GOVERNMENT OF WESTERN AUSTRALIA

Clearing Permit Decision Report

Government of Western Australia
Department of Environment Regulation

1. Application details

1.1. Permit application details

Permit application No.: 6836/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Marcel David Sharpe

1.3. Property details

Property: LOT 25 ON PLAN 22916, METTLER
Local Government Area: City of Albany

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
10		Mechanical Removal	Horticulture

1.5. Decision on application

Decision on Permit Application: Refused
Decision Date: 29 June 2016
Reasons for Decision: The clearing application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the *Environmental Protection Act 1986*, and it has been concluded that the proposed clearing is at variance to clearing principle (a), may be at variance to principle (d) and is not likely to be at variance to the remaining clearing principles.

The Delegated Officer has determined that the application area contains a significant population of a Priority 1 flora species, a priority ecological community and may contain a threatened ecological community.

On 24 May 2016, the Delegated Officer advised the applicant that a flora survey targeted at conservation significant flora species and ecological communities undertaken by a suitably qualified botanist would determine the impacts from the proposed clearing to priority flora and ecological communities. The applicant was invited to provide additional information including the ability to avoid or minimise impacts. No response was received at the time of this decision.

State policies and other relevant policies have been taken into account in the decision to refuse to grant this clearing permit.

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
The vegetation under application has been mapped as Beard vegetation association 980 which is described as shrublands, jarrah mallee-heath (Shepherd et al., 2001). A Department of Environment Regulation (DER) site inspection described the vegetation under application as regenerating mallee Corymbia sp., *Banksia grandis* and Xanthorrhoea on the ridge of a coastal hill (DER, 2015).	The proposed clearing of 10 hectares of native vegetation is for the purpose of agriculture.	Very Good; Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).	The condition of the vegetation under application was determined via a DER site inspection undertaken 8 December 2015 (DER, 2015).

3. Assessment of application against Clearing Principles

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

Comments

Proposed clearing is at variance to this Principle

The application is to clear 10 hectares of native vegetation for the purpose of agriculture. A fire has recently moved through the application area and the vegetation is regenerating. Vegetation communities have the ability to regenerate following natural disturbance events, such as fire.

Ten fauna species listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* (WC Act) have been recorded within the local area (10 kilometre radius) (Parks and Wildlife, 2007-). Given the lack of hollow bearing trees and extent of surrounding and adjoining vegetation (60 per cent in local area); the vegetation under application is not likely to form significant habitat for these species.

No rare flora species have been recorded within the local area (10 kilometre radius). Given this, the vegetation under application is not likely to include rare flora.

Twelve flora species listed as Priority by the Department of Parks and Wildlife (Parks and Wildlife) have been recorded within the local area (10 kilometre radius). Nine of these species are listed as Priority 3 or 4 by Parks and Wildlife. Priority 3 (P3) is defined as species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them (Parks and Wildlife, 2015).

Priority 4 (P4) is defined as species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands (Parks and Wildlife, 2015).

Given the relatively small size of the application area in comparison to the highly vegetated local area, clearing the vegetation under application is not likely to significantly impact on these P3 and P4 species.

Two of the flora species are listed as Priority 1 (P1) by Parks and Wildlife. P1 is defined as species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either very small or on lands not managed for conservation. Such species are in urgent need of further survey (Parks and Wildlife, 2015).

The first of these P1 flora species is known from three records (Western Australian Herbarium, 1998-). Given the age of these records (1901 and 1975) and as the recorded habitat (seasonally wet areas) does not match the application area, it is not likely to be present within the application area.

A record for the second P1 flora species is mapped 150 metres from the application area within a valley, however the location description states "summit of unnamed hill north east of Warriup hill". Parks and Wildlife (2016) has confirmed that the location of the record is inaccurate and was definitely on a hill top. Given this, the recorded population falls within the application area.

Parks and Wildlife (2016) advised that this population is one of only three known for the species and the most eastern extent of occurrence. When last surveyed in 2001 approximately 1000 plants were recorded. This species is a short range endemic confined to Green Range, therefore loss of the population would result in the loss of a third of the known populations and a reduction of 50 per cent of the species known range. This would be highly significant to the conservation of the species (Parks and Wildlife, 2016).

One of the flora species is listed as Priority 2 (P2) by Parks and Wildlife. P2 is defined as species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes (Parks and Wildlife, 2015). The habitat requirements for this species have been defined as gravelly soils (Western Australian Herbarium, 1998-). As gravelly soils are present within the application area (DER, 2015) the species may be present. Given the conservation status of this species, an occurrence within the application area may be significant.

The vegetation within and surrounding the application area has been mapped within the Commonwealth listed threatened ecological community (TEC), Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal Floristic Province of Western Australia (Proteaceae Dominated Kwongkan Shrublands). This TEC is listed as endangered under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). Proteaceae Dominated Kwongkan Shrublands is a broad vegetation association that also encompasses well defined, discrete vegetation associations (DotE, 2014).

The priority ecological community (PEC) Green Range Granite Hill Heath and Woodland Community has also been mapped over a large portion of the application area (approximately 6.7 hectares). Parks and Wildlife (2016b) has advised that "based on information following a flora survey of the location in 2001, a report and photographs following a site inspection of the application area, underlying substrate and soil types, together

with local knowledge, it appears the remnant vegetation within the application area aligns with Priority 1 ecological community, Green Range Granite Hill Heath and Woodland Community".

Green Range Granite Hill Heath and Woodland Community is known from three occurrences on the Parks and Wildlife database, all on freehold land with no occurrence in conservation reserve. The community is restricted in distribution, with a range of 6.5 kilometres. A total of 165 hectares of this vegetation association has been recorded, approximately 6.7 hectares of which falls within the application area. Given this 4.6 per cent of the community lies within the application area and the proposed clearing has the potential to impact the conservation status of this community (Parks and Wildlife, 2016).
Given the above, the proposed clearing is at variance to this clearing Principle.

Methodology

References:
DER (2015)
DotE (2014)
Keighery (1994)
Parks and Wildlife (2007-)
Parks and Wildlife (2015)
Parks and Wildlife (2016)
Western Australian Herbarium (1998-)

GIS Datasets:
SAC Bio Datasets - accessed April 2016

(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.

Comments

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

The application area is located on the peak of a coastal hill. A DER (2015) site inspection described the vegetation under application as regenerating, mallee Corymbia sp., *Banksia grandis* and Xanthorrhoea sp. with granite outcrops.

The local area (10 kilometre radius) surrounding the application area retains approximately 60 per cent native vegetation. The vegetation under application is surrounded by and adjoins an extensive remnant of native vegetation.

Ten fauna species listed as rare or likely to become extinct under the WC Act have been recorded within the local area (10 kilometre radius)(Parks and Wildlife, 2007-); Australasian bittern (*Botaurus poiciloptilus*), forest red-tailed black-cockatoo (*Calyptorhynchus banksii* subsp. *naso*), Baudin's cockatoo (*Calyptorhynchus baudinii*), Carnaby's cockatoo (*Calyptorhynchus latirostris*), malleefowl (*Leipoa ocellata*), dibbler (*Parantechinus apicalis*), western ground parrot (*Pezoporus flaviventris*), red-tailed phascogale (*Phascogale calura*), Hutton's shearwater (*Puffinus huttoni*) and Quokka (*Setonix brachyurus*).

Given the amount of vegetation surrounding the application area (approximately 60 per cent vegetation within the local area) the vegetation under application is not likely to contain significant foraging habitat for black cockatoo species. No trees of an age and size as to be considered suitable black cockatoo nesting sites were observed within the application area (DER, 2015).

Given the lack of hollow bearing trees, position of the application area on top of a hill and extent of surrounding and adjoining vegetation, the vegetation under application is not likely to form significant habitat for rare fauna recorded from the local area.

Given the extent of vegetation surrounding the area under application, it is not likely to form significant habitat for the movement of fauna through the landscape.

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

Methodology

References:
DER (2015)
Parks and Wildlife (2007-)

GIS Datasets:
Remnant vegetation

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

Comments

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

No rare flora species have been recorded within the local area (10 kilometre radius). Given this, the application area is not likely to include or be necessary for the continued existence of rare flora and is not likely to be at variance to this Principle.

Methodology GIS Datasets:
SAC Bio Datasets - accessed April 2016

(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.

Comments

Proposed clearing may be at variance to this Principle

The vegetation within and surrounding the application area has been mapped within the Commonwealth listed TEC, Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal Floristic Province of Western Australia (Proteaceae Dominated Kwongkan Shrublands). This TEC is listed as endangered under the EPBC Act. Proteaceae Dominated Kwongkan Shrublands is a broad vegetation association that also encompasses well defined, discrete vegetation associations (DotE, 2014).

The PEC Green Range Granite Hill Heath and Woodland Community has also been mapped over a large portion of the application area (approximately 6.7 hectares). Parks and Wildlife (2016) advised that "based on information following a flora survey of the location in 2001, a report and photographs following a site inspection of the application area, underlying substrate and soil types, together with local knowledge, it appears the remnant vegetation within the application area aligns with Priority 1 ecological community, Green Range Granite Hill heath and woodland community". The conservation advice for the Proteaceae Dominated Kwongkan Shrublands lists this PEC as potentially occurring within the TEC vegetation association.

The areas considered critical to the survival of the Proteaceae Dominated Kwongkan Shrubland covers all patches that meet the key diagnostic characteristics and condition thresholds for the ecological community, plus the buffer zones, particularly where this comprises surrounding native vegetation (DotE, 2014).

The vegetation under application is likely to be consistent with this TEC, however a flora survey of the application area would be required in order to confirm its presence within the area under application.

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

Methodology Reference:
DotE (2014)
Parks and Wildlife (2016)

GIS Datasets:
SAC Bio Datasets - accessed April (2016)

(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.

Comments

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

The area under application is located within the Esperance Plains Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion retains approximately 52 per cent of its pre-European vegetation extent (Government of Western Australia, 2014).

The application area is located within the City of Albany, within which there is approximately 36 per cent pre-European vegetation extent remaining (Government of Western Australia, 2014).

The vegetation under application is mapped as Beard vegetation association 980 of which there is approximately 41 per cent of its pre-European vegetation extent remaining within the Esperance Plains bioregion (Government of Western Australia, 2014).

The local area (10 kilometre radius) retains approximately 60 per cent native vegetation.

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).

Given the above and the extent of native vegetation within the local area, the vegetation under application is not likely to fall within an area that has been extensively cleared.

The PEC Green Range Granite Hill Heath and Woodland Community and the TEC Proteaceae Dominated Kwongkan Shrublands are likely to be present within the application area. The application area also supports a significant population of a P1 flora species. Given this, the vegetation under application is considered a significant remnant.

Given the above, although the application area is a significant remnant, it does not fall within a highly cleared landscape and is not likely to be at variance to this Principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed Lands (%)
IBRA Bioregion*				
Esperance Plains	2,899,941	1,495,049	52	55
Shire*				
City of Albany	431,369	156,398	36	46
Beard Vegetation Association in Bioregion*				
980	160,409	65,981	41	26

Methodology

References:
Commonwealth of Australia (2001)
*Government of Western Australia (2014)

GIS Datasets:
SAC Bio datasets - accessed April 2016

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

Comments

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

No watercourses or wetlands have been mapped within the application area. This is consistent with the position of the application area on top of a hill. A site inspection of the application area did not record any wetland vegetation (DER, 2015).

The closest water feature to the application area is a minor non-perennial watercourse located approximately 20 metres from the application area.

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

Methodology

References:
DER (2015)

GIS Datasets:
Hydrography linear

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

Comments

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

Soils within the application area have been mapped within the Mount Manypeaks 1 subsystem (map unit) which is described as; undulating low hills, crests and rock outcrops, deeply dissected valleys and coastal drainage channels. Weathered granite with colluvium and minor alluvium. Ironstone gravels, bare rock and sandy duplex soils (Schoknecht et al., 2004).
The area under application has been mapped within the following land degradation risk categories (Schoknecht et al., 2004):

- 30 - 50 per cent of map unit has a moderate to high salinity risk or is presently saline;
- less than three per cent of the map unit has a moderate to high flood risk;
- 50 to 70 per cent of map unit has a high to extreme wind erosion risk;
- three to 10 per cent of map unit has a high to extreme phosphorus export risk;
- less than three per cent of map unit has a moderate to very high waterlogging risk; and
- less than three per cent of map unit has a high to extreme water erosion risk.

Given the mapped land degradation risks, the lack of watercourses within the application area and its position within the landscape, clearing the vegetation under application is not likely to lead to land degradation through salinity, water erosion, flooding, waterlogging or eutrophication.

The Commissioner of Soil and Land Conservation (2016) has advised that wind erosion is unlikely on the proposed area to be cleared due to the soil types present and proposed land use as a lavender farm. It was also advised that the remaining vegetation will provide a wind barrier on all sides.

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

Methodology References:
Commissioner of Soil and Land Conservation (2016)
Schoknecht et al. (2004)

GIS Datasets:
Land degredation risk
Hydrography linear
Soil subsystem

(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.

Comments **Proposed clearing is not likely to be at variance to this Principle**
The closest mapped conservation reserve, Basil Road Nature reserve, occurs approximately seven kilometres from the application area. As the land in-between the application area and this reserve is highly cleared, clearing the vegetation under application is not likely to impact its environmental values.

Tinkelelup Nature Reserve, occurs approximately nine kilometres west of the application area. The land in-between the application area and this reserve forms a large, unbroken remnant of native vegetation. Given the distance to the nearest reserve and the extent of native vegetation surrounding the application area, the proposed is not likely to impact on the environmental values of Tinkelelup Nature Reserve or any other reserve.

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

Methodology GIS Datasets:
Parks and Wildlife Tenure

(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.

Comments **Proposed clearing is not likely to be at variance to this Principle**
The application area is situated on top of a hill. No watercourses or wetlands are present within the application area (DER, 2015).

The area under application has been mapped within the following land degradation risk categories (Schoknecht et al., 2004):
- 30 - 50 per cent of map unit has a moderate to high salinity risk or is presently saline;
- three to 10 per cent of map unit has a high to extreme phosphorus export risk; and
- less than three per cent of map unit has a high to extreme water erosion risk.

Given the mapped risk categories, lack of surface water and position of the application within the landscape, clearing the vegetation under application is not likely to deteriorate the quality of surface or groundwater through salinity, eutrophication or water erosion.

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

Methodology References:
DER (2015)
Schoknecht et al. (2004)

GIS Datasets:
Land degredation risk
Hydrography linear

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

Comments **Proposed clearing is not likely to be at variance to this Principle**
Given the position of the application area within the landscape, the proposed clearing is not likely to be at variance to this clearing Principle.

Methodology GIS Datasets:
Hydrography linear

Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments The applicant's original purpose of clearing included the removal of the invasive introduced species *Acacia*

longifolia in order to establish a lavender farm. A site inspection of the application area did not identify this species on site (DER, 2015). At the time of inspection the application area was regenerating from a recent fire.

The City of Albany (2016) has advised that as the application is to clear an invasive species, it has no objections to the proposed clearing.

On 24 May 2016 the Department of Environment Regulation wrote to the applicant, outlining the environmental issues identified in the preliminary assessment, and inviting a response within 30 days. To date, no formal response has been received from the applicant responding to the environmental issues identified in the preliminary assessment.

No Aboriginal Sites of Significance have been mapped within the application area.

No submissions have been received in relation to this application.

Methodology

References:
City of Albany (2016)
DER (2015)

GIS Datasets:
Aboriginal Sites of Significance

4. References

City of Albany (2016) Advice received in relation to clearing permit application CPS 6836/1. Received 23 February 2016. DER ref: A1054500.

Commissioner of Soil and Land Conservation (2016) Advice received in relation to clearing permit application CPS 6836/1. Received 8 April 2016. DER ref: A1078442.

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.

DER (2015) Site Inspection Report for clearing permit application CPS 6836/1. Inspection undertaken 8 December 2015. DER ref: A1083556.

DotE (2014) Environment Protection and Biodiversity Conservation Act 1999 (s266B) Approved Conservation Advice for Proteaceae Dominated Kwongkan Shrublands of the southeast coastal floristic province of Western Australia.

Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. 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.

Parks and Wildlife (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: http://naturemap.dpaw.wa.gov.au/. Accessed January 2016.

Parks and Wildlife (2015) Conservation Codes for Western Australian Flora and Fauna. Updated 11 November 2015.

Parks and Wildlife (2016) Advice received in relation to clearing permit application CPS 6836/1. Received 15 March 2016. DER ref: A1083578.

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.

Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. http://florabase.dpaw.wa.gov.au/ (Accessed April 2016).