



1. Application details

1.1. Permit application details

Permit application No.: 6908/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Mr Frank Pace

1.3. Property details

Property: Lot 18717 on Plan 87429
Local Government Authority: Shire of Quairading
DER Region: Greater Swan
DPaW District: Wheatbelt
Localities: Balkuling

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
65		Mechanical Removal	Grazing and pasture

1.5. Decision on application

Decision on Permit Application: Refuse

Decision Date: 30 June 2016

Reasons for Decision: The applicant applied to clear 65 hectares of native vegetation. The application area was reduced to 45 hectares of parkland clearing in response to environmental issues identified in the preliminary assessment by the Delegated Officer by letter dated 24 May 2016.

The clearing application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*, and it has concluded that the proposed clearing is seriously at variance to Principle (e), is at variance to Principles (a), (b) and (f), may be at variance to Principles (c), (d), (g), (h) and (i), and is not likely to be at variance to Principle (j).

The Delegated Officer noted that the reduction of the application area to 45 hectares may reduce the environmental impacts however 45 hectares is considered a significant size in a highly cleared and fragmented landscape. Parkland clearing will remove the mid and understory native vegetation which may contain rare and priority flora, provide suitable fauna habitat and modify the ecological communities represented on site.

The Delegated Officer determined that the application area is of a significant size in a highly cleared and fragmented landscape, which provides habitat for a variety of threatened and priority, may comprise a threatened ecological community and has a medium to high salinity risk associated with land clearing.

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
Mapped Beard Vegetation Association 947 is described as medium woodland; powderbark & mallet (Shepherd et al, 2001).	The clearing of 65 hectares of native vegetation within Lot 18717 on Deposited Plan 87429, Balkuling, is for the purpose of pasture.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The condition and description of the vegetation was determined via a site inspection undertaken by Department of Environment Regulation Officers in November 2014.
Mapped Beard Vegetation Association 1049 is described as medium woodland; wandoo, York gum, salmon gum, morrel & gimlet (Shepherd et al, 2001).		To Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994).	The vegetation under application is largely comprised of Wandoo open woodland (DER, 2014).

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 applicant proposes to clear 65 hectares of native vegetation within Lot 18717 on Deposited Plan 87429, Balkuling, for the purpose of generating pasture. The area under application is the same area applied under CPS 6308/1. The re-assessment of the native vegetation under this clearing principle is the same as previously assessed in 2015.

The vegetation under application is comprised of Wandoo open woodland with a range of smaller scale habitats such as breakaways and shrubland (Parks and Wildlife, 2014a) in good to very good (Keighery, 1994) condition (DER, 2014). The area is fenced, however, some grazing may have occurred in the past.

The application area occurs within the Avon Wheatbelt Bioregion. The Avon Wheatbelt contains eucalypt woodlands that have a high proportion of threatened flora (Department of Conservation and Land Management, 2001). Where 30 per cent, or less, of the pre-European extent of native vegetation remains, species loss accelerates exponentially at an ecosystem level (EPA, 2000). The majority of ecosystems in the Avon Wheatbelt have been cleared extensively to below the 10 per cent threshold (Department of Conservation and Land Management, 2002). About 18 per cent of native vegetation remains in the Avon Wheatbelt bioregion.

Several priority flora species have been recorded in the local area (20 kilometre radius). A site inspection undertaken in November 2014 by the Department of Parks and Wildlife (Parks and Wildlife, 2014a) determined that based on the soil and vegetation types on site, the application area includes suitable habitat for seven species of rare flora, and 12 species of priority flora (two Priority 1). Parks and Wildlife (2016) advised that one Priority 1 species has had its conservation status upgraded to rare flora and that not only is the previous advice still current, but the potential conservation significance is increased with the upgraded conservation status of the species potentially on this site.

A Threatened ecological community (TEC) has been mapped over the area proposed for clearing. The 'Eucalypt Woodlands of the Western Australian Wheatbelt' was listed by the federal government as Critically Endangered in December 2015. There is potential for the presence of '*Banksia prionotes* and *Xylomelum angustifolium* low woodlands on transported yellow sand' Priority 1 Ecological Community on site (Parks and Wildlife, 2014a).

Several fauna of conservation significance have been mapped within the local area, and based on the habitat on site, the application area provides suitable habitat for the Red-tailed Phascogale (*Phascogale calura*), Shield-backed Trapdoor Spider (*Idiosoma nigrum*), and Carnaby's cockatoo (*Calyptorhynchus latirostris*) (Parks and Wildlife, 2014a). These species are all classified as rare or likely to become extinct under the *Wildlife Conservation Act 1950*. Given that the landscape surrounding the application has been extensively cleared, large-sized remnants, such as the 65 hectare area proposed for clearing, represent a significant habitat resource for flora and fauna within a highly fragmented local landscape.

The local area surrounding the application has been extensively cleared and retains approximately five to ten per cent native vegetation. The area under application is partly mapped as Beard Vegetation Association (BVA) 1049 which has been identified as a high priority ecosystem for protection due to its valley floor landform location (Parks and Wildlife, 2014a). BVA 1049 retains six per cent of its pre-European extent as it has been extensively cleared for its loamy soils which are conducive to high wheat production (Parks and Wildlife, 2014a).

The application area is in good to very good (Keighery, 1994) condition (DER, 2014), occurs within an extensively cleared landscape, contains suitable habitat for three fauna species classified as rare or likely to become extinct, may include several species of rare and priority flora, and is likely to contain a TEC.

On 24 May 2016, the Delegated Officer wrote to the applicant outlining the environmental impacts identified during the preliminary assessment of the proposed clearing and advising of intent to refuse the application within 30 days. On 6 June 2016, the applicant advised that the application area would be reduced to 45 hectares of parkland clearing (by not clearing all the trees). No further information was provided in relation to the identified environmental impacts.

A reduction in size of the application area may reduce the environmental impacts from clearing, however parkland clearing will clear the mid and understory vegetation which may contain rare and priority flora, provide suitable fauna habitat and modify the ecological communities represented on site. The reduced application area of 45 hectares is considered to remain of a significant size in a highly cleared and fragmented landscape, resulting in environmental impacts.

Taking into account the applicant's advice, and noting the application area of 45 hectares is in an extensively cleared landscape, contains suitable habitat for three fauna species classified as rare or likely to become

extinct, may include several species of rare and priority flora, and may comprise a TEC, it is considered that the application area comprises a high level of biodiversity.

Therefore the proposed clearing is at variance to this Principle.

Methodology

References:

- EPA (2000)
- Department of Conservation and Land Management (2002)
- DER (2014)
- Parks and Wildlife (2014a)

GIS Databases:

- SAC Bio Datasets (Accessed May 2016)
- NLWRA, Current Extent of Native Vegetation

(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 at variance to this Principle

The area under application is the same area applied under CPS 6308/1. The re-assessment of the native vegetation under this clearing principle is the same as previously assessed under CPS 6308/1 in 2015.

The following threatened and priority fauna species have been identified within a 20 kilometre radius of the application area, either in the same vegetation type (structure), vegetation association and/or broad Soil Mapping Unit as that contained in the proposed clearing area: (Western Wheatbelt) White Browed Babbler (*Pomatostomus superciliosus* subsp. *ashbyi*) (Priority 4); Tree-stem Trapdoor Spider (*Aganippe castellum*) (Priority 4), Rainbow Bee-eater (*Merops ornatus*) (International Agreement Species), Peregrine Falcon (*Falco peregrinus*) (Specially Protected Fauna), Bilby (*Macrotis lagotis*) (Threatened Fauna), Red-tailed Phascogale (*Phascogale calura*) (Threatened Fauna), Carnaby's cockatoo (*Calyptorhynchus latirostris*) (Threatened Fauna) and Shield-backed Trapdoor Spider (*Idiosoma nigrum*) (Threatened Fauna) (DPAw, 2007-).

The Tree-stem Trapdoor Spider prefers habitat in flood-prone depressions and flats that support myrtaceous shrub communities. The burrows of this species are specially designed with an aboveground entrance to withstand occasional sheet flooding (DEC, 2008). The application area is not within a flood-prone depression or flat and is therefore unlikely to comprise significant habitat for this species.

The Rainbow Bee-eater and Peregrine Falcon are highly mobile avian species that occupy large home ranges, therefore the proposed clearing is not likely to significantly impact these species.

The Red-tailed Phascogale's preferred habitats are Allocasuarina woodlands with hollow-containing eucalypts (such as *Eucalyptus wandoo*) and *Gastrolobium* sp. A large proportion of nest sites are in highly flammable locations, such as stands of dead *Allocasuarina* spp. and the skirts and stumps of live and dead grass trees (*Xanthorrhoea* spp.). Trees need to be of a sufficient age to provide hollows for nesting in limbs or logs (DEC, 2012). There were several small hollows within trees located on site (DER, 2014), therefore the application area may contain significant habitat for this species, particularly given that the surrounding landscape has been extensively cleared.

The Shield-backed Trapdoor Spider (*Idiosoma nigrum*) typically inhabits clay soils of eucalypt woodlands and acacia vegetation, and relies heavily on leaf litter and twigs to build its burrow (DotE, 2013). The application area is largely comprised of open woodland of *Eucalyptus wandoo*, with mapped soil type Ewerts 2 Phase Map unit 256 MbES2 consisting of sand and loamy sands over yellow clay, gravelly ridges with heavier soils occurring below the breakaway (Commissioner of Soil and Land Conservation, 2014). The habitat on site is consistent with the requirements of the Shield-backed Trapdoor Spider, and given that a recent nearby record (2010) has been taken, the application area may comprise significant habitat for this species.

Carnaby's cockatoo is known to forage on the seeds, nuts and flowers of proteaceous species (Banksia, Hakea, Grevillea), as well as Allocasuarina and Eucalyptus species (Valentine and Stock, 2008). The application area provides suitable foraging habitat for Carnaby's cockatoo given the prevalence of Wandoo woodland.

The Commonwealth referral guidelines (Commonwealth of Australia, 2012) for Carnaby's cockatoo identify that 'Breeding habitat is defined in these referral guidelines as trees of species known to support breeding within the range of the species which either have a suitable nest hollow, or which are of a suitable diameter at breast height (DBH) to develop a nest hollow. For Salmon Gum and Wandoo, suitable DBH is 300 millimetres'. These guidelines indicate that Wandoo and Salmon Gum are the preferred tree species for breeding. The application area has not been surveyed for fauna by a qualified zoologist, however no active nest hollows were observed during an onsite assessment (Parks and Wildlife, 2014a, DER, 2014). The several trees with small hollows on site have the potential to provide breeding habitat for this species.

The application area falls within the extensively cleared Shire of Quairading (nine per cent pre-European vegetation remaining), and includes a mapped vegetation association with six per cent of its pre-European

vegetation remaining, within a landscape that retains approximately five to ten per cent native vegetation. Therefore the 65 hectares of suitable foraging habitat and potential breeding habitat for Carnaby's cockatoo (predominantly open Wandoo woodland) is considered significant.

Noting the size and condition of the application area it is likely to provide value as a stepping stone for fauna within a highly fragmented local landscape. The proposed clearing may decrease the movement of fauna across the landscape and potentially limit movement between conservation reserves.

As previously noted the applicant reduced the application area to 45 hectares of parkland clearing (by not clearing all the trees). The reduced application area may reduce the environmental impacts from clearing, however the application area is considered to remain of a significant size in a highly cleared and fragmented landscape. Parkland clearing will clear the mid and understory vegetation which provides suitable fauna habitat and will modify the ecological communities represented on site.

Taking into account the applicant's advice, and noting the application area is in an extensively cleared landscape and contains suitable habitat for three fauna species classified as rare or likely to become extinct, it is considered that the application area comprises significant fauna habitat.

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

Methodology

References:

- DPaW (2007-)
- DEC (2012)
- DEC (2008)
- DER (2014)
- DotE (2013)
- Commissioner of Soil and Land Conservation (2014)
- Parks and Wildlife (2014a)
- Commonwealth of Australia (2012)
- Valentine and Stock (2008)

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

Comments

Proposed clearing may be at variance to this Principle

The area under application is the same area applied under CPS 6308/1. The re-assessment of the native vegetation under this clearing principle is the same as previously assessed under CPS 6308/1 in 2015.

A site inspection undertaken in November 2014 by the Department of Parks and Wildlife (Parks and Wildlife, 2014a) determined that based on the soil and vegetation types on site, the application area includes suitable habitat for seven species of rare flora. Parks and Wildlife (2016) advised that since November 2014, and the assessment carried out under application CPS 6308/1, one of the Priority 1 species has had its conservation status upgraded to rare flora, making a total of eight rare flora species that may be present within the application area.

The closest mapped rare flora species to the application area is a lignotuberous shrub, mapped approximately 50 metres from the southern boundary of the area proposed for clearing. This species grows to three metres in height, flowers in October and has a preference for sand, loam or clay (Western Australian Herbarium, 1998-). This species has a restricted distribution within a highly fragmented landscape, with a low number of recorded individuals (Parks and Wildlife, 2014b). The application area contains sand and loamy sands over yellow clay, and given the close proximity of this abovementioned mapped occurrence, the vegetation under application may include this species.

The Department of Parks and Wildlife Wheatbelt Region confirmed the occurrence of one rare flora species from the freehold remnant adjacent to the application area (Parks and Wildlife, 2014a). This species is a dioecious shrub, growing to 0.5 to 1.5 metres high on sand over laterite on low ridges and quartz outcrops (Western Australian Herbarium, 1998-) and has the potential to occur within the application area (Parks and Wildlife, 2014a).

Parks and Wildlife (2016) advised one species of rare flora listed as endangered at the time the assessment for CPS 6308/1 was undertaken, is now critically endangered. The previous advice remains current, however the potential conservation significance has increased with the upgraded conservation status of the species potentially on this site.

As previously noted the applicant reduced the application area to 45 hectares of parkland clearing. The reduced application area may reduce the environmental impacts from clearing, however parkland clearing will clear the mid and understory vegetation which may contain rare flora. The reduced application area of 45 hectares is still considered to remain of a significant size resulting in environmental impacts.

Taking into account the applicant's advice, and noting the application area of 45 hectares may include several species of rare flora, it is considered that the application area may comprise suitable habitat for rare flora.

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

Methodology References:
-Western Australian Herbarium (1998-)
-Parks and Wildlife (2014a)
-Parks and Wildlife (2014b)
-Parks and Wildlife (2016)

GIS Databases:
-SAC Bio Datasets (Accessed May 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 area under application is the same area applied under CPS 6308/1. The re-assessment of the native vegetation under this clearing principle is the same as previously assessed under CPS 6308/1 in 2015.

Since the assessment of the previous application, the threatened ecological community (TEC) 'Eucalyptus Woodlands of the Western Australian Wheatbelt' (WA Wheatbelt Woodlands) was proclaimed under the *Environment Protection and Biodiversity Conservation Act 1999* by the federal government in December 2015 and is listed as Critically Endangered. The TEC mapping indicates that it covers the whole of the application area.

The WA Wheatbelt Woodlands extend across the Avon Wheatbelt, the Western Mallee sub-region and part of the Jarrah Forest bioregions.

The WA Wheatbelt Woodlands consist of woodlands where there is a relatively open canopy dominated by eucalypt species such as wandoo, salmon gum and mallet. The understorey is highly variable in structure and composition, for example, being mostly bare such as under some mallet woodlands, or having a scrub understorey such as in wandoo woodlands.

Pre-European settlement, the woodlands occurred extensively throughout the Wheatbelt. Since then, it has been cleared significantly, with about 85% of native vegetation cleared in the Avon Wheatbelt bioregion. The area under application to clear is within this extensively cleared bioregion.

As previously noted the applicant reduced the application area to 45 hectares of parkland clearing (by not clearing all the trees). The reduced application area may reduce the environmental impacts from clearing, however parkland clearing will clear the mid and understorey vegetation which will impact ecological communities represented on site.

Taking into account the applicant's advice, and noting the application area is in an extensively cleared landscape and is indicatively mapped as a TEC, it is considered that the application area may comprise a TEC.

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

Methodology GIS Databases:
-SAC Bio Datasets (Accessed May 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 seriously at variance to this Principle**
The area under application is the same area applied under CPS 6308/1. The re-assessment of the native vegetation under this clearing principle is largely the same as previously assessed under CPS 6308/1 in 2015.

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).

The local area surrounding the application area has been extensively cleared and is highly fragmented. The Avon Wheatbelt Bioregion and Shire of Quairading retain considerably less than the 30 per cent threshold with approximately 19 and 9 per cent of their pre-European vegetation remaining respectively.

The 65 hectare area proposed for clearing contains 13.77 hectares (21.2 per cent) of Beard Vegetation Association (BVA) 1049 and 51.23 hectares (78.8 per cent) of BVA 947. BVA 1049 is endemic to the Avon Wheatbelt Bioregion and therefore occurs nowhere else in Western Australia. BVA 947 is restricted to the Avon Wheatbelt 2 (ancient drainage) and Northern Jarrah Forest (JF1) (Parks and Wildlife, 2014a). BVA 947 and 1049 retain approximately 34 and 6 per cent of their pre-European vegetation extents respectively. It is poorly

reserved in Parks and Wildlife managed lands, with only 16% (BVA 947) and 0.4% (BVA 1049) of the pre-European vegetation protected.

The application area provides significant habitat for Carnaby's Cockatoo, suitable habitat for the Shield-backed Trapdoor Spider and Red-tailed Phascogale and may provide significant habitat for, and include, a number of rare and priority flora species. Therefore the vegetation under application is considered a significant remnant.

Given the environmental significance of the application area and that the local area, Avon Wheatbelt Bioregion, Shire of Quairading and BVA 1049 all retain considerably less than the 30 per cent threshold for ecological communities, the proposed clearing is seriously at variance to this Principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed Lands (%)
IBRA Bioregion¹				
Avon Wheatbelt	9,517,109	1,765,881	18	2
Shire¹				
Shire of Quairading	201,651	18,905	9	1
Beard Vegetation Association² in Bioregion¹				
947	34,016	11,768	34	7
1049	833,384	56,842	6	0.4

As previously noted the applicant reduced the application area to 45 hectares of parkland clearing (by not clearing all the trees). The reduced application area may reduce the extent of environmental impacts from clearing, however the application area remains a significant size in a highly cleared and fragmented landscape. Parkland clearing will clear the mid and understory vegetation which may contain rare and priority flora, provide suitable fauna habitat and modify the ecological communities represented on site.

Taking into account the applicant's advice, and noting the application area is in an extensively cleared landscape, contains suitable habitat for three fauna species classified as rare or likely to become extinct, may include several species of rare and priority flora, and may comprise a TEC, the reduced application area is a significant remnant in a highly cleared landscape.

Given the above, the proposed parkland clearing is considered to be seriously at variance to this Principle.

Methodology References:
Commonwealth of Australia (2001)
² Beard (1981)
¹ Government of Western Australia (2014)
GIS Databases:
-NLWRA, Current Extent of Native Vegetation

(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 at variance to this Principle**
The area under application is the same area applied under CPS 6308/1. The re-assessment of the native vegetation under this clearing principle is the same as previously assessed under CPS 6308/1 in 2015

The closest wetland or watercourse to the application area is a minor non perennial watercourse that runs from the northern portion through to the centre of the application area. No major watercourses or wetlands occur within close proximity to the application area.

Given the presence of a minor non perennial watercourse on site, the proposed clearing is at variance to this Principle.

Methodology GIS Databases:
-Hydrography, linear
-Hydrography, hierachy
-Geomorphic Wetlands, Wheatbelt

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

Comments **Proposed clearing may be at variance to this Principle**
The area under application is the same area applied under CPS 6308/1. The re-assessment of the native vegetation under this clearing principle is the same as previously assessed under CPS 6308/1 in 2015.

The application area has been mapped as Ewarts 2 Phase Map unit 256 MbES2, with a lesser area of Quailing 2 Phase Map unit 256MbQU2. The Ewarts soils are a range of sand and loamy sands over yellow clay, gravelly ridges with heavier soils occurring below the breakaway. The Quailing 2 soils are yellow and pale sandplain and gravelly soils above the breakaway. The application area occupies upper and mid slope positions in the landscape (Commissioner of Soil and Land Conservation, 2014).

In 2014 a Land Degradation Assessment Report was undertaken by the Department of Agriculture and Food Western Australia (DAFWA) for the previous application over the same areas as this current application. The assessment identified that the proposed clearing is not expected to alter the risk of waterlogging on site, and the risk of waterlogging causing appreciable land degradation is low (Commissioner of Soil and Land Conservation, 2014).

The assessment identified that the risk of water erosion causing land degradation is low given the presence of permeable soils on site and that the area is intended for pasture. Eutrophication and flooding are also not likely to result in appreciable land degradation as a result of this clearing being approved (Commissioner of Soil and Land Conservation, 2014).

The Commissioner of Soil and Land Conservation (2014) advised that, if cleared, ground water recharge under the sandy soils of the application area is likely to be high and therefore an incremental increase in salinity of waterways down gradient would be expected. Land monitoring indicates that the application area has a medium to high salinity risk associated with land clearing.

The Commissioner of Soil and Land Conservation (2016) advised there is no reason to change his previous advice in relation to the proposed clearing being may be at variance this Principle.

The sandy soils identified on site are also prone to wind erosion which may result in appreciable land degradation if left exposed for long periods.

The applicant's proposal to reduce the application area to 45 hectares of parkland clearing may reduce the risk of land degradation, however there continues to be a risk that appreciable land degradation will result from clearing given the scale of the proposed clearing.

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

Methodology References:
-Commissioner of Soil and Land Conservation (2014)
-Commissioner of Soil and Land Conservation (2016)

(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 may be at variance to this Principle**
The area under application is the same area applied under CPS 6308/1. The re-assessment of the native vegetation under this clearing principle is the same as previously assessed under CPS 6308/1 in 2015.

The closest conservation area to the proposed clearing is an un-named Nature Reserve located approximately 3.2 kilometres east of the application area. A separate un-named Nature Reserve is located approximately 4.3 kilometres south, and Dangin Nature Reserve and Dulbelling Nature Reserve are located 11 and 12 kilometres south east respectively.

There are small areas of remnant vegetation scattered between the application area and the abovementioned reserves. The local area (20 kilometre radius) surrounding the application retains five to ten per cent native vegetation and therefore large sized remnants, such as the 45 hectare area proposed for clearing, are likely to provide value as a stepping stone for fauna within a highly fragmented local landscape. The proposed clearing may therefore influence movement of fauna across the landscape and potentially limit movement between conservation reserves.

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

Methodology GIS Databases:
-DPaW Tenure
-NLWRA, Current Extent of Native Vegetation

(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 may be at variance to this Principle**
The area under application is the same area applied under CPS 6308/1. The re-assessment of the native vegetation under this clearing principle is the same as previously assessed under CPS 6308/1 in 2015.

The closest wetland or watercourse to the application area is a minor non perennial watercourse that runs from the northern portion through to the centre of the application area. No major watercourses or wetlands occur within close proximity to the application area.

The proposed clearing may cause a short term increase in sedimentation of the watercourse during rainfall, however, this is likely to be minimal given the minor non perennial nature of the watercourse.

The Commissioner of Soil and Land Conservation (2014) has advised that, if cleared, ground water recharge under the sandy soils of the application area is likely to be high and therefore incremental increases in salinity of waterways down gradient would be expected. Land monitoring indicates that the application area has medium to high salinity risk associated with land clearing.

Given the above, the proposed clearing may lead to the incremental deterioration of groundwater through increased salinity, therefore the proposed clearing may be at variance to this Principle.

Methodology References:
-Commissioner of Soil and Land Conservation (2014)

GIS Databases:
-Hydrography, linear
-Hydrography, hierachy
-Geomorphic Wetlands, Wheatbelt

(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**

The area under application is the same area applied under CPS 6308/1. The re-assessment of the native vegetation under this clearing principle is the same as previously assessed under CPS 6308/1 in 2015

The Commissioner of Soil and Land Conservation (2014) has advised that the proposed clearing is unlikely to increase surface water run-off which would contribute to stream flows and potential flooding. No significant change is expected as a result of clearing.

The proposed clearing is not likely to be at variance to this Principle.

Methodology References:
- Commissioner of Soil and Land Conservation (2014)

Planning instruments and other relevant matters.

Comments The proposed clearing falls within the Avon Rights in Water and Irrigation Surface Water Area. The Department of Water was notified of the application and advised that it had no comment (DoW, 2014).

The application area is zoned 'farming' under the Shire of Quairading Town Planning Scheme No. 2.

The application area is within the agricultural area defined in Environmental Protection Authority Position Statement No.2 (EPA 2000), which states that significant clearing of native vegetation has already occurred on agricultural land, leading to a reduction in biodiversity and increase in land salinization. Therefore there is a general presumption against clearing within this area for agricultural purposes (EPA, 2000).

In exceptional circumstances the EPA would consider supporting clearing for agriculture within this region if:

- (a) There are alternative mechanisms for protecting biodiversity.
- (b) The area to be cleared is relatively small, depending on the scale at which biodiversity changes over the area, including extent of vegetation in the surrounding area and recognising that values will vary for different ecosystems.
- (c) The proponent demonstrates that the elements set out in Section 4.3 of this Position Statement are being met. This will require extensive local and regional biodiversity work.
- (d) Land degradation, including aquatic environments and threatening processes, such as dieback, salinisation or disruption of catchment processes, on-site and off-site would not be exacerbated.

Several submissions have been received from the Quairading Land Care District Council (LCDC, 2014). The submissions identify a number of concerns including erosion, pasture productivity and downstream water problems.

In 2014, the applicant applied for a clearing permit for 65 hectares under application CPS 6308/1. The area was the same as the area applied under this application. CPS 6308/1 was refused on 7 April 2015 and the decision was appealed (Appeal C006 of 2015). On 8 July 2015, the Minister for Environment dismissed the appeal and advised the applicant that the decision did not preclude the applicant from submitting a fresh clearing permit application that addressed the environmental issues identified in the decision report.

In submitting clearing permit application CPS 6908/1 for the same area, no additional information was provided that addressed the environmental issues identified under the assessment of application CPS 6308/1. The assessment against the clearing principles under this application is largely unchanged from the previous assessment.

On 24 May 2016, the Delegated Officer wrote to the applicant outlining the environmental impacts identified during the preliminary assessment of the proposed clearing and advising of intent to refuse the application within 30 days. On 6 June 2016, the applicant advised that the application area would be reduced to 45 hectares of parkland clearing (by not clearing all the trees). No further information was provided in relation to the identified environmental impacts.

A reduction in size of the application area may reduce the environmental impacts from clearing, however parkland clearing will clear the mid and understory vegetation which may contain rare and priority flora, provide suitable fauna habitat and modify the ecological communities represented on site. The reduced application area of 45 hectares is still considered to remain of a significant size in a highly cleared and fragmented landscape, resulting in significant environmental impacts.

Methodology References:
-DoW (2014)
-EPA (2000)
-LCDC (2014)

GIS Databases:
-Town Planning Scheme Zones

4. References

- Beard, J. S. (1981) *Vegetation Survey of Western Australia – Swan*. 1:1,000,000 Vegetation Series. University of Western Australia Press.
- Commissioner of Soil and Land Conservation (2014) Land Degradation Assessment Report for Clearing Permit Application CPS 6308/1. Site inspection undertaken 3/11/2014 (DER Ref A845439).
- Commissioner of Soil and Land Conservation (2016) Land Degradation Assessment Response for CPS 6908/1. Department of Agriculture and Food Western Australia (DER Ref A1079326).
- 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, Canberra.
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