



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 8622/1

File Number: DWERVT 3203

Duration of Permit: From 14 September 2020 to 14 September 2022

PERMIT HOLDERS

Eleanor Wright

Bruce Wright

LAND ON WHICH CLEARING IS TO BE DONE

Lot 6828 on Deposited Plan 209199, Kojaneerup South

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 20.6 hectares within the area shaded yellow on attached Plan 8622/1(a).

CONDITIONS

1. Avoid, minimise and reduce the impacts and extent of clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in 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.

2. Dieback and weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the 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.

3. Fauna management - direction of clearing

The Permit Holder shall conduct clearing in a slow progressive manner from north to south to allow fauna to move into adjacent native vegetation ahead of the clearing activity.

4. Offsets – conservation covenant

Prior to undertaking any clearing authorised under this Permit, and no later than 14 September 2021 the Permit Holder shall:

- (a) give a conservation covenant under section 30B of the *Soil and Land Conservation Act 1945* setting aside the area shaded red on attached Plan 8622/1(b) for the protection and management of vegetation in perpetuity; and
- (b) provide to the *CEO* a copy of the executed conservation covenant.

5. Period in which clearing is authorised

The Permit Holder must ensure that the planting of crop/pasture species occurs within three months of the authorised clearing being undertaken.

6. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit, in relation to the clearing of native vegetation authorised under this Permit:

- (a) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
- (b) the date that the area was cleared;
- (c) the size of the area cleared (in hectares);
- (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 1 of this Permit;
- (e) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 2 of this Permit;
- (f) actions taken in accordance with condition 3 of this Permit;
- (g) actions taken to give a conservation covenant in accordance with condition 4 of this Permit; and
- (h) actions taken in accordance with condition 5 of this Permit.

7. Reporting

- (a) The Permit Holder must provide to the *CEO* on or before 30 June of each year, a written report:
 - (i) of records required under condition 6 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit has been undertaken, a written report confirming that no clearing under this Permit has been undertaken, must be provided to the *CEO* on or before 30 June of each year.
- (c) Prior to 24 May 2022, the Permit Holder must provide to the *CEO* a written report of records required under condition 6 of this Permit where these records have not already been provided under condition 7(a) of this Permit.

DEFINITIONS

The following meanings are given to terms used in this Permit:

CEO means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;

dieback means the effect of *Phytophthora* species on native vegetation;

fill means material used to increase the ground level, or fill a hollow;

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;

weed/s means any plant –

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*;
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.



Meenu Vitarana
A/MANAGER
NATIVE VEGETATION REGULATION






*Officer delegated under Section 20
of the Environmental Protection Act 1986*

18 August 2020

Plan 8622/1(a)



Legend

-  Roads
-  Imagery
-  Clearing Instruments Activities
-  Cadastre (Search)
-  Local Government Authority



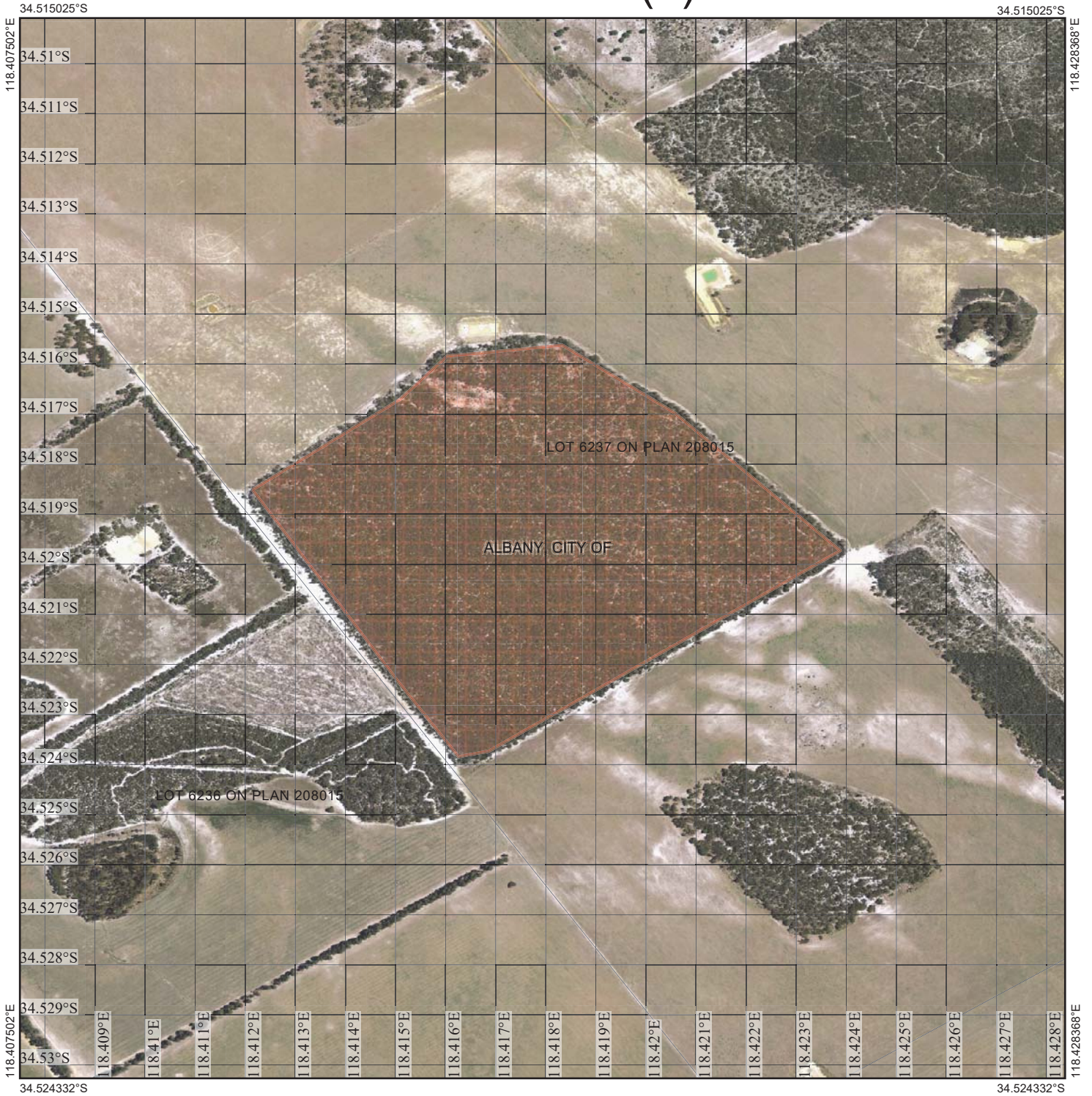
(Approximate when reproduced at A4)

GDA 94 (Lat/Long)





Geocentric Datum of Australia 1994

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Plan 8622/1(b)



Legend

-  Clearing Instruments Conditions
-  Imagery
-  Cadastre (Search)
-  Local Government Authority



(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

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Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8622/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Mrs Eleanor Wright
Mr Bruce Wright
Application received date: 22 July 2019

1.3. Property details

Property: Lot 6828 on Deposited Plan 209199, Kojaneerup South
Local Government Authority: Albany, City of
Localities: Kojaneerup South

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
20.6		Mechanical Removal	Grazing & pasture

1.5 Decision on application

Decision on Permit Application: Grant
Decision Date: 24 July 2020

2. Reasons for Decision

The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986* (EP Act). It has been concluded that the proposed clearing is at variance with Principles (b) and (e), may be at variance with Principles (g) and (i) and is not likely to be at variance with the remaining clearing Principles.

During the assessment of the application, the applicant revised the application area. The original application area included 45 hectares of native vegetation, in a very good to excellent condition, containing a high level of biodiversity. On 4 February 2020, the applicant revised the application area to 20.6 hectares. The revised application area is largely in a degraded (Keighery, 1994) condition. In revising the application area the applicant has excluded the highest quality remnant vegetation on the property, and any vegetation in a very good or better condition.

The assessment determined that the revised application area is not likely to significantly impact on any conservation significant flora species or threatened or priority ecological communities (TEC/PEC).

The assessment determined that the revised application area provides the following environmental values:

- 20.6 hectares of suitable foraging habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*)
- Forms part of a significant remnant within an extensively cleared area and is likely to act as a stepping stone for fauna moving across the landscape.

The Delegated Officer considers that the following land acquisition offset is sufficient to counterbalance the significant residual impacts of clearing:

- The acquisition and conservation of 54.5 hectares of native vegetation, two kilometres north of the application area, which contains the following values (DWER, 2019);
 - Significant foraging habitat for Carnaby's cockatoo
 - Significant remnant native vegetation in an extensively cleared landscape
 - Habitat for conservation significant flora species
 - Vegetation representative of the Kwongan Shrublands TEC
 - Vegetation in a very good to excellent (Keighery, 1994) condition

To minimise other potential impacts, as a condition of the Clearing Permit the applicant will be required to undertake the following measures:

- Undertake slow, progressive one directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity
- Implement weed and dieback management measures to reduce the risk of spread, including;
 - Cleaning machines of soil and vegetation before entering and leaving the application area
 - Ensuring that no known dieback or weed-affected soil, mulch, fill or other material is brought into the application area
 - Restricting the movement of machines and other vehicles to the limits of the areas to be cleared.
- Plant crops/pasture within three months of clearing to reduce the exposure time of bare sandy soils and minimise the risk of wind erosion and downstream sedimentation.

In determining to grant a Clearing Permit subject to conditions, the Delegated Officer found that the proposed clearing is unlikely to lead to an unacceptable risk to the environment.

3. Site Information

Clearing Description

The revised application is to clear 20.6 hectares of native vegetation within Lot 6828 on Deposited Plan 209199, Kojaneerup South, for the purpose of grazing and pasture. The applicant has advised that the clearing is required to expand the available area for grazing and pasture on the property and increase the viability of the farm.

Vegetation Description

According to available broad scale vegetation mapping, the application area has been mapped as Beard vegetation association 48, which is described as Shrublands; scrub/ heath (Shepherd et al, 2001).

A site inspection of the application area undertaken by the Department of Water and Environmental Regulation (DWER) noted that the application area comprises open mallee woodland over a relatively sparse mid and understorey, with scattered *Xanthorrhoea* sp., *Adenanthos cuneata*, *Hakea* sp. and *Banksia* sp. in the mid storey over native grasses and sedges, weed species and bare areas (DWER, 2019).

Vegetation Condition

The site inspection identified that the application area is in the following condition (DWER, 2019):

Degraded	Basic vegetation structure severely impacted by disturbance, scope for regeneration but not to a state approaching good condition without intensive management (Keighery, 1994)
Good	Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994)

The area is adjacent to cleared paddocks, and is not fenced from stock, with clear evidence of historical grazing throughout. As a result, the majority of the vegetation is in a degraded (Keighery, 1994) condition (DWER, 2019).

Soil type

The application area has been mapped as the Chillinup 6 land subsystem which is described as large lunettes associated with the Chillinup 4 subsystem (DPIRD, 2017).

Comments

The local area considered in the assessment of this application is defined as a 20 kilometre radius measured from the centre of the application area.



Figure 1: Revised Application Area



Figure 2: Original application area



Figure 3. Proximity of original to revised application area

4. Minimisation and mitigation measures

The applicant initially applied to clear 45 hectares of native vegetation (Figure 2). A site inspection determined that the initial application area contained the following values:

- Vegetation in a very good to excellent condition
- Suitable habitat for priority flora species
- Vegetation representative of the 'Kwongkan Shrublands' state listed PEC (Priority 3) and federally listed TEC
- Significant habitat for Carnaby's cockatoo and habitat for malleefowl
- Significant remnant vegetation within an extensively cleared landscape

On 20 December 2019 DWER wrote to the applicant to advise of these values and request additional information on measures to avoid and minimise impacts.

On 4 February 2020 the applicant requested to revise the application area by changing the location of the proposed clearing. The revised application area comprises 20.6 hectares of native vegetation largely in a degraded (Keighery, 1994) condition, having undergone considerable historical disturbance through cattle grazing (DWER, 2019). By amending the application area, the applicant has achieved the following:

- Minimised impacts to high quality habitat for priority flora species
- Minimised impacts to the 'Kwongkan Shrublands' TEC/PEC
- Excluded vegetation in a very good or better condition
- Excluded preferred malleefowl habitat
- Excluded the highest quality foraging habitat for Carnaby's cockatoo

The revised application area contains suitable foraging habitat for Carnaby's cockatoo and is considered to be a significant remnant within an extensively cleared landscape. The applicant has committed to providing an offset to address this impact (see Section 6 for offset description).

The revised application area (Figure 1) forms the basis of this clearing assessment and is referred to in this report as the 'application area'.

5. Assessment of application against clearing principles

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

Proposed clearing is not likely to be at variance with this Principle

Delegated Officers Key Considerations

The application area is not likely to provide a high level of biodiversity. This is based on the following:

- It is largely in a degraded condition with a sparse native understorey heavily impacted by grazing
- It is not likely to include threatened or priority flora species
- It is not likely to comprise a threatened or priority ecological community

It is noted that the application area includes 20.6 hectares of Carnaby's cockatoo foraging habitat in an extensively cleared landscape. The impact to Carnaby's cockatoo habitat is considered a significant residual impact and requires offsetting (See Section 6), however based on the above key considerations, the presence of Carnaby's habitat alone does not infer that the application area has a high level of biodiversity.

Background

A site inspection identified that the application area largely comprises open mallee woodland over a relatively sparse mid and understorey, with scattered *Xanthorrhoea* sp., *Adenanthos cuneata*, *Hakea* sp. and *Banksia* sp. in the mid storey over grasses, sedges, weed species and bare areas (DWER, 2019).

The application area is adjacent to cleared paddocks, and is not fenced from stock, with clear evidence of historical grazing throughout resulting in vegetation largely in a degraded (Keighery, 1994) condition (DWER, 2019).

Threatened and Priority Flora

There are records of 23 threatened and priority flora species within the local area. Of these species, nine priority flora species have been recorded within similar habitat types to that recorded in the application area (Western Australian Herbarium, 1998- ; DWER, 2019). These species are:

- *Monotoca aristata* (Priority (P) 2, known from 27 records)
- *Leucopogon cymbiformis* (P2, known from 13 records)
- *Chordifex leucoblepharus* (P2, known from 21 records)
- *Calytrix pulchella* (P3, known from 20 records)
- *Latrobea recurva* (P3, known from 18 records)
- *Calectasia obtusa* (P3, known from 20 records)
- *Drosera fimbriata* (P4, known from 20 records)
- *Thysanotus parviflorus* (P4, known from 22 records)
- *Bossiaea divaricate* (P4, known from 24 records)

The application area is largely in a degraded (Keighery, 1994) condition with a heavily disturbed understorey as a result of historical stock grazing throughout (DWER, 2019). Therefore, the application area is unlikely to contain any substantial populations of the above species. Noting the number of known records of each species, in the unlikely event that any of these species do occur within the application area, the proposed clearing is not likely to impact on the conservation status of these species.

Threatened and Priority Ecological Communities

The application area is not mapped as a priority or threatened ecological community. There is one federally listed threatened ecological community (TEC) mapped within the local area (closest occurrence 1.4 kilometres south), known as the 'Proteaceae dominated kwongan shrublands of the southeast coastal floristic province of Western Australia' (Kwongan Shrublands). This community is listed as endangered under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and is also a state listed priority ecological community (PEC) (Priority 3).

The condition threshold as specified within the approved conservation advice for the Kwongan Shrublands is as follows (Threatened Species Scientific Committee (TSSC), 2014):

Condition Category	Minimum patch size	Weeds	Dieback
High:	1 ha	≤ 30% perennial weed cover	No known dieback infestation
Moderate⁴:	0.05 ha (e.g. 10m x 50m or 5m x 100m, in roadside scenario)	≤ 70% perennial weed cover	May be present or absent.

The conservation advice notes that focus is on the protection of remaining patches that are most functional, relatively natural, and in relatively good condition, with less disturbed patches likely to provide greater biodiversity values (TSSC, 2014). The conservation advice notes that very degraded/modified patches are not considered occurrences of the Kwongkan Shrublands (TSSC, 2014).

The majority of the application area is in a degraded (Keighery, 1994) condition, and is unlikely to be representative of this community on the basis of its modified condition not aligning with the condition thresholds (DWER, 2019). This has not been confirmed via survey, so there is some potential (albeit limited) for portions of the application area to align with this community.

Should a portion of the application area be representative of this TEC/PEC, the proposed clearing is unlikely to impact on its regional or local extent given the following:

- The application area has been heavily grazed and is largely in a degraded (Keighery, 1994) condition
- The Kwongkan Shrublands has been mapped as extending over an area of around 1,180,000 hectares, and the application area would comprise 0.0017 per cent of this mapped occurrence
- Around 45,000 hectares of the Kwongkan Shrublands has been mapped within the local area and the application area would comprise 0.046 per cent of this mapped occurrence
- The applicant has committed to placing a conservation covenant over a 54.5 hectare patch of native vegetation in a very good to excellent (Keighery, 1994) condition, which is mapped as and considered representative of the Kwongkan Shrublands TEC/PEC (DWER, 2019).

The application area is not considered to be representative of any other known TEC's or PEC's, and the proposed clearing is not likely to impact on any such communities.

The application area forms part of a larger patch of around 66.6 hectares of remnant native vegetation, with the remaining 46 hectares in better condition than the application area, having undergone significantly less disturbance. The remaining 46 hectares may be representative of the Kwongkan shrublands TEC/PEC (noting that it is not mapped as this TEC/PEC). The proposed clearing will increase the risk of weeds and dieback spreading into the adjacent native vegetation and may therefore impact on the TEC/PEC and the overall biodiversity of the patch. As condition of the Clearing Permit, the applicant will be required to undertake weed and dieback management measures to reduce this risk.

Fauna and Ecological Linkages

As discussed under Principle (b), the application area contains preferred foraging habitat for Carnaby's cockatoo and value as a stepping stone for fauna within an extensively cleared landscape. The applicant has committed to providing an offset to address these impacts (outlined under Section 6).

The application area forms part of a larger patch of remnant vegetation (of 66.6 hectares) that provides a stepping stone for fauna within a highly cleared landscape. While the application area is largely in a degraded condition, and has undergone greater disturbance than the remainder of the larger patch, it contributes to the overall patch size and may act to buffer that patch from threatening processes.

(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.

Proposed clearing is at variance with this Principle

Delegated Officers Key Considerations

It is considered that the application area comprises significant habitat for fauna as it contains:

- 20.6 hectares of preferred Carnaby's cockatoo foraging habitat within an extensively cleared landscape
- Value as a landscape stepping stone for fauna movement

The applicant has committed to providing an offset to address these impacts, as detailed in Section 6.

As a condition of the Clearing Permit the applicant will also be required to undertake slow progressive one directional clearing measures to allow terrestrial fauna to disperse ahead of the clearing activity should they occur on site at the time of clearing.

Background

According to available datasets there are records of 25 conservation significant fauna species within the local area. Of these species, the application area provides suitable habitat for the following (DWER, 2019):

- Carnaby's cockatoo (endangered under the EPBC Act and *Biodiversity Conservation Act 2016* (BC Act))
- Baudin's cockatoo (*Calyptorhynchus baudinii*) (endangered under the EPBC Act and BC Act)
- Forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) (vulnerable under the EPBC Act and BC Act)
- Malleefowl (*Leipoa ocellata*) (vulnerable under the EPBC Act and BC Act)

Baudin's cockatoo and Forest red-tailed black cockatoo

The application area provides some suitable habitat for Baudin's cockatoo and forest red-tailed black cockatoo, however the available foraging habitat for these species is not preferred, noting that they predominantly forage on marri and marri and jarrah respectively (Commonwealth of Australia, 2012). There is no suitable breeding or roosting habitat for these species within the application area (DWER, 2019).

Given the above, the vegetation within the application area is not likely to provide significant habitat for these species.

Malleefowl

Malleefowl inhabit semi-arid to arid shrublands and low woodlands dominated by mallee and/or Acacia, preferably with a sandy soil and an abundance of leaf litter, which it uses to build large mounds to incubate its eggs (BirdLife International, 2016).

Due to the sparse understorey, the application area is unlikely to be significant for this species (DWER, 2019). The construction of mounds for egg incubation would be particularly unlikely with such a degraded understorey and lack of heavy leaf litter, and any use of the application area by malleefowl would likely be transient.

Given the above, the application area is not likely to provide significant habitat for malleefowl. Slow progressive one directional clearing would help to allow fauna to disperse ahead of the clearing activity should any malleefowl occur within the application area at the time of clearing.

Carnaby's cockatoo

Carnaby's cockatoo nest in hollows in live or dead trees of marri, karri, wandoo, tuart, salmon gum, jarrah, flooded gum, York gum, powder bark, bullich and blackbutt (Commonwealth of Australia, 2012). Trees with a diameter at breast height of greater than 500 millimetres, or 300 millimetres for salmon gum and wandoo, are considered large enough to potentially develop a nest hollow (Commonwealth of Australia, 2012).

The application area does not contain any trees with the potential to provide nesting habitat for Carnaby's cockatoo (DWER, 2019). The closest confirmed breeding hollow to the application area is around 30 kilometres north west. Similarly, the application area does not contain any suitable roosting trees (DWER, 2019).

Carnaby's Cockatoo forages on the seeds, flowers and nectar of native proteaceous plant species (e.g. *Banksia*, *Hakea* and *Grevillea* species), *Eucalyptus* and *Callistemon* species (Commonwealth of Australia, 2012).

The application area comprises open mallee woodland over a relatively sparse mid and understorey, with scattered *Xanthorrhoea* sp., *Adenanthos cuneata*, *Hakea* sp. and *Banksia* sp. These species provide preferred foraging habitat for Carnaby's cockatoo (DWER, 2019).

The application area is located within an extensively cleared landscape, retaining only 17.3 per cent native vegetation cover.

Carnaby's cockatoo has been significantly impacted by historical clearing of its habitat and it is estimated that this species has disappeared from more than one-third of its historical breeding range (EPA, 2019). Broad-scale clearing of native vegetation has resulted in fragmentation of breeding and foraging habitat, loss of breeding hollows, and changes in the species distribution (EPA, 2019). The EPA's technical guidance notes that "this species is reliant on the maintenance of resources over multiple bioregions, which adds an extra complexity to its conservation. To address this, mitigation must be applied across the species range" (EPA, 2019). Noting this, it is considered that the remaining suitable habitat for this species within its current range is likely to be significant.

While the application area is largely in a degraded (Keighery, 1994) condition (DWER, 2019), it contains 20.6 hectares of preferred Carnaby's cockatoo foraging habitat in a highly fragmented landscape, and is therefore considered to be significant for this species.

The applicant has committed to providing an offset to address the impact to Carnaby's cockatoo habitat as detailed under Section 6.

Ecological Linkages

The application area is within Strategic Zone C of the Western Australian South Coast Macro Corridor Network, which was designed to identify a regional-scale Macro Corridor Network of native vegetation (CALM, 2006). The vegetation within Zone C potentially provides habitat for wildlife at a local scale, but requires closer assessment to determine its value for a regional scale macro corridor network (CALM, 2006).

The application area forms part of a larger remnant of around 66.6 hectares, which is likely to provide value as a stepping stone for fauna moving through an extensively cleared landscape. While the application area is largely in a degraded (Keighery, 1994) condition, and has undergone greater disturbance than the remainder of the larger patch, it contributes to the overall patch 'stepping stone' and may act to buffer that patch from threatening processes.

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

Proposed clearing is not likely to be at variance with this Principle

Delegated Officers Key Considerations

The application area is not likely to include or be necessary for the continued existence of threatened flora. This is based on the following:

- The application area is largely in a degraded condition
- The application area does not contain suitable habitat for the two species of threatened flora recorded in the local area, being *Androcalva perlaria* and *Conostylis misera*, recorded 11.2 kilometres east and 17.4 kilometres west of the application area respectively.

(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.

Proposed clearing is not likely to be at variance with this Principle

Delegated Officers Key Considerations

The application area is unlikely to comprise the whole or part of, or be necessary for the maintenance of a threatened ecological community (TEC). This is based on the following:

- There are no state listed TEC's recorded within the local area
- The vegetation type recorded within the application area is not representative of any known state listed TEC's

It is noted that the proposed clearing is within close proximity to a mapped occurrence of the Kwongkan Shrublands ecological community, which is a federally listed TEC, however noting that this is not a state listed TEC, impacts to this community have been described under Principle (a).

(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.

Proposed clearing is at variance with this Principle

Delegated Officers Key Considerations

It is considered that the application area is a significant remnant in an extensively cleared area, as it contains the following values:

- 20.6 hectares of foraging habitat for Carnaby's cockatoo
- significant remnant vegetation within an extensively cleared local area containing 17.3 per cent vegetation cover
- an extensively cleared mapped vegetation association containing 25.6 per cent of its pre-European extent
- contributes towards a larger patch that provides a landscape stepping stone for fauna

The applicant has committed to providing an offset to address these impacts, as detailed in Section 6.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

As indicated in Table 3, the application area occurs within the Esperance Plains bioregion and includes one mapped vegetation association, being Beard Vegetation Associations (BVA) 48.

The remnant vegetation extent for the bioregion is greater than the 30 per cent threshold described above (Government of Western Australia, 2019), however the remnant vegetation extent for the mapped BVA is below this threshold at 25.6 per cent. This BVA retains 2,633 hectares of its pre-European vegetation extent and the proposed clearing of 20.6 hectares of vegetation mapped as this BVA would reduce its current extent by around 0.78 per cent.

The local area (comprising 33,379 hectares) retains around 17.3 per cent native vegetation cover (5776 hectares), and the application area occurs within a large corridor of highly fragmented agricultural land. Noting this, the application area is considered to be within an extensively cleared landscape, and is considered a significant remnant as it contains foraging habitat for Carnaby's cockatoo and value as a stepping stop to facilitate fauna movement.

Table 1 – Remnant Vegetation Statistics (Government of Western Australia, 2019).

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent of pre-European extent in DBCA Managed Lands (%)
IBRA Bioregion				
Esperance Plains	2,889,941	1,494,449	52	28

Vegetation Associations				
Beard Vegetation Association 48	10,255	2,633	25.6	9.9

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

Proposed clearing is not likely to be at variance with this Principle

Delegated Officers Key Considerations

The application area does not contain native vegetation growing in, or in association with an environment associated with a watercourse a wetland. This is based on the following:

- No wetlands or watercourses have been mapped within the application area with the closest hydrological feature (an area subject to inundation) mapped around 100 metres west
- A site inspection of the application area did not identify any riparian vegetation, watercourses or wetlands.

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

Proposed clearing may be at variance with this Principle

Delegated Officers Key Considerations

The proposed clearing may result in appreciable land degradation should the application area remain bare for an extended period of time. This is based on the following:

- The application area comprises light sandy soils with a high risk of wind erosion
- There is a small sandy rise within the centre portion of the application area
- The local area is commonly subject to strong prevailing winds and is bordered by highly cleared agricultural areas

As a condition on the Clearing Permit, the applicant will be required to undertake cropping/pasture activities within three months of the proposed clearing to minimise the risk of wind erosion.

The application is mapped as the Chillinup 6 land subsystem which is described as large lunettes associated with the Chillinup 4 subsystem (DPIRD, 2017).

A site inspection of the application area identified light sandy soils (DWER, 2019). The application area sits within the upper slope position of the landscape, with a small sandy rise occurring within the centre of the application area. Topographical contours indicate a five metre height difference between this sandy rise and the western border of the application area.

The Department of Planning, Infrastructure and Regional Development (DPIRD) undertook a land degradation assessment for the proposed clearing of the initial 45 hectare application area, which is located around two kilometres north of the application area. The assessment identified that the original application area had a moderate to high capability for the proposed end land use and the risk of land degradation is low (Commissioner of Soil and Land Conservation, 2019).

The assessment of the initial application area identified that there is some risk of wind erosion should the land not be put to pasture or clayed to improve water retention capabilities (CSLC, 2019).

This advice is likely applicable to the revised application area, given that the original area contained similar soils. It is noted that the revised proposed clearing may have a slightly greater risk of wind erosion given the sandy rise within the centre portion of the application area. Noting this, there is some potential for the proposed clearing to result in appreciable land degradation via wind erosion should the area remain bare for an extended period.

As a condition on the Clearing Permit, the applicant will be required to undertake cropping/pasture activities within three months of the proposed clearing to minimise the risk of wind erosion.

(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.

Proposed clearing is not likely to be at variance with this Principle

Delegated Officers Key Considerations

The proposed clearing is not likely to impact on the environmental values of a conservation area noting that the closest conservation area to the application area is Hassell National Park, located around 7.7 kilometres south of the application area. The application area does not provide any direct linkage values to this 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.

Proposed clearing may be at variance with this Principle

Delegated Officers Key Considerations

The proposed clearing may cause deterioration in the quality of surface or underground water should the application area remain bare for any length of time. This is based on the following:

- The application area slopes downwards towards an area subject to inundation and water may run-off into this area following rainfall and result in localised sedimentation

As a condition on the Clearing Permit, the applicant will be required to undertake cropping/pasture activities within three months of the proposed clearing to minimise the risk of sedimentation.

As discussed under Principle (f), the closest wetland or watercourse to the application area is an area subject to inundation located around 100 metres west of the application area. The application area slopes downwards towards this area from its centre point, and water is likely to run-off into this area subject to inundation following rainfall. Therefore, the proposed clearing may cause a short term increase in sedimentation into this area, should rainfall occur immediately post clearing.

According to available datasets, groundwater salinity within the application area is mapped at between 7000 and 14000 total dissolved solids, milligrams per litre. This level of groundwater salinity is classified as 'brackish'. DPIRD's land degradation assessment report of the initial application area noted that there is no salinity within the property (CSLC, 2019). The report concluded that the risk of salinity causing land degradation is low.

While this advice was provided for a different area, it is considered to be applicable to the current application given that the mapped groundwater salinity levels are the same, and noting that the initial application area was a larger area of 45 hectares with a greater density of native vegetation. Therefore, the risk of increasing salinity groundwater or surface water levels as a result of the proposed clearing is low.

Given that the proposed clearing may result in sedimentation of a nearby area subject to inundation, the proposed clearing may be at variance with this Principle.

As a condition on the Clearing Permit, the applicant will be required to undertake cropping/pasture activities within three months of the proposed clearing to stabilise soils and minimise the risk of runoff and sedimentation.

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

Proposed clearing is not likely to be at variance with this Principle

Delegated Officers Key Considerations

The proposed clearing is not likely to cause or exacerbate the incidence or intensity of flooding. This is based on the following:

- There are no wetlands or watercourses mapped within the application area
- The application area contains highly permeable sandy soils
- The application area is largely in a degraded condition
- The local area is subject to a moderate mean annual rainfall of 500 millimetres

Planning instruments and other relevant matters.

There are no Aboriginal Sites of Significance mapped within the application area.

The original Clearing Permit application was advertised on DWER's website on 18 August 2019 with a 21 day submission period. One public submissions was received in relation to this application.

The submission (2019) raised the following concerns:

- There is enough pasture already cleared in that area for agricultural purposes and it is vital that what remnant vegetation is left should remain
- Whilst the applicant has shown a reduction from 56 to 45 hectares, this is a large patch of isolated remnant bush, which should remain undisturbed
- The clearing will impact on the Proteaceae Dominated Kwongkan Shrubland TEC
- The clearing may affect the saline ground-water table, causing it to rise further, which is already an issue in this area
- The clearing may impact on threatened or priority flora
- The clearing will result in the loss of significant habitat for black cockatoo species.

The submission concluded that for the reasons set out above, the application area should remain uncleared (Submission, 2019).

As outlined within Section 3, the applicant has made a significant revision to the application area to:

- Avoid significant impacts to the Kwongkan Shrubland TEC/PEC
- Avoid suitable habitat for threatened and priority flora
- Reduce the extent of impact to high quality foraging habitat to Carnaby's cockatoo.

The applicant has also committed to providing an offset (outlined in Section 6) which is considered to address the remaining residual environmental impacts.

The application was re-advertised on 19 February 2020 and 12 March 2020 for a seven day public submission period respectively, to reflect changes in the application area and a change in property details. No submissions were received.

The City of Albany advised that "this land is zoned General Agriculture under the City of Albany Local Planning Scheme No.1. The City has not received any development applications relating to this lot and none are required for this clearing to occur ... The intention to graze sheep and crop the land stated as the purpose for the clearing are land uses that do not require express development approval and are permitted in this area. The City of Albany has no objection to this clearing request" (City of Albany, 2019).

The applicant previously applied for a Clearing Permit application on 18 July 2017 (CPS 7683/1). During the assessment of that application, the applicant amended the application area to exclude a stand of native vegetation in very good to excellent condition with high biodiversity values. The majority of the revised application area contained native vegetation in a degraded to completely degraded condition. DWER subsequently granted a permit to clear 29.58 hectares for the revised application area on 22 May 2018.

The cumulative impacts of granting multiple Clearing Permits within close proximity are acknowledged, however given that the applicant has revised the application area in both instances and has committed to providing an offset to secure the highest quality vegetation on the property within conservation estate (See Section 6 below), impacts to environmental values are considered to have been adequately addressed.

6. Suitability of Proposed offset

Offset Proposal

After consideration of the proposed avoidance and minimisation measures, the proposed clearing will result in the following significant residual impacts:

- Loss of 20.6 hectares of significant habitat for Carnaby's cockatoo
- Loss of significant remnant vegetation within an extensively cleared landscape
- Loss of remnant vegetation that contributes to a landscape stepping stone for fauna movement

To address the above impacts, the applicant has committed to giving a conservation covenant under the *Soil and Land Conservation Act 1945*, setting aside an area of 54.5 hectares for the protection and management of vegetation in perpetuity (see figure 4 below). The offset area, which formed the original application area, is around two kilometres north of the application area within a neighbouring freehold Lot owned by the applicant.

Offset Adequacy

In assessing whether the proposed offset is adequately proportionate to the significance of the habitat values being impacted, DWER undertook a calculation using the Commonwealth Offsets Assessment Guide.

The calculation determined that the conservation in perpetuity of 54.5 hectares of native vegetation in close proximity, which contains the following values (DWER, 2019), is adequate to counterbalance the significant residual impacts:

- Vegetation in a very good (Keighery, 1994) to excellent (Keighery, 1994) condition
- High quality Carnaby's cockatoo foraging habitat
- Significant remnant vegetation within an extensively cleared landscape
- Value as a stepping stone for fauna movement
- Vegetation mapped as and considered representative of the Kwongkan Shrublands TEC/PEC

Given the above, the proposed offset is considered adequate to counterbalance the significant residual impacts of clearing, consistent with the *WA Environmental Offsets Policy September 2011*.



Figure 4. Offset Area

7. References

- BirdLife International. 2016. *Leipoa ocellata*. The IUCN Red List of Threatened Species 2016: <https://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T22678646A92782728.en> .Downloaded 22 June 2020.
- City of Albany (2019) Direct Interest Submission for Clearing Permit Application CPS 8622/1. Received 16 August 2019. DWER Ref A1822083.
- Commissioner of Soil and Land Conservation (2019) Land Degradation Assessment for Clearing Permit Application CPS 8622/1. Received 10 September 2019. DWER Ref A1822090.
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Commonwealth of Australia (2012) EPBC Act referral guidelines for three threatened black cockatoo species. Department of Sustainability, Environment, Water, Populations and Communities, Canberra.
- Department of Conservation and Land Management (CALM) (2006). The Western Australian South Coast Macro Corridor Network. A bioregional Strategy for Nature Conservation.
- Department of Primary Industries and Regional Development (DPIRD) (2017) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. URL: <https://maps.agric.wa.gov.au/nrm-info/> (accessed April 2020).
- Department of Water and Environmental Regulation (DWER) (2019) Site Inspection Report for Clearing Permit Application CPS 8622/1, undertaken 7 November 2019. DWER Ref A1851378.
- Environmental Protection Authority (EPA) (2019) EPA Technical Report: Carnaby's Cockatoo in Environmental Impact Assessment in the Perth and Peel Region Advice of the Environmental Protection Authority under Section 16(j) of the Environmental Protection Act 1986.
- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of February 2018. WA Department of Parks and Wildlife, Perth
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, 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 (2019) Public Interest Submission for Clearing Permit Application CPS 8622/1. Received 4 September 2019. DWER Ref A1852323.
- Threatened Species Scientific Committee (TSSC) (2014) Approved Conservation Advice for Proteaceae Dominated Kwongan Shrublands of the southeast coastal floristic province of Western Australia. Department of the Environment, Canberra.
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <http://florabase.dpaw.wa.gov.au/> (Accessed June 2020).

GIS databases:

- CPS Areas applied to clear
- NatureMap (conservation significant fauna)
- DAFWA Subsystems
- Vegetation Complexes – South West
- Managed Tenure
- TPFL Data June 2020
- WAHerb Data June 2020
- Aboriginal Sites Register
- IBRA Vegetation WA
- WA TEC PEC
- Land Degradation Hazards
- Hydrography Linear
- Hydrography Hierarchy
- Geomorphic Wetlands