit holder is authorised to clear *native vegetation* for the purpose of construction of a limestone pad and truck turning area.

### 2. Land on which clearing is to be done

Lot 9005 on Deposited Plan 52008, Nullaki

### 3. Clearing authorised

The permit holder must not clear more than 2.87 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1.

### 4. Period during which clearing is authorised

The permit holder must not clear any *native vegetation* after 30 January 2029.

### **PART II – MANAGEMENT CONDITIONS**

### 5. Avoid, minimise, and reduce impacts and extent of clearing

In determining the *native vegetation* authorised to be cleared under this permit, the permit holder must apply the following principles, set out in descending order of preference:

- (a) avoid the clearing of *native vegetation*;
- (b) minimise the amount of *native vegetation* to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

### 6. Weed and dieback management

When undertaking any clearing authorised under this permit, the permit holder must take the following measures to minimise the risk of introduction and spread of *weeds* and *dieback*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no known *dieback* or *weed*-affected soil, *mulch*, *fill*, or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

### 7. Directional clearing

The permit holder must:

- (a) conduct clearing activities in a slow, progressive manner towards adjacent *native vegetation*; and
- (b) allow reasonable time for fauna present within the area being cleared to move into adjacent *native vegetation* ahead of the clearing activity.

### **8.** Wind erosion management

The permit holder must commence construction of the limestone pad and truck turning area no later than two (2) months after undertaking the authorised *clearing* activities to reduce the potential for wind erosion.

### PART III - RECORD KEEPING AND REPORTING

### 9. Records that must be kept

The permit holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

Table 1: Records that must be kept

No.	Relevant matter	Spec	Specifications				
1.	1. In relation to the authorised clearing activities generally	(a)	the species composition, structure, and density of the cleared area;				
		(b)	the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings;				
		(c)	the date that the area was cleared;				
		(d)	the direction of clearing;				
		(e)	the size of the area cleared (in hectares);				
		(f)	actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 5; and				
		(g)	actions taken to minimise the risk of the				

No.	Relevant matter	Specifications						
		introduction and spread of <i>weeds</i> and <i>dieback</i> in accordance with condition 6.						

# 10. Reporting

The permit holder must provide to the *CEO* the records required under condition 9 of this permit when requested by the *CEO*.

### **DEFINITIONS**

In this permit, the terms in Table 2 have the meanings defined.

**Table 2: Definitions** 

Term	Definition			
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the <i>Environmental Protection Act 1986</i> .			
clearing	has the meaning given under section 3(1) of the EP Act.			
condition	a condition to which this clearing permit is subject under section 51H of the EP Act.			
fill	means material used to increase the ground level, or to fill a depression.			
dieback	means the effect of <i>Phytophthora</i> species on native vegetation.			
department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.			
EP Act	Environmental Protection Act 1986 (WA)			
mulch	means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation.			
native vegetation	has the meaning given under section 3(1) and section 51A of the EP Act.			
weeds	means any plant –  (a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture Management Act 2007</i> ; or  (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or  (c) not indigenous to the area concerned.			

# **END OF CONDITIONS**

Mathew Gannaway

**MANAGER** 

NATIVE VEGETATION REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

5 January 2024



# **Clearing Permit Decision Report**

### 1 Application details and outcome

### 1.1. Permit application details

Permit number: CPS 10188/1

Permit type: Purpose permit

**Applicant name:** Great Southern Lime Partnership

**Application received:** 11 May 2023

**Application area:** 2.87 hectares (revised) of native vegetation

**Purpose of clearing:** Construction of a limestone pad and truck turning area

Method of clearing: Mechanical

**Property:** Lot 9005 on Deposited Plan 52008

Location (LGA area/s): City of Albany

Localities (suburb/s): Nullaki

### 1.2. Description of clearing activities

The vegetation proposed to be cleared is 2.87 hectares of native vegetation contained within two contiguous areas along Lee Road in Nullaki. The proposed clearing is to facilitate the construction of a limestone pad and truck turning area (see Figure 1, Section 1.5).

The application was revised during the assessment process in response to the fauna and vegetation survey results (Aurora, 2023). The changes resulted in a reduction in the proposed clearing from 3.29 hectares to 2.87 hectares to minimise the clearing impacts to high quality black cockatoo foraging habitat (see Section 3.1 for further details).

### 1.3. Decision on application

**Decision:** Granted

**Decision date:** 5 January 2024

**Decision area:** 2.87 hectares of native vegetation, as depicted in Section 1.5, below.

### 1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Water and Environmental Regulation (DWER) advertised the application for 21 days and 10 submissions were received. Consideration of matters raised in the public submissions is summarised in Appendix B.

In making this decision, the Delegated Officer had regard for the site characteristics (see Appendix C), relevant datasets (see Appendix G.1), the findings of a fauna and vegetation survey (see Appendix F), the clearing principles set out in Schedule 5 of the EP Act (see Appendix D), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3). The Delegated Officer also took into consideration the work safety order

from the Department of Mines and Industry Regulation and Safety (DMIRS) identifying safety issues in the mine site in February 2023. This clearing permit application is required to meet DMIRS requirements.

The assessment identified that the proposed clearing will result in:

- potential impacts to conservation significant fauna if present during clearing activities,
- risk of potentially introducing and spreading weeds and dieback into adjacent vegetation, which may impact on the quality of the adjacent vegetation and its habitat values,
- land degradation in the form of wind erosion if not appropriately managed.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined that the impacts of the proposed clearing, including impacts to fauna present at the time of clearing and the potential to facilitate the introduction of weeds and dieback, and land degradation from wind erosion, can be minimised and managed to be unlikely to lead to an unacceptable risk to environmental values through permit conditioning.

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,
- · works to commence within two months of clearing to minimise wind erosion,
- undertake slow, progressive one directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity.

### 1.5. Site map

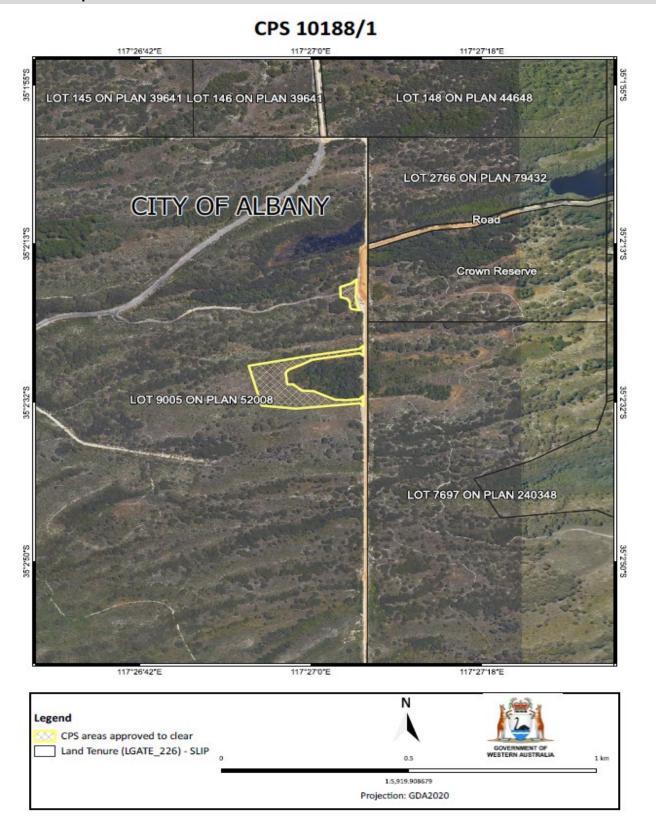


Figure 1 Map of the application area

The areas crosshatched yellow indicate the areas authorised to be cleared 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 510 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)
- Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act)

The key guidance documents which inform this assessment are:

- A guide to the assessment of applications to clear native vegetation (DER, December 2013)
- Procedure: Native vegetation clearing permits (DWER, October 2019)
- Technical guidance Terrestrial Fauna Surveys for Environmental Impact Assessment (EPA, 2016)

### 3 Detailed assessment of application

### 3.1. Avoidance and mitigation measures

During the assessment process the applicant reduced the size of the proposed area to be cleared from 3.29 hectares to 2.87 hectares (Figure 2). This was in response to high quality black cockatoo foraging habitat being recorded in the fauna and vegetation survey (Aurora, 2023).

The applicant advised that the following measures to mitigate the impacts of the proposed clearing will be undertaken (Bowman & Partners, 2023a):

- The avoidance and mitigation measures go back to the original application for clearing which was granted through CPS 8392/1. Planning for the lime extraction and product dispatch operations occurred in the years 2017 to 2020, whilst operations have now been underway since approximately mid-2022,
- This formative site planning sought to minimise the environmental footprint of the operation by confining the working area footprint to a minimised operational area,
- Within the present operational framework, this has resulting in the siting of product stockpiles within the same operational area as the limestone extraction area,
- This decision was made notwithstanding the requirement of the Clearing Permit, that no more than 3 ha at one time could be worked as an operating area.
- The first plans for the operation located stockpiles at a separate location to the extraction area (coincident
  with the present application area) at the base of the massive limestone ridge upon which the extraction
  operation is located,
- However, in an effort to reduce vegetation clearing requirements, the present co-location of extraction and stockpiling operations was adopted,
- Notwithstanding the access road and product trucking operations have government engineering approval, operational experience has shown that modification of the product handling process is necessary to increase the efficiency of product export from the site,
- In designing the stockpile area and truck turning area, attention has been given to minimizing the size of the clearing required whilst also ensuring the stockpile clearing area is sufficiently large to store the required quantity of materials and allow safe transit for product delivery machines and their operation within the area, as well as entry, loading and transit within the area, and exit from the site to the haulage road,
- Further, from the large expanse of available sites where the stockpile area could be located, the proposed location has been chosen on the basis that it mostly consists of only one vegetation type, which is a low sedgeland vegetation with minimal vegetation and habitat diversity.

CPS 10188/1

# 117-265-1E 117-270'E 117-270'E LOT 2766 ON PLAN 79432 PROND CITY OF ALBANY LOT 7334 ON PLAN 79432. S7265 Crown Reserve

Figure 2 The areas crosshatched blue represents the original proposed clearing area of 3.29 hectares and the areas crosshatched yellow represents the revised clearing area of 2.87 hectares proposed to be cleared under CPS 10188/1.

Considering the above, 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

CPS areas approved to clear
CPS areas applied to clear
Land Tenure (LGATE\_226) - SLIP

LEGEND Legend

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

The assessment against the clearing principles (see Appendix D) identified that the impacts of the proposed clearing present a risk to biological values (fauna), and land and water resources. 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 Principles (a) and (b)

### Assessment

The application area is located within the Warren IBRA bioregion. According to available databases a total of 58 conservation significant fauna species have been recorded within the local area (10-kilometre radius of the application area). Of the conservation significant fauna species recorded in the local area, the application area may provide habitat for the following five fauna species:

- Calyptorhynchus banksia naso Forest red-tailed black cockatoo (VU)
- Pseudocheirus occidentalis Western ringtail possum (CR)
- Zanda baudinii Baudin's black cockatoo (EN)
- Zanda latirostris Carnaby's black cockatoo (EN)
- Zephyrarchaea mainae Main's assassin spider (VU)

This assumption is based on habitat requirements, distribution, mapped vegetation types and the condition of the vegetation. Photos provided by Aurora Environmental identified that the vegetation within the proposed area was largely consistent with the mapped vegetation types for the area, consisting of low woodland of *Agonis flexuosa* and closed heath on stabilised dunes (Aurora, 2023).

The *Botaurus poiciloptilus* – Australasian bittern (EN) was not identified as a species whereby suitable habitat may be impacted by the proposed clearing. However, this species was raised in a number of the public submissions and has been considered further in this assessment.

### Western ringtail possum

The western ringtail possum (WRP) is an arboreal marsupial associated with a diverse range of habitats. The application area is in the South Coast management zone, one of three identified management zones known to support large numbers of WRP's (DPAW 2017). Habitat used by WRP in the South Coast zone includes peppermint woodland. Habitat critical for survival includes "high nutrient foliage availability for food, suitable structures for protection/nesting, and canopy continuity to avoid/escape predation and other threats" (DPAW 2017). According to the WRP recovery plan (DPAW 2017), habitat loss and fragmentation from urban development is a key threatening process for WRP in the South Coast zone. Disruption to canopy connectivity restricts dispersal ability of WRP and can cause overpopulation within patches of habitat. Where WRP must come to the ground to disperse between habitat, the risk of road kills and predation increases. Maintaining habitat connectivity is essential for long term conservation of WRP.

According to available databases, the closest WRP record is 8.9 kilometres from the application area. The surrounding area to the application area has also been identified as having suitable habitat for WRP. Critical habitat for the WRP appears to vary between key management zones, with the key management zones for the south coast being a diverse range of vegetation types between Walpole and Cheynes Beach, but principally in near-coastal limestone heath, jarrah marri thicket woodland and forest, riparian, peppermint woodland and karri forest vegetation (DPAW, 2017). The common themes however are high nutrient foliage availability for food, suitable structures for protection/nesting, and canopy continuity to avoid/escape predation and other threats. Long-term survival of the species requires linkages between suitable habitat patches and as such habitat critical to survival incorporates this (DPAW, 2017). The targeted fauna survey of the application area recorded no traces of WRP (e.g., dreys, scats or scratching's) within the proposed construction of the limestone pad or truck turning area (Aurora, 2023). The fauna survey identified that historical disturbances within the application area indicates that the species does not occur in this location (Aurora, 2023).

### **Black cockatoos**

The application area is within the mapped distribution of *Zanda latirostris* (Carnaby's cockatoo), *Zanda Calyptorhynchus* (Baudin's cockatoo) and *Calyptorhynchus banksii naso* (forest red-tailed black cockatoo). According to available databases, there are no known black cockatoo breeding sites within the local area. The closest known roost site is 6.5 kilometres to the east. The revised application area is not mapped as black cockatoo foraging habitat, however adjacent vegetation is mapped as high-quality black cockatoo foraging habitat.

Black cockatoo species are noted to forage on a range of plant species, with the primary foraging resources varying between species (Commonwealth of Australia, 2012). Carnaby's cockatoos forage on the seeds, nuts, and

flowers of a variety of plants, including Proteaceous species (*Banksia spp., Hakea spp., and Grevillea spp.*), as well as *Allocasuarina* and *Eucalyptus* species, marri, and a range of introduced species (Valentine and Stock, 2008). Forest red-tailed black cockatoos feed predominantly on the seeds of marri and jarrah, which comprise approximately 90 per cent of their diet (DEC, 2008). Baudin's cockatoos primarily feed on the seeds of marri, but may also forage on the seeds of jarrah and Proteaceous species (DEC, 2008). The Black Cockatoo Habitat Assessment for the application area recommended a reduced clearing area to exclude high quality foraging habitat comprised of *Banksia littoralis* woodland (Aurora, 2023). Given the revised application area does not contain these foraging plant species, it is unlikely to impact the foraging capacity for local populations of black cockatoos.

Food resources within the range of roost and breeding sites are important to sustain populations of black cockatoos, and foraging resources should therefore be viewed in the context of the proximity to the known roosting and breeding sites to the application area. Available databases show that there are four records of black cockatoo roost sites within the local area but no mapped breeding locations. Following breeding, they will flock in search of food, usually within six kilometres of a night roost (Commonwealth of Australia, 2012), but may range up to 20 kilometres. The Black Cockatoo Habitat Assessment for the application area noted that there were no trees present that would be suitable for breeding or roosting (Aurora, 2023).

### **Mains Assassin Spider**

Mains Assassin Spider (MAS) has very specific habitat requirements. Within the coastal forests in which it occurs, the species can only be found in the complex understorey layer of 'elevated leaf-litter' which forms in low-growing grasses, 'wiry' herbs (Rix and Harvey, 2009). With the exception of a single record from Mount Hallowell, all specimens of MAS have been found within long-unburnt groves of Peppermint Trees (*Agonis spp.*), especially the dark, thickly vegetated groves which develop in valleys, gullies and depressions in the landscape (Rix and Harvey, 2009). The species was first discovered in 1983 at Torndirrup National Park, south of Albany, and it was not until 2007 that the species was observed again near the Albany wind farm (Rix and Harvey, 2009).

The fauna survey determined the preferred habitat type for MAS, being suspended leaf litter, was absent for the majority of the application area. Anecdotal evidence suggests that Lot 9005 was last burnt in 1994 but had been subject to repeated frequent burn at approximately five-year intervals for decades before that. This may explain why there is an almost complete absence of suspended leaf litter underneath stands of *Agonis flexuosa* (Aurora, 2023). Noting the above, it is unlikely that MAS occurs within the application area.

### Australasian bittern

The Australasian bittern (AB) is a large stocky, thick-necked, heron-like bird that grows to 76 centimetres in length (TSSC, 2011). In Western Australia, the AB was formerly widespread in the south west ranging from north to Moora, east to near Mount Arid and as far inland as Toolibin Lake. It is now likely that it only occurs on the western coastal plain between Lancelin and Busselton in the southern coastal region from Augusta and Albany (TSSC, 2011). The AB occurs mainly in freshwater wetlands and rarely, in estuaries or tidal wetlands, it favours wetlands with tall dense vegetation where it forages in still shallow water (Marchant and Higgins, 1990). The AB was not identified within the application area but has been recorded at nearby Lake Saide which is 1.6 kilometres north east. As the application area does not contain suitable habitat for the AB it is unlikely the proposed clearing will impact on individuals or local populations.

### Conclusion

Based on the above assessment, the application area is not considered likely to represent significant habitat for any conservation significant species or to be critical for the continuation of the species. However, individuals may be present at the time of clearing whilst they transverse the landscape. Slow directional clearing will mitigate the risk to individuals. In addition, the clearing activities have the potential to impact the quality of the surrounding fauna habitat by facilitating the spread of weeds and dieback.

### Conditions

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

- directional clearing, which requires, slow progressive, one directional clearing allow terrestrial fauna to disperse ahead of the clearing activity should they occur on site at the time of clearing which will minimise impact to individuals,
- weed and dieback management measures will be required as a condition on the clearing permit to mitigate impacts to adjacent vegetation.

### 3.2.2. Land and water resources (land degradation) - Clearing Principle (g)

### Assessment

The mapped soil type within the application area (Meerup podzols over calcerous phase) is described as podzols over calcareous sand, banksia-bullich-yate woodland. The soil type has an extremely high risk of wind erosion and subsurface acidification.

### Wind erosion

According to available databases, clearing of the proposed native vegetation is likely to have an extremely high risk of wind erosion. This is due to the sandy nature of the topsoil across the application area. If appropriate measures such as ground cover or adequate dust suppression on exposed surfaces are put in places, then the environmental impacts caused by wind erosion can be managed. Ensuring works commence within two months of clearing will minimise exposure to bare soils.

### **Subsurface acidification**

The soil type within the application area is mapped as 78 per cent presently acidic. As the proposed clearing and future usage of the site will not be excavating soils at depth, it is unlikely that acid sulphate soils will be encountered at the site or that the clearing will lead to appreciable land degradation.

### Conclusion

Based on the above assessment, the proposed clearing may cause land degradation through wind erosion. Ensuring works commence within two months will minimise this risk.

### Conditions

To address the above impacts, the following management measure will be required as a condition on the clearing permit:

• The permit holder must commence construction of turn around and stockpile area no later than two (2) months after undertaking the authorised clearing activities to reduce the potential for wind erosion.

### 3.3. Relevant planning instruments and other matters

The City of Albany advised DWER that local government approvals are required (City of Albany, 2023). The City of Albany held a council meeting on December 19, 2023. During the meeting a motion was passed to grant Development Approval P2160670 to Great Southern Lime Partnership for the construction of a limestone pad and truck turning area on Lot 9005 on Deposited Plan 52008, Nullaki. DWER acknowledges that Great Southern Lime Partnership has received Development Approval from the City of Albany for the proposed works under the *Planning and Development Act 2005*.

On the 17 July 2020, clearing permit CPS 8392/1 was granted to allow clearing within a prescribed area on Lot 9005, Nullaki, to proceed in accordance with conditions of approval. Clearing permit application CPS 10188/1 was in response to a DMIRS safety issue requiring the truck turnaround area and stockpile area which has been rectified. The mine has not been operational since January 2023 (Bowman & Partners, 2023a).

Several Aboriginal sites of significance have been mapped within the local area, with none mapped as occurring within the application area. It is the permit holder's responsibility to comply with relevant legislation and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

### End

# Appendix A. Additional information provided by applicant

Summary of comments	Consideration of comment
The applicant provided updated shapefiles of the reduced clearing area in response to the results of the fauna and vegetation survey. The revised area has been amended down to 2.87 hectares proposed to be cleared.	See section 3.1
On the 1 <sup>st of</sup> November 2023, the applicant provided responses to several matters raised in public submissions.	See Appendix B

# Appendix B. Details of public submissions

Ten submissions were received raising 11 grounds in total, with supporting information provided as comments under each ground of submission. Where the comments within the grounds of submission raised similar concerns, they have been combined in the summary table below to provide a streamlined approach.

Summary of comments	Consideration of comment
The proposed clearing of the application area will impact on conservation significant fauna, specifically the Australasian Bittern, forest red-tailed black cockatoo, Baudin's cockatoo, Carnaby's cockatoo, western ringtail possum and Main's assassin spider.	Fauna surveys were requested and undertaken for the area proposed to be cleared. Current literature was also referred to when considering impacts to conservation significant fauna and their preferred habitat. DWER's assessment identified that the proposed clearing will not impact conservation significant fauna (See section 3.2.1). Suitable habitat for the Australian Bittern was not identified within the application area. The applicant has reduced the clearing footprint to avoid an area that contained suitable foraging habitat for black cockatoos.
The clearing should be forwarded on to The Department of Climate Change, Energy, The Environment and Water under Matters of National Significance- Endangered Species	The permit holder has been advised that any action that has or is likely to have a significant impact on any matters of national significance (MNES) or other protected matters, will require approval from the Australian Government Minister for the Environment and Energy. It is the proponent's responsibility to ensure that they comply with the EPBC Act and refer any actions that may impact MNES. Based on DWER's assessment, no significant impact to MNES will occur as a result of the clearing.
There is a lack of fauna, flora, Threatened Ecological Community (TEC) and wetland surveys to identify potential impacts, and discrepancies in past surveys of the area.	A number of fauna, flora and vegetation surveys have been undertaken between 2016 and 2023 for the adjacent clearing permit CPS 8392/4 and the current application CPS 10188/1. The most recent survey being from Aurora Environmental that was received during the assessment of CPS 10188/1, which has been uploaded onto DWER's FTP site. These surveys were used to inform DWER's assessment of the clearing permit application.  The proposed area is not representative of a TEC or Priority Ecological Community. See Section 3.2.1
Increased risk of land degradation in the form of acid sulphate soils and wind erosion	DWER's assessment identified that the clearing within the application area may cause wind erosion. Based on extent of the application area and the location and soil type, it is not likely to have an appreciable impact

Summary of comments	Consideration of comment
	on land degradation. A condition of granting this permit, the applicant will have two months to commence construction to reduce impacts. See section 3.2.2. Acid sulphate soils was not identified by DWER to be a significant risk as the applicant is not clearing at depth for this application.
The offset site has no strategy and is inappropriate	The clearing permit application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the <i>Environmental Protection Act 1986</i> (EP Act). DWER has determined that there is no significant residual impact to environmental values as a result of the clearing and an offset is not required.
Concerns over the area being within a conservation zone and does not comply with the City of Albany's development approvals as was overturned by WASAT	The application area is located adjacent to Conservation Covenant 220 (See Figure 13) and is not to occur within the conservation area. Zoning is a matter considered under Local Planning Scheme 1 and administered under the <i>Planning and Development Act 2005</i> . The Delegated Officer considered that the zoning of the property under application would have been adequately considered during the planning and SAT processes.
Safety concerns over mine site and surrounding roads	DWER acknowledges that there are safety concerns, however this does not require the clearing of native vegetation. This has been addressed by DMIRS and hence the mine is currently shut down until these issues are resolved.
<ul> <li>The environmental report does not consider the impacts to surrounding areas, the application area is at higher elevation to the wetland, so it will be impacted by the runoff and water can not be pulled from the wetland for the 'wetting' down of the lime trucks. Potential impacts to groundwater.</li> <li>Increased CO2 emissions from increased truck usage in the area will affect the water in surrounding wetlands.</li> </ul>	DWER's assessment of clearing permit applications is undertaken in accordance with A guide to the assessment of applications to clear native vegetation (DER, 2013) and Procedure: Native vegetation clearing permits (DWER, 2019). DWER's assessment is a risk-based and evidence-based judgment in accordance with the requirements of the EP Act on whether a clearing permit application is likely to have a significant effect on the environment. In considering whether to grant a clearing permit, the Delegated Officer must take into account not only the clearing principles, but also any planning instruments or other matters considered to be relevant. In accordance with section 51H of the EP Act, a clearing permit may be granted subject to conditions as necessary for the purposes of preventing, controlling, abating, or mitigating environmental harm or directly or indirectly offsetting the loss of the cleared vegetation, and proportionate to the assessed potential impact on the environment. DWER's assessment did not identify any long-term adverse effects to water- related impacts. See Appendix C.1.
WASAT stated that only 1 hectare is to be used for stockpile, concerns over 5 hectares will be used. Concerns that the stockpile area is to be located within the pit area.	The stockpile application site has an area of approximately 2.8 hectares, whilst the application also includes an area of 2,929 m2 for a truck turning area near the site's road exit point. The application was never one hectare nor was it ever proposed to be five hectares. The active Clearing Permit allows clearing of four hectares at a time to excavate limestone therefore the project is operating within prescribed limits (Bowman & Partners Environmental, 2023b).

Summary of comments	Consideration of comment		
Discrepancies in the maps of stockpile area and offset area, and there has been no rehabilitation	DWER has determined that there is no significant residual impact to environmental values and an offset is not required.		
	The clearing permit requires rehabilitation to be carried out on a sequential basis, with commencement of rehabilitation works to commence in areas where mining has ceased, and a second stage is operative. There have been no works since January, as Great Southern lime Partnership was required to cease operations in regard to Instructions from DMIRS in regard to road design factors between the pit and the exit road from the site. The initial mining area has not yet been completed, so the requirement for rehabilitation under the clearing permit has not been triggered yet. The operational area represents 2.9 hectares of clearing which is well within the 4 hectares of specifications set down in the Development Approval and Clearing Permit. (Bowman & Partners Environmental, 2023b)		
The report should be undertaken by a competent person due to the misleading/false and/or incomplete information contained in the application	DWER considers the nominated environmental scientist to have the experience and expertise necessary to successfully undertake the fauna and vegetation survey and report.		

# Appendix C. Site characteristics

### C.1. Site characteristics

The information provided below describes the key characteristics of the area proposed to be cleared and is based on the best information available to DWER at the time of this assessment. This information was used to inform the assessment of the clearing against the Clearing Principles, contained in Appendix D.

Characteristic	Details
Local context	The area proposed to be cleared comprises of two patches of native vegetation in the intensive land use zone of Western Australia. It is adjacent to DBCA conservation covenant 220 and surrounded by native vegetation with a lime extraction pit approximately 1.1 kilometres to the south.
	Aerial imagery indicates the local area (10-kilometre radius from the centre of the area proposed to be cleared) retains approximately 50.61 per cent of the original native vegetation cover.
Ecological linkage	The application area is located within the South Coast Macro Corridor (Strategic Zone A). The proposed clearing is not going to sever this corridor or significantly impact fauna movement across the landscape.
Conservation areas	No conservation areas are mapped within the application area. The closest conservation area is a DBCA conservation covenant 220 located adjacent to the application area
Vegetation description	Photographs supplied by the applicant and the findings of a fauna and vegetation survey (Aurora, 2023) indicate the vegetation within the proposed clearing area predominately consists of <i>Agonis flexuosa/Bossiaea linophylla/Allocasuarina humilis/Leucopogon insularis</i> shrubland over <i>Loxocarya cinerea/Desmocladus flexuosus</i> sedgeland.

Characteristic	Details
	Representative photos and the survey descriptions and maps are available in Appendix F.
	<ul> <li>This is consistent with the mapped vegetation type:</li> <li>Meerup Mp, which is described as mosaic of open low woodland of Agonis flexuosa with some Eucalyptus cornuta, tall shrubland of Agonis flexuosa with Trymalium floribundum in gullies and closed heath of Olearia axillaris-Spyridium globulosum-Acacia littorea on stabilised dunes in the hyper humid zone. (Shepherd et al, 2001)</li> </ul>
	The mapped vegetation type retains approximately 97.49 per cent of the original extent (Government of Western Australia, 2019).
Vegetation condition	Photographs supplied by the applicant and a vegetation survey (Aurora, 2023) indicate the vegetation within the proposed clearing area is in Good to Excellent (Keighery, 1994 –) condition.
	The full Keighery (1994) condition rating scale is provided in Appendix E.  Representative photos and the full survey descriptions and mapping are available in Appendix F.
Climate and landform	The climate of the southwest of Western Australia is described as having a Mediterranean-type climate of mild, wet winters and warm to hot, dry summers. The mean annual rainfall for Nullaki is 1010 millimetres.
	The average annual rainfall received over the application area from 1991 to 2020 is 1000 to 1500 millimetres (Commonwealth of Australia, 2021). The application area is at an altitude of 10 - 15 meters above sea level.
Soil description	<ul> <li>The soil within the application area is mapped as:</li> <li>Meerup podzols over calcareous phase (254NkMRp) described as podzols over calcareous sand, banksia-bulich-yate woodland.</li> </ul>
Land degradation risk	<ul> <li>water erosion: 36% of the map has a very high-water erosion risk,</li> <li>wind erosion: 43% of the map has an extreme wind erosion risk,</li> <li>salinity: 100% of the map has a nil or partial salinity risk,</li> <li>flood: 100% of the map has a very low flood risk,</li> <li>waterlogging: 100% of the map has a nil to low waterlogging risk,</li> <li>subsurface acidification: 78% is presently acidic,</li> <li>phosphorus export: 36% of the map has a very high phosphorus export risk.</li> </ul>
Waterbodies and hydrogeography	The desktop assessment and aerial imagery indicated that no wetlands or waterbodies transect the application area. The closest waterbody to the application area is a non-perennial branch of the Wilson Inlet which is located two kilometres west of the application area.  The application area does not transect any water resources proclaimed under either the Rights in Water and Irrigation Act 1914 (RIWI Act) or the Country Areas Water Supply Act 1947 (CAWS Act).
	Groundwater salinity within the application area is mapped at 14000-35000 milligrams per total dissolved solids.
Flora	The desktop assessment identified that a total of 15 conservation significant flora species have been recorded within the local area, comprising of two Priority 1 (P1) flora species, three Priority 2 (P2) flora species, five Priority 3 (P3) flora species and five Priority 4 (P4) flora species (Western Australian Herbarium, 1998-). None of these existing records occur within the application area, with the closest record being an occurrence of <i>Sphaerolobium calcicole</i> (P3) approximately 2.4 kilometres from the application area.
	With consideration for the relevant datasets (see Appendix G.1), the habitat preferences and conservation statuses of the aforementioned species, the distribution

Characteristic	Details
	and extent of existing records, the application area is unlikely to provide significant habitat for threatened or priority flora species.
	No threatened or priority flora have been recorded within the application area (Bowman & Partners Environmental, 2023a).
Ecological communities	The desktop assessment identified that there are no conservation significant ecological communities within the application area. The closest mapped PEC is the Subtropical and Temperate Coastal Saltmarsh which is located 2.2 kilometres north east of the application area.
	No PEC or TEC have been recorded within the application area (Bowman & Partners Environmental, 2023a).
Fauna	The desktop assessment identified that a total of 58 conservation significant fauna species have been recorded within the local area including 19 threatened fauna species, seven priority fauna species, six other specially protected fauna species, and 26 migratory fauna species (DBCA, 2007-). None of these existing records occur within the application area, with the closest record being an occurrence of <i>Botaurus poiciloptilus</i> , approximately 1.6 kilometres from the application area.
	With consideration for the site characteristics set out above, relevant datasets (see Appendix G.1) and the habitat preferences of the aforementioned species, and biological survey information (Aurora, 2023) the application area is unlikely to provide significant habitat for conservation significant fauna species (see Section 3.2.1)

# C.2. Vegetation extent

	Pre- European extent (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre- European extent in all DBCA managed land
IBRA bioregion*					
Warren	833985.56	659432.21	79.07	558485.38	66.97
Vegetation complex					
Meerup Mp*	24407.75	23794.48	97.49	18931.56	77.56
Local area					
10km radius	32736.72	7782.66	50.61	-	-

<sup>\*</sup>Government of Western Australia (2019a)

# C.3. Fauna analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Calyptorhynchus banksii naso (forest red-tailed black cockatoo)	VU	Y	Y	8.5	1	Υ
Pseudocheirus occidentalis (western ringtail possum)	EN	Y	Y	8.9	1	Υ
Zanda latirostris (Carnaby's cockatoo)	EN	Υ	Y	1.7	14	Y
Zanda calyptorhynchus (Baudin's cockatoo)	EN	Υ	Y	2.4	15	Y
Zephyrarchaea mainae (Main's assassin spider)	VU	Y	Y	2.9	2	Υ

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

# Appendix D. 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."	Not likely to be at variance	Yes Refer to Section
Assessment: The area proposed to be cleared consists of low woodland in a Good to Excellent condition (Keighery, 1994). The area does not contain significant habitat for conservation significant fauna and no threatened or priority flora or unique assemblage of plants is likely to occur. Proposed clearing area is not likely to contain a high level of biodiversity.		3.2.1., above.
Principle (b): "Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."	May be at variance	Yes Refer to Section 3.2.1., above.
<u>Assessment:</u> The area proposed to be cleared is not likely to contain significant habitat for conservation significant fauna. However, individuals may be present at the time of the clearing.		ŕ
Principle (c): "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."	Not likely to be at	No
<u>Assessment:</u> The area proposed to be cleared is unlikely to contain habitat for threatened flora.	variance	
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."	Not likely to be at variance	No
<u>Assessment:</u> The area proposed to be cleared is unlikely to be representative of any TEC listed under the BC Act or EPBC Act.		
Environmental value: significant remnant vegetation and conservation are	eas	
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."	Not at variance	No
Assessment: The mapped vegetation type and vegetation extent in the local area is consistent with the national objectives and targets for biodiversity conservation in Australia. The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area.		
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."	Not at variance	No
Assessment: Whilst the application area is located adjacent to a conservation area, weed and dieback management actions will minimise the risk or impacts occurring to the adjacent vegetation. The proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas.		
Environmental value: land and water resources	<u> </u>	•
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."	Not at variance	No
Assessment: Given no water courses or wetlands are recorded within the application area, the proposed clearing is not within an environment associated with a watercourse or wetland.		

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 application area includes soils associated with coastal dunes, which are highly susceptible to wind erosion. Noting the size and location of the proposed area as well as the condition of the vegetation, the proposed clearing is likely to have an appreciable impact on land	May be at variance	Yes Refer to Section 3.2.2, above.
Principle (i): "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water."  Assessment: Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to impact surface or ground water quality.	Not likely to be at variance	No
Principle (j): "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."	Not at variance	No
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.		
Given no water courses or wetlands are recorded within the application area, the proposed clearing is unlikely to contribute to waterlogging.		

# Appendix E. Vegetation condition rating scale

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

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from

Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

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

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

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

# Appendix F. Biological survey information excerpts and photographs of the vegetation

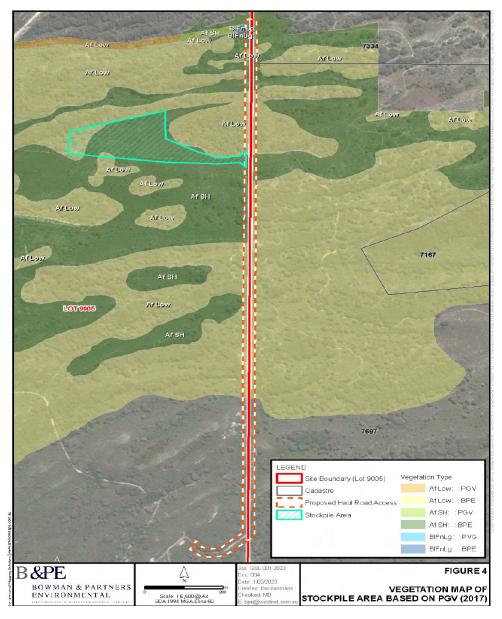


Figure 3. Vegetation map of the proposed clearing area (Bowman & Partners Environmental, 2023a)



Figure 4. View of proposed stockpile location looking west from the haul road, it will not include the peppermint woodland in the right of the frame (Bowman & Partners Environmental, 2023a)



Figure 5. Fauna survey- Nullaki Lime Pit, survey track and photo locations (Aurora, 2023)



Figure 6. Vegetation type Af SH, truck turn around area (north) (Aurora, 2023)



Figure 7. Vegetation type Af SH, truck turn around area (north) (Aurora, 2023)



Figure 8. Vegetation type BI Xp removed from the application area (Aurora, 2023)



Figure 9. Vegetation type BI Xp removed from the application area (Aurora, 2023)



Figure 10. Vegetation type Af SH, Proposed lime stockpile area (south) Good to Very Good condition (Aurora, 2023)



Figure 11. Vegetation type Af SH, Proposed lime stockpile area (south) Good to Very Good condition (Aurora, 2023)



Figure 12. Looking across vegetation type Af SH to BI Xp: area proposed to be cleared for lime stockpile (Aurora, 2023)



Figure 13. Old livestock trough with grassy weeds (Aurora, 2023)

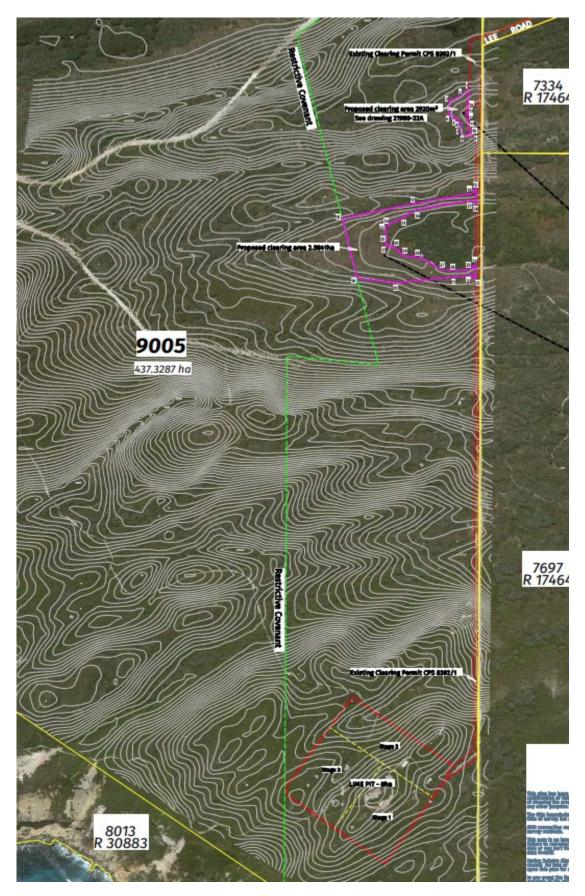


Figure 14. Clearing permit 10188/1 revised clearing areas, also showing the border of DBCA conservation covenant (City of Albany, 2023)

### Appendix G. Sources of information

### G.1. GIS databases

Publicly available GIS Databases used (sourced from <a href="www.data.wa.gov.au">www.data.wa.gov.au</a>):

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Contours (DPIRD-073)
- 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)
- Hydrography Inland Waters Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Local Planning Scheme Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality Flood Risk (DPIRD-007)
- Soil Landscape Land Quality Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping Best Available
- Soil Landscape Mapping Systems

### Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) Points and Polygons
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

### G.2. References

Aurora Environmental (Aurora) (2023) Fauna survey for the proposed lime stockpile and truck turn around areas for clearing permit application CPS 10188/1, received 17 October 2023 (DWER Ref DWERVT851239).

Bowman & Partners Environmental (2023a) *Proposed Stockpile Area: Great Southern Lime Nullaki Operations*), and supporting information for clearing permit application CPS 10188/1, received 15 August 2023 (DWER Ref: DWERDT822062).

Bowman & Partners Environmental (2023b) Applicant providing response to points raised in submissions for clearing permit application CPS 10188/1, received 1 November 2023 (DWER Ref: DWERDT863899).

- City of Albany (2023) Advice for clearing permit application 10188/1, received 16 October 2023 (DWER Ref: DWERDT849323)
- Commonwealth of Australia (2001) *National Objectives and Targets for Biodiversity Conservation 2001-2005*, Canberra.
- Department of Environment and Conservation (DEC) (2008) Forest black cockatoo (Baudin's cockatoo, Calyptorhynchus baudinii, and forest red-tailed black cockatoo, Calyptorhynchus banksii naso) Recovery Plan. Department of Environment and Conservation, Canberra.
- Department of Environment Regulation (DER) (2013). *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 Parks and Wildlife (DPAW) (2017) *Pseudocheirus occidentalis Recovery Plan,* Department of Parks and Wildlife, Perth, Western Australia
- Department of Primary Industries and Regional Development (DPIRD) (2019). *NRInfo Digital Mapping. Department of Primary Industries and Regional Development.* Government of Western Australia. URL: https://maps.agric.wa.gov.au/nrm-info/ (accessed 19 October 2023).
- Department of Water and Environmental Regulation (DWER) (2019). *Procedure: Native vegetation clearing permits*. Joondalup. Available from: https://dwer.wa.gov.au/sites/default/files/Procedure Native vegetation clearing permits v1.PDF.
- Environmental Protection Authority (EPA) (2016). *Technical Guidance Flora and Vegetation Surveys for Environmental Impact Assessment*. Available from: http://www.epa.wa.gov.au/sites/default/files/Policies\_and\_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey\_Dec13.pdf.
- Environmental Protection Authority (EPA) (2016). *Technical Guidance Terrestrial Fauna Surveys*. Available from: <a href="https://www.epa.wa.gov.au/sites/default/files/Policies">https://www.epa.wa.gov.au/sites/default/files/Policies</a> and Guidance/Tech%20guidance-%20Terrestrial%20Fauna%20Surveys-Dec-2016.pdf.
- Government of Western Australia (2019) 2018 South West Vegetation Complex Statistics. Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth, https://catalogue.data.wa.gov.au/dataset/dbca
- Government of Western Australia. (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. <a href="https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics">https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics</a>
- Great Southern Lime Partnership (2023) *Clearing permit application CPS 10188/1*, received 11 May 2023 (DWER Ref: DWERVT12621).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Marchant, S., and Higgins, P.J. (1990) *Handbook of Australian, New Zealand and Antarctic Birds. Volume one-Ratites to Ducks.* Oxford University Press. Melbourne
- Mattiske, E.M. and Havel, J.J. (1998) *Vegetation Complexes of the South-west Forest Region of Western Australia.*Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whisson, G. (2009) *South West Regional Ecological Linkages Technical Report*, Western Australian Local Government Association and Department of Environment and Conservation, Perth.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and

- Wright M. J. (1960-68) *Atlas of Australian Soils*, Sheets 1 to 10, with explanatory data. CSIRO and Melbourne University Press: Melbourne.
- Rix, M.G., and Harvey, M.S. (2012) Australian Assassins, Part II: A review of the new assassin spider genus Zephyrarchaea (Araneae, Archaeidae) from southern Australia.
- Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia Overview of Methodology and outputs Resource Management Technical Report No. 280. Department of Agriculture.
- Shah, B. (2006) Conservation of Carnaby's Black-Cockatoo on the Swan Coastal Plain, Western Australia.

  December 2006. Carnaby's Black-Cockatoo Recovery Project. Birds Australia, Western Australia.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) *Native Vegetation in Western Australia, Extent, Type and Status*. Resource Management Technical Report 249. Department of Agriculture, Western Australia.
- Submission (2023a) *Public submission in relation to clearing permit application CPS 10188/1*, received 1 September 2023 (DWER Ref: DWERDT829498).
- Submission (2023b) *Public submission in relation to clearing permit application CPS 10188/1,* received 4 September 2023 (DWER Ref: DWERDT831066).
- Submission (2023c) *Public submission in relation to clearing permit application CPS 10188/1*, received 7 September 2023 (DWER Ref: DWERDT832346).
- Submission (2023d) *Public submission in relation to clearing permit application CPS 10188/1*, received 8 September 2023 (DWER Ref: DWERDT833304)
- Submission (2023e) *Public submission in relation to clearing permit application CPS 10188/1*, received 9 September 2023 (DWER Ref: DWERDT833400).
- Submission (2023f) *Public submission in relation to clearing permit application CPS 10188/1,* received 10 September 2023 (DWER Ref: DWERDT833671).
- Submission (2023g) *Public submission in relation to clearing permit application CPS 10188/1*, received 10 September 2023 (DWER Ref: DWERDT833539).
- Submission (2023h) *Public submission in relation to clearing permit application CPS 10188/1,* received 10 September 2023 (DWER Ref: DWERDT833436).
- Submission (2023i) *Public submission in relation to clearing permit application CPS 10188/1*, received 11 September 2023 (DWER Ref: DWERDT834906).
- Submission (2023j) *Public submission in relation to clearing permit application CPS 10188/1*, received 11 September 2023 (DWER Ref: DWERDT833447).
- Threatened Species Scientific Committee (2011) Commonwealth Listing Advice on Botaurus poiciloptilus.

  Department of Sustainability, Environment, Water, Population and Communities. Canberra, ACT. Available from: <a href="http://environment.gov.au/biodiversity/threatened/species/pubs/1001-listing-advice.pdf">http://environment.gov.au/biodiversity/threatened/species/pubs/1001-listing-advice.pdf</a>
- Trudgen, M.E. (1991) *Vegetation condition scale* in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth.
- Valentine, L.E. and Stock, W. (2008) Food Resources of Carnaby's Black Cockatoo (Calyptorhynchus latirostris) in the Gnangara Sustainability Strategy Study Area. Edith Cowan University and Department of Environment and Conservation. December 2008.
- Western Australian Herbarium (1998-). FloraBase the Western Australian Flora. Department of Biodiversity, Conservation and Attractions, Western Australia. https://florabase.dpaw.wa.gov.au/ (Accessed 19 October 2023)

# **Schedule 1**

The boundary of the area authorised to be cleared is shown in the map below (Figure 1).

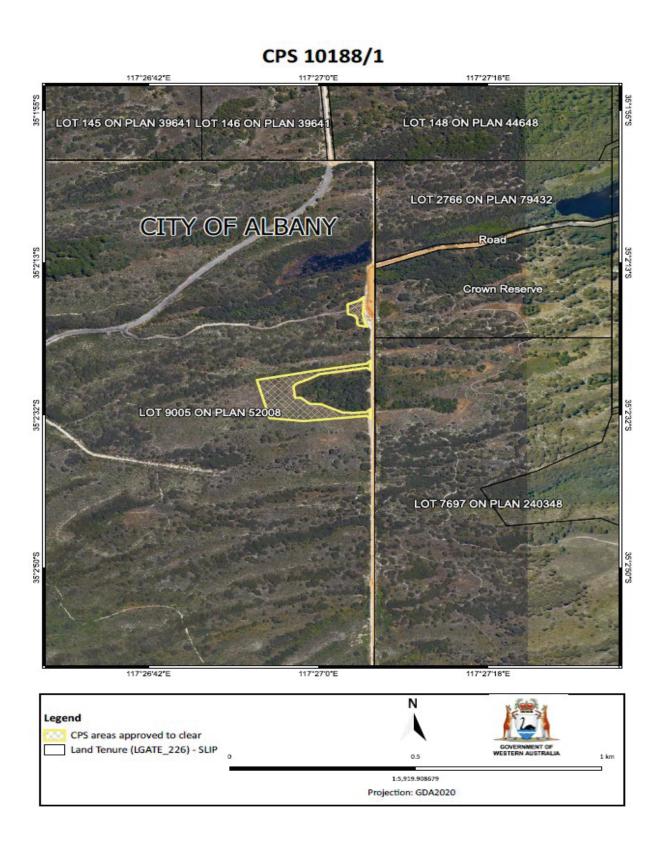


Figure 1: Map of the boundary of the area within which clearing may occur