



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 7320/1

File Number: 2016/002019-1

Duration of Permit: From 17 February 2018 to 17 February 2020

PERMIT HOLDER

Gwenyth Merle Gibson

Ronald Charles Gibson

LAND ON WHICH CLEARING IS TO BE DONE

Lot 762 on Deposited Plan 208430

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 32.2 hectares of native vegetation within the area hatched yellow on attached Plan 7320/1.

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 *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. 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); and
- (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 1 of this Permit.

4. Reporting

The Permit Holder must provide to the CEO the records required under condition 2 of this Permit, when requested by the CEO.

DEFINITIONS

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

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 Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



James Widenbar
MANAGER
CLEARING REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

18 January 2018

Plan 7320/1



Legend

-  Areas approved to clear
 -  Cadastre
 -  LGA
- Virtual Mosaic (LGATE-V001)



1:10,000

MGA 94

Geocentric Datum of Australia 1994

[Signature] Date 18/1/2018

Officer with delegated authority under Section 20
of the Environmental Protection Act 1986



GOVERNMENT OF
WESTERN AUSTRALIA



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7320/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Mrs Gwenyth Merle Gibson
Mr Ronald Charles Gibson
Application received date: 14 October 2016

1.3. Property details

Property: LOT 761 ON PLAN 208430, MUNGLINUP
LOT 762 ON PLAN 208430, MUNGLINUP
Local Government Authority: RAVENSTHORPE, SHIRE OF
Localities: MUNGLINUP

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
51		Mechanical Removal	Cropping

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 18 January 2018

Reasons for Decision: Following an initial assessment of the 51 hectare application area, the applicant minimised the environmental impacts of the clearing by removing the vegetation with the highest environmental value (reduced to 32.8 hectares).

The revised 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 not likely to be at variance to the clearing Principles.

The Delegated Officer has had regard to specialist advice received from the Department of Biodiversity, Conservation and Attractions and a site inspection of the application area undertaken by the Department of Water and Environmental Regulation.

Based on the limited clearing in a predominantly degraded condition, results of a flora survey showing minimal environmental value and significant adjoining native vegetation in a better condition, the Delegated Officer considers that the proposed clearing represents a low risk and is unlikely to result in unacceptable impacts to the environment.

Weed and Dieback management procedures have been added to the permit to ensure that adjoining vegetation is not impacted by the proposed clearing.

The Delegated Officer also took into consideration that in order to limit the impact of the clearing the applicant removed a large portion of the original area proposed to be cleared for the application area.

Given the above, the Delegated Officer decided to grant a clearing permit.

2. Site Information

Vegetation Description

Three Beard vegetation associations have been mapped within the application area:

- Beard vegetation association 47 is described as shrublands; tallerack mallee-heath;
- Beard vegetation association 128 is described as bare areas; rock outcrops; and
- Beard vegetation association 516 is described as shrublands; mallee scrub, black marlock (Shepherd et al., 2001).

Two vegetation types were identified within Area 1 (figure 1):

- *Lambertia inermis* (chittick) open tall shrub and *Banksia baueri* (woolly banksia) heath; and
- *Eucalyptus pleurocarpa* very open mallee and *Melaleuca striata* heath.

Four vegetation types were identified within Area 2 (figure 1):

- *Eucalyptus occidentalis* Woodland;
- *Eucalyptus flocktoniae* mallee and heath;
- *Eucalyptus pleurocarpa* mallee heath; and
- *Eucalyptus platypus* mallet woodland (Craig, 2017).

Clearing Description

The application is to clear 51 hectares of native vegetation within Lots 761 and 762 on Deposited Plan 208430, Munglinup, for the purpose of cropping.

Vegetation Condition

Very Good; Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

To

Degraded; Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

Comment

The application area has been considered as two distinct areas based on differences in the vegetation condition and composition.



Fig 1: Areas under application.

3. Minimisation and mitigation measures

In order to avoid and minimise the identified environmental impacts of the clearing, on 10 December 2017 the applicant removed Area 1 from the application area, reducing the clearing to 32.2 hectares of native vegetation. As assessed within Section 6, this minimisation measure has significantly reduced the potential environmental impacts of the clearing.

Section 4 provides an assessment of the original 51 hectare application area. Section 6 provides a revised assessment of the Principles at variances given the reduction of the application area to 32.2 hectare of native vegetation.

4. Assessment of application against clearing principles

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

Proposed clearing is at variance to this Principle

The applicant proposes to clear up to 51 hectares of native vegetation within Lots 761 and 762 on Deposited Plan 208430, Munglinup, for the purpose of cropping.

The application area was inspected by then Department of Environment Regulation (DER) officers on 22 February 2017. The application area was cleared approximately 20 years ago, and comprises of regrowth vegetation that ranges from a very good to degraded (Keighery, 1994) condition.

The application area has been considered as two distinct areas based on differences in the vegetation condition and composition:

- Area 1 (long linear western portion of application area within Lot 761) comprises of scattered *Eucalyptus pleurocarpa* over a dense shrubland of *Melaleuca* sp., *Banksia* sp. and *Xanthorrhoea preissii* (DER, 2017). Although this area has been previously cleared, the area appeared to be regenerating well and there are very few weed species present in the understorey, therefore is considered to be in a good (Keighery, 1994) condition (DER, 2017).
- Area 2 (eastern portions of the application area within Lot 762) comprises of *Eucalyptus* sp. woodland over *Hakea*, *Acacia* and *Dodonaea* sp. scrub over mixed native sedges and exotic weeds (DER, 2017). There was evidence that sections of this area have been historically parkland cleared and impacted by grazing. A non-perennial watercourse known as the Dallinup Creek runs adjacent to the application area.

The vegetation closest to the watercourse is of a degraded (Keighery, 1994) condition where there was a higher density of weed cover and sections that have been previously cleared. The condition of the vegetation improved as DER Officers traversed the application area in a north easterly direction away from the watercourse.

According to available databases, a total of nine priority (P) flora taxa have been recorded within the local area (10 kilometre radius). The closest of these is a P3 species known as *Hopkinsia adscendens* mapped approximately four kilometres south west of the application area. This species has a preference for dry or seasonally damp habitats along streams (Western Australian Herbarium, 1998-). Given there are non-perennial watercourses that occur in close proximity to the application area, suitable habitat for this species may occur within the application area.

However, noting that P3 species are generally known from collections from several different localities not under imminent threat and that the applicant has committed to a 20 metre vegetative buffer from all watercourses, it is not likely the proposed clearing will impact on the conservation status of this species (Department of Parks and Wildlife (Parks and Wildlife), 2014).

As discussed under Principle (b), three species of conservation significance have been recorded within the local area (10 kilometre radius), Carnaby's cockatoo (*Calyptorhynchus latirostris*), rainbow bee-eater (*Merops ornatus*) and common greenshank (*Tringa nebularia*) (Parks and Wildlife, 2007-).

As discussed under Principle (c), a survey of the application area identified 52 clumps of a rare flora species over two locations in the southern section of Area 1.

The majority of the application area intersects the Commonwealth listed threatened ecological community (TEC) 'Proteaceae dominated kwongkan shrublands of the southeast coastal floristic province of Western Australia' (Kwongkan Shrublands). Approximately 11 hectares of this TEC was identified within the northern section of Area 1 (Craig, 2017). This nationally listed TEC is listed as endangered and protected under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (discussed further under Principle (d)).

Area 1 contains rare flora and the Kwongkan Shrublands TEC and therefore, the proposed clearing is at variance to this 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 indigenous to Western Australia.

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

According to available databases, a total of three species of conservation significance have been recorded within the local area (Parks and Wildlife, 2007-). All three species, namely the Carnaby's cockatoo (*Calyptorhynchus latirostris*) listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* (WC Act), rainbow bee-eater (*Merops ornatus*) and common greenshank (*Tringa nebularia*) protected under international agreement have the potential to utilise the application area based on the habitat types present within the application area.

Area 1 of the application area is likely to provide suitable foraging habitat for the Carnaby's cockatoo given the presence of proteaceous species in this area which are the preferred food source for this species (Valentine and Stock, 2008). No suitable breeding or nesting trees were observed within the application area (DER, 2017).

The rainbow bee-eater is known to occur in numerous habitats including open forests and woodlands, shrublands, in cleared or semi-cleared habitats such as areas of human habitation and farmland. It prefers open, cleared or lightly-timbered areas that are often, but not always in close proximity to permanent water (Department of the Environment and Energy, 2017). The application area may provide suitable habitat for this species given the vegetation type and its close proximity to watercourses.

The common greenshank occurs in a range of terrestrial wetlands (permanent and ephemeral), artificial wetlands and sheltered coastal habitats (Department of the Environment and Energy, 2017). Given the presence of several tributaries within the application area, suitable habitat may occur within the application area.

While the above listed conservation significant avian fauna species may utilise habitat within the application area for opportunistic foraging, the application area is unlikely to provide significant habitat given the mobile nature of these species and that there are two large remnants of native vegetation adjoining the application area that will provide habitat that is of a better condition.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

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

Proposed clearing is at variance to this Principle

A search of the Department of Biodiversity, Conservation and Attractions' (DBCAs) rare flora databases revealed records of four rare flora species within the local area. Parks and Wildlife advised that the application area may support suitable habitat for three of the four rare flora species (Parks and Wildlife, 2017b).

The closest known record of the first rare flora species is located approximately 1.2 kilometres from Area 1 (Parks and Wildlife, 2017b). This species is known to occur in flat or gently undulating plains in yellow or grey sand over laterite clay, in low heath and sedge communities with other scattered emergent species including Chittick (*Lambertia inermis*), Southern Plain Banksia (*Banksia media*), Tallerack (*Eucalyptus pleurocarpa*) and other mallees (Parks and Wildlife, 2017a).

This species is currently known from 19 populations and 792 mature plants and the application area occurs within the species known range (Parks and Wildlife, 2017b).

The second rare flora species has been recorded approximately 10 kilometres from the application area. This species is an erect open shrub, 0.5 to 2.5 metres high that flowers between January to February and August to December (Western Australian Herbarium, 1998-). The preferable habitat for this species is along river banks and on plains of sandy clay loam over granite in alluvial soils (Parks and Wildlife, 2017a). According to available databases, this species has also been recorded in areas where the parent material is granite as well as laterite and ironstone soils.

A population of the third rare flora species has been recorded approximately five kilometres north of Area 1 on a tributary of Dallinup Creek within the same broadscale mapped vegetation and soil type (Parks and Wildlife, 2017a). This species is known to occur within rocky, sandy clay soils along watercourses or in areas that collect run-off associated with Bushy Yate (*Eucalyptus lehmannii*), Tallerack (*Eucalyptus pleurocarpa*), Broom bush (*Melaleuca uncinata*) and sheoaks (*Allocasuarina* spp.) (Parks and Wildlife, 2017a).

Based on the known habitat requirements for the abovementioned rare flora species, it is considered that the application area contains suitable habitat for these species. A targeted flora and vegetation survey was conducted on 13 July 2017 and 29 August 2017 within the application area (Craig, 2017). The survey identified 52 clumps of a rare flora species (first species described above) over two locations in the southern section of Area 1 (Craig, 2017). DBCA advised that this species is currently known from 38 populations and 15,131 plants.

There are four other populations of this species known to occur within 10 kilometres of the application area (DBCA, 2017). Three of these populations occur along road verges containing thin strips of remnant vegetation surrounded by cleared farmland. The other population occurs on a road verge adjoining a larger piece of remnant vegetation but this is also a road reserve (DBCA, 2017). Whilst the taking of the two subpopulations may not have a severe impact on the conservation status of the species, none of the immediate surrounding populations occur on secure land tenure. Therefore, as much of the two subpopulations should be retained as possible to ensure the future conservation of the species in the local area (DBCA, 2017).

Given the above, the proposed clearing is at variance to this 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.

Proposed clearing is at variance to this Principle

According to available databases, the majority of the application area intersects the Commonwealth listed TEC 'Proteaceae dominated kwongkan shrublands of the southeast coastal floristic province of Western Australia' (Kwongkan Shrublands).

The Kwongkan Shrublands TEC is predominantly located within the Esperance Sandplains and Mallee bioregions, and typically occurs on sandplains, occupying lower and upper slopes and ridges, as well as uplands, where rainfall ranges from 400 to 800 millimetres a year. It largely occurs on duplex soils and deep to shallow soils on the sandplains, and comprises shrublands dominated by plants from the family Proteaceae, including plants from the genera *Adenanthos*, *Banksia*, *Grevillea*, *Hakea*, *Isopogon* and *Lambertia* (Threatened Species Scientific Committee, 2014).

Whilst the application area has been mapped within the Kwongkan Shrublands TEC, the Commonwealth of Australia notes that detailed mapping of this TEC is not available, and ground truthing is required to verify if a site meets the required diagnostic criteria to be the described TEC (Commonwealth of Australia, 2013).

The targeted flora and vegetation survey identified approximately 11 hectares of *Lambertia inermis* open tall shrubland and *Banksia bauera* heath in the northern section of Area 1 (Craig, 2017). This community meets the criteria for referral as 'Proteaceae dominated kwongkan shrublands of the southeast coastal floristic province of Western Australia' under the EPBC Act (Craig, 2017)

Given the presence of 11 hectares of the Kwongkan Shrublands TEC in Area 1, the proposed clearing is at variance to this 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.

Proposed clearing is at variance to this Principle

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 1, the remaining extents of native vegetation within the local government authority, the Interim Biogeographic Regionalisation for Australia (IBRA) bioregion and the mapped vegetation association are above the minimum 30 per cent representation threshold.

While the remaining extents of native vegetation within the local government authority, the IBRA bioregion and the mapped vegetation associations all retain greater than the 30 per cent threshold, the local area (10 kilometre radius surrounding the application area) retains approximately 26 per cent native vegetation (9011.10 hectares). Therefore, it is considered that the application area is located within an extensively cleared landscape.

Application Area 1 contains rare flora and a TEC, therefore it is considered to be significant as a remnant.

Given the above, the proposed clearing is at variance to this Principle.

Table 1: Vegetation extents

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Department of Parks and Wildlife Managed Lands		
				Extent (ha)	Pre-European (%)	Current (%)
IBRA bioregion*						
Esperance Plains	2,899,941	1,495,046	52	834,118	29	55
Local government authority*						
Shire of Ravensthorpe	5,469,337	5,436,103	99.4	154,329	2.82	2.69
Beard vegetation association in bioregion*						
516	318,747	219,798	69	91,771	29	42
128	10,827	9,158	85	7,155	66	76
47	959,936	336,782	35	177,481	19	52

(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 may be at variance to this Principle

A minor non-perennial watercourse known as the Dallinup Creek intersects the application area within Area 2. A site inspection undertaken by DER identified wetland vegetation growing in association with this watercourse within Area 2 (DER, 2017). However, impacts to this watercourse from the proposed clearing are likely to be minimal as the applicant has advised that they will maintain a vegetative buffer of 20 metres from all tributaries. A vegetation management condition placed on the permit will assist to further mitigate impacts to this watercourse.

Given the above, the proposed clearing may be at variance to this Principle.

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

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

The soils within the application area have been mapped at a regional scale by the Department of Primary Industries and Regional Development and are comprised of two soil landscape units, being Munglinup 2 subsystem (Map Unit 245Mu_2) within Area 1 and Young 1 subsystem (Map Unit 245 Yo_1) within Area 2.

Munglinup 2 subsystem in Area 1 is described as a gently undulation plain and rises with occasional gravelly hillocks (Commissioner of Soil and Land Conservation (CSLC), 2017). The soils in this area are comprised of sandy, gravelly duplexes to alkaline grey shallow sandy duplex soils (CSLC, 2017). This soil type was observed within Area 1 during DER's site inspection (DER, 2017).

Young 1 subsystem in Area 2 is described as incised river valley with gently to moderately inclined slopes, narrow alluvial plan and some breakaways and patches of granite rock (CSLC, 2017).

The CSLC has advised that appreciable land degradation in the form of salinity, waterlogging, flooding and eutrophication are unlikely to occur as a result of the proposed clearing (CSLC, 2017).

Given the above, the proposed clearing is not likely to be at variance to this 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.

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

According to available databases, two conservation areas are located within the local area, namely the Cheadanup Nature Reserve (A class) and East Naernup Nature Reserve located approximately eight kilometres north west and 9.7 kilometres south east of the application area, respectively.

Given the distance to the conservation areas and the agricultural land that lies between the application area and the reserves, it is unlikely that the proposed clearing will impact on the environmental values of the reserves.

Given the above, the proposed clearing is not likely to be at variance to this 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.

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

A minor non-perennial watercourse known as the Dallinup Creek intersects the application area within Area 2 flowing in a south-westerly direction.

The topography of the subject land slopes towards the Dallingup Creek and flows towards the Oldfield River located approximately 1.5 kilometres south west of Area 2. The proposed clearing may result in water erosion, sediment transport and associated turbidity to this non-perennial watercourse. However, given the applicant has advised that they will maintain a vegetative buffer of 20 metres from all tributaries on the subject land, it is not likely the proposed clearing will cause deterioration in the quality of surface or underground water.

Groundwater salinity within the application area has been mapped as brackish to moderately saline at between 7000 - 14000 milligrams per litre Total Dissolved Solids. Given the application area adjoins two large areas of remnant vegetation, it is not likely the proposed clearing will lead to a perceptible rise in the water table and thus an increase in groundwater salinity levels.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

(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 to this Principle

The CSLC has advised that land degradation in the form of flooding is unlikely to occur as a result of the proposed clearing (CSLC, 2017).

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Planning instruments and other relevant matters.

The application area is located within the Kondinin-Groundwater Area proclaimed under the *Rights in Water and Irrigation Act 1914* (RIWI Act). The former Department of Water (DoW) advised that any taking or diversion of groundwater or bore construction in this proclaimed area is subject to licencing from DoW (DoW, 2016). The applicant is required to contact the Department of Water and Environmental Regulation's South Coast Regional office for licencing information as required.

The Shire of Ravensthorpe (the Shire) has been notified of the application and has advised that the Shire has no objection to the proposed clearing (Shire of Ravensthorpe, 2016).

The application was advertised in *The West Australian* newspaper on 14 November 2016 for a 21 day submission period. No submissions have been received in the relation to this application.

There are no Aboriginal Sites of Significance recorded in the application area.

5. Applicant's Submissions

On 15 September 2017, the applicant submitted a flora survey in support of the application. Further clarification on the methodology used in the flora survey was received on 27 September 2017. The flora survey identified 52 clumps of a rare flora species within Area 1 as well as 11 hectares of the Commonwealth listed TEC 'Proteaceae dominated kwongkan shrublands of the southeast coastal floristic province of Western Australia' (Kwongkan Shrublands) within the northern section of Area 1 (Craig, 2017).

On 10 December 2017, the applicant advised that they would remove Area 1 from the application area, in order to reduce the environmental impacts of the clearing.

6. Consideration of variances following applicants submission / further information

As assessed within Section 4, the proposed clearing of 51 hectares of native vegetation is at variance to principles (a), (c), (d) and (e). Given this, as identified within Section 3, the applicant has removed Area 1 from the clearing area. This has reduced the clearing area to 32.2 hectares of native vegetation.

An assessment of the revised application area (being area 2 identified above), consistent with Schedule 5 of the *Environmental Protection Act 1986*, determined the following. The remaining clearing Principles remain not likely to be at variance as assessed under Section 4.

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

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

As assessed within Section 4, Area 2 (eastern portions of the application area within Lot 762) comprises of Eucalyptus sp. woodland over Hakea, Acacia and Dodonaea sp. scrub over mixed native sedges and exotic weeds (DER, 2017). There was evidence that sections of this area have been historically parkland cleared and impacted by grazing. A non-perennial watercourse known as the Dallingup Creek runs adjacent to the application area. The vegetation closest to the watercourse is of a degraded (Keighery, 1994) condition where there was a higher density of weed cover and sections that have been previously cleared. The condition of the vegetation improved as DER Officers traversed the application area in a north easterly direction away from the watercourse.

A targeted flora and vegetation survey was conducted on 13 July 2017 and 29 August 2017 within the application area (Craig, 2017). No rare flora or vegetation consistent with a TEC was identified within Area 2.

As assessed within Section 4, the application area is not likely to contain significant fauna habitat.

Soil and Dieback management measures will ensure that vegetation adjacent to the application area is not impacted by the proposed clearing.

Given the above, the proposed clearing of 32.2 hectares of native vegetation is not likely to be at variance to this Principle.

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

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

A targeted flora and vegetation survey was conducted on 13 July 2017 and 29 August 2017 within the application area (Craig, 2017). No rare flora was identified within Area 2.

Given the presence of adjoining vegetation and condition of the application area, it is not likely to be necessary for the continued existence of rare flora.

Given the above, the proposed clearing of 32.2 hectares of native vegetation is not likely to be at variance to this 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.

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

A targeted flora and vegetation survey was conducted on 13 July 2017 and 29 August 2017 within the application area (Craig, 2017). Vegetation consistent with a TEC was not identified within Area 2.

Given the lack of TEC vegetation, condition of the vegetation and presence of adjoining vegetation, the proposed clearing is not likely to impact on an ecological linkage or the movement of biological material through the landscape and the vegetation under application is not likely to be necessary for the maintenance of a TEC.

Given the above, the proposed clearing of 32.2 hectares of native vegetation is not likely to be at variance to this Principle.

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

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

As assessed within Section 4, while the remaining extents of native vegetation within the local government authority, the IBRA bioregion and the mapped vegetation associations all retain greater than the 30 per cent threshold, the local area (10 kilometre radius surrounding the application area) retains approximately 26 per cent native vegetation (9011.10 hectares).

The vegetation under application adjoins a larger remnant of native vegetation. Given this, the proposed clearing is not likely to impact on the movement of biological material through the landscape. As identified within the flora survey, the vegetation under application is not likely to contain a TEC, PEC, conservation significant flora or significant fauna habitat.

Given the above, the proposed clearing of 32.2 hectares of native vegetation is not likely to be at variance to this Principle.

7. References

- Commissioner of Soil and Land Conservation (CSLC) (2017) Land Degradation Advice for clearing permit application CPS 7315/1 received 17 March 2017; Department of Agriculture and Food Western Australia (DER Ref: A1396863).
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Commonwealth of Australia (2013) Map of 'Proteaceae Dominated Kwongan Shrublands of the Southeast Coastal Floristic Province of Western Australia'. Department of the Environment, Canberra, Australia.
- Craig G.F. (2017) Botanical Surveys of Loc 761 and Loc 762 (DWER Ref: A1523626).
- Department of Biodiversity, Conservation and Attractions (DBCA) (2017) Advice on the conservation of rare flora. Received on 12 October 2017 (DWER Ref: A1541650).
- Department of Environment Regulation (2017) Site Inspection Report for CPS 7320/1. Department of Environment Regulation, Western Australia (DER Ref: A1391971).
- Department of Parks and Wildlife (Parks and Wildlife) (2014) Conservation Codes for Western Australia Flora and Fauna. Department of Parks and Wildlife, Western Australia.
- Department of Parks and Wildlife (Parks and Wildlife) (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed 05/05/2017
- Department of Parks and Wildlife (Parks and Wildlife) (2017a) Advice received in relation to clearing permit application CPS 7320/1, received 20 December 2016. Department of Parks and Wildlife, Western Australia (DER Ref: A1395773).
- Department of Parks and Wildlife (Parks and Wildlife) (2017b) Secondary advice received in relation to clearing permit application CPS 7320/1, received 20 December 2016. Department of Parks and Wildlife, Western Australia (DER Ref: A1410509).
- Department of the Environment and Energy (2017) *Tringa nebularia* - Common Greenshank, Greenshank in Species Profile and Threats Database, Department of the Environment, Canberra.
- Department of Water (DoW) (2016) Advice for Clearing Permit CPS 7320/1. Department of Water (DER Ref: A1352865).
- Government of Western Australia (2016). 2016 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2016. WA Department of Parks and Wildlife, Perth.
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