GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 7254/1
File Number: DER2013/001205
Duration of Permit: From 17 December 2016 to 17 December 2021

PERMIT HOLDER

Justin Thomas Griffiths

LAND ON WHICH CLEARING IS TO BE DONE

Lot 12153 on Deposited Plan 206303, Crowea

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 13 hectares of native vegetation within the area cross-hatched yellow on Plan 7254/1.

CONDITIONS

1. **Vegetation management**
   The Permit Holder shall not clear native vegetation within 30 metres of any *watercourse* or *wetland* within and/or adjacent to the area cross-hatched yellow on Plan 7254/1.

2. **Fauna management**
   The Permit Holder shall not clear native vegetation within 10 metres of *habitat trees* found within the area cross-hatched yellow on Plan 7254/1.

3. **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.

DEFINITIONS

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

habitat tree(s): means trees that have a diameter, measured at 1.5 metres from the base of the tree, of 50 centimetres or greater;

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;

watercourse has the meaning given to it in section 3 of the *Rights in Water and Irrigation Act 1914*;

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; and

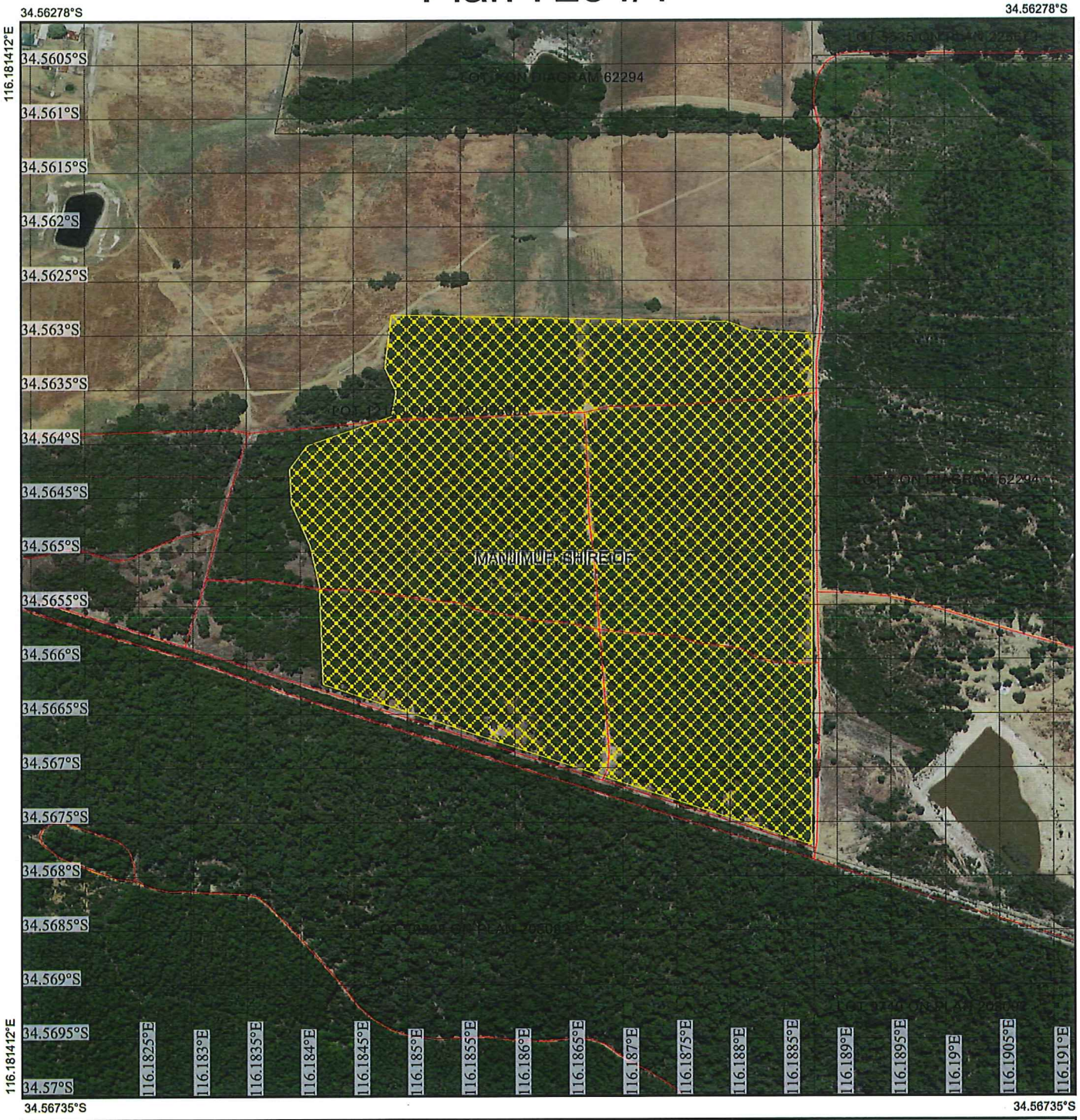
wetland/s means an area of seasonally, intermittently or permanently waterlogged or inundated land, whether natural or otherwise, and includes a lake, swamp, marsh, spring, dampland, tidal flat or estuary.

Emma Bramwell
A/ MANAGER
CLEARING REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

17 November 2016

Plan 7254/1



Legend

- Roads
- Imagery
- Clearing Instruments Activities
- Local Government Authority

N

0 200m

1:4,756

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

Date 17/11/16

A/Manager Clearing Regulation

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

GOVERNMENT OF WESTERN AUSTRALIA

Government of Western Australia
Department of Environment Regulation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7254/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Mr Justin Thomas Griffiths

1.3. Property details

Property: LOT 12153 ON PLAN 206303, CROWEA
Local Government Authority: MANJIMUP, SHIRE OF
DER Region: South Coast
DPaW District: DONNELLY
Localities: CROWEA

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 17 November 2016
Reasons for Decision: The clearing permit application was received on 31 August 2016, and has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*. It has been concluded that the proposed clearing may be at variance to clearing principles (b) and (h) and is not likely to be at variance to any of the remaining clearing principles.

The Delegated Officer determined that the application area may include nesting habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudin's cockatoo (*Calyptorhynchus baudinii*), forest red-tailed black-cockatoo (*Calyptorhynchus banksii* subsp. *naso*) and southern brush-tailed phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*). The Delegated Officer also determined that the application area contains two minor, non-perennial watercourses, providing linkage to other areas of vegetation. To mitigate these potential impacts, the clearing permit will require that the Permit Holder does not clear within 10 metres of habitat trees or within 30 metres of any watercourse or wetland.

State policies and other relevant policies have been taken into consideration in the decision to grant a 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 application area is mapped as the following vegetation types: • Beard vegetation association 1144: Tall forest; karri & marri (*Corymbia calophylla*) (Shepherd et al., 2001). • Beard vegetation association 3: Medium forest; jarrah-marri (Shepherd et al., 2001). • Mattiske vegetation complex CYy: Tall open forest of *Corymbia calophylla* with mixture of *Eucalyptus marginata* subsp. *marginata* and *Eucalyptus diversicolor* on uplands in hyperhumid and perhumid zones (Mattiske and Havel, 1980). • Mattiske vegetation complex A: Open forest of *Eucalyptus marginata* subsp. *marginata-Banksia ilicifolia -Nuytsia floribunda* with some *Eucalyptus diversicolor* on gently sloping sandy terrain in hyperhumid and perhumid zones (Mattiske and Havel, 1980).	The application is to parkland clear 13 hectares of native vegetation within Lot 12153 on Deposited Plan 206303, Crowea, for the purposes of pasture, grazing and fire control.	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 aerial imagery and photographs and advice received from the Department of Agriculture and Food WA (Commissioner of Soil and Land Conservation, 2013).

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 not likely to be at variance to this Principle

The application is to parkland clear 13 hectares of native vegetation within a 18.64 hectare footprint area on Lot 12153 on Deposited Plan 206303, Crowea, for the purposes of pasture, grazing and fire control. The applicant advised that the proposed clearing will not include large trees or native vegetation within 30 metres of any watercourse.

Three rare flora and five priority flora species have been recorded within the local area (10 kilometre radius). Two of the rare and three of the five priority flora species grow in association with watercourses or wetlands, and may therefore be present within the application area. The applicant advised that the proposed clearing will not include native vegetation within 30 metres of any watercourse. It is considered that the retention of a 30 metre buffer to watercourses will ensure that associated rare and priority flora species are not impacted by the proposed clearing, and that an ecological linkage is retained for the movement of fauna between areas of remnant vegetation.

The preferred habitat for the remaining two priority flora species is granite outcrops and ironstone ridges, and black peaty sand. The chief soils within the application area are sandy acidic yellow mottled soils (Northcote et al., 1960-68). Given the mapped soil type, the application area does not provide suitable habitat for these species.

No threatened or priority ecological communities have been recorded within the local area.

Nine fauna species listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* have been recorded within the local area, being the noisy scrub bird (*Atrichornis clamosus*), forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*), Baudin's cockatoo (*Calyptorhynchus baudinii*), Carnaby's cockatoo (*Calyptorhynchus latirostris*), southern brush-tailed phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*), western ringtail possum (*Pseudocheirus occidentalis*), chuditch (*Dasyurus geoffroii),* western mud minnow (*Galaxiella munda*) and quokka (*Setonix brachyurus*) (Parks and Wildlife, 2007-).

The application area may contain suitable breeding trees for black cockatoos and southern brush-tailed phascogale. It is considered that the retention of trees that have a diameter of 50 centimetres or greater, measured at 1.5 metres from the base of the tree, will ensure that arboreal fauna are not impacted by the proposed clearing.

The vegetation within the application area is considered to be in a good (Keighery, 1994) condition. The local area retains approximately 65 per cent native vegetation cover. The application area is adjacent to the Warren State Forest.

On the basis of the above, it is considered that the application area is unlikely to comprise a high level of biological diversity.

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

Methodology

References:
Keighery (1994)
Northcote et al. (1960-68)
Parks and Wildlife (2007-)

GIS Database:
SAC Bio datasets – Accessed October 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 may be at variance to this Principle

The application area has been broadly mapped as tall karri – marri forest and as medium jarrah – marri forest (Shepherd et al., 2001). The vegetation within the application area is considered to be in a good (Keighery, 1994) condition. The application area contains watercourses. The local area (10 kilometre radius) retains approximately 65 per cent native vegetation cover, the majority of which is held in conservation estate including the Warren State Forest.

Nine fauna species listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* have been recorded within the local area, being the noisy scrub bird (*Atrichornis clamosus*), forest red tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*), Baudin's cockatoo (*Calyptorhynchus baudinii*), Carnaby's cockatoo (*Calyptorhynchus latirostris*), southern brush-tailed phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*), western ringtail possum (*Pseudocheirus occidentalis*), chuditch (*Dasyurus geoffroii),* western mud minnow (*Galaxiella munda*) and quokka (*Setonix brachyurus*) (Parks and Wildlife, 2007-).

Carnaby's cockatoos nest in large hollows of eucalyptus trees and forage on the seeds, nuts and flowers of a large variety of plants including proteaceous species (*banksia, hakea, grevillea*), as well as *Allocasuarina* and *Eucalyptus* species, *Corymbia calophylla* and a range of introduced species, especially seeds from cones of *Pinus* species (Shah, 2006; Valentine and Stock, 2008).

The Recovery Plan for Baudin's cockatoo states that critical habitat for the survival of important populations of this species comprises all marri, karri and jarrah forests, woodlands and remnants in the south-west of Western Australia receiving more than 600 millimetres of annual average rainfall (DEC, 2008).

Potential nesting trees for black cockatoos are defined as "trees of species known to support breeding within the range of the species which either have a suitable nest hollow or are of a suitable diameter at breast height (DBH) to develop a nest hollow. For most tree species, suitable DBH is 500 millimetres".

The southern brush-tailed phascogale is a small arboreal dasyurid. In south west Western Australia they have been observed in dry sclerphyll forests and open woodlands that contain hollow bearing trees. Habitat clearing, fragmentation, and alteration by logging and mining are the greatest threats to this species (DEC, 2012).

The western mud minnow is found within swift flowing streams in karri forest and feeds near the fringe of streams and pools (TSSC, 2016). The applicant intends on retaining a 30 metre buffer to the watercourses located within the application area, therefore the proposed clearing will not impact this species.

The western mud minnow is found within swift flowing streams in karri forest and feeds near the fringe of streams and pools (TSSC, 2016). The applicant intends on retaining a 30 metre buffer to the watercourses located within the application area, therefore the proposed clearing will not impact this species.

Noting the mapped vegetation types within the application area, it is considered that the application area may contain suitable foraging and breeding habitat for the abovementioned black cockatoo species and southern brush-tailed phascogale. However noting the proximity of the application area to the Warren State Forest, it is considered that impacts to these species are unlikely to be significant.

An ecological linkage, defined by the South West Regional Ecological Linkage (SWREL) Report (Molloy et al., 2009) is mapped approximately 2.6 kilometres west of the application area. The SWREL report (Molloy et al.,2009) defines an ecological linkage as "A series of (both contiguous and non-contiguous) patches of native vegetation which, by virtue of their proximity to each other, act as stepping stones of habitat which facilitate the maintenance of ecological processes and the movement of organisms within, and across, a landscape".

Noting the size of the proposed clearing, the condition of the vegetation and presence of watercourses within the application area, and the proximity of the application area to a mapped ecological linkage, it is considered that the application area may comprise significant habitat for some indigenous fauna species.

The applicant advised that the proposed clearing will not include large trees or native vegetation within 30 metres of any watercourse. It is considered that the retention of a 30 metre buffer to watercourses will ensure that an ecological linkage is retained for the movement of fauna between areas of remnant vegetation. It is considered that the retention of trees that have a diameter of 50 centimetres or greater, measured at 1.5 metres from the base of the tree, will ensure that arboreal fauna are not impacted by the proposed clearing.

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

Methodology

References:
DEC (2008)
DEC (2012)
Keighery (1994)
Molloy et al. (2009)
Parks and Wildlife (2007-)
Shah (2006)
Shepherd et al. (2001)
TSSC (2016)
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 is not likely to be at variance to this Principle

Three rare flora species have been recorded within the local area (10 kilometre radius). Two of these species grow in association with watercourses and wetlands, and may therefore be present within the application area. The third rare flora species is found in soil pockets on granite outcrops, and suitable habitat for this species does not occur within the application area.

The applicant advised that the proposed clearing will not include large trees or native vegetation within 30 metres of any watercourse. It is considered that the retention of a 30 metre buffer to watercourses will ensure that associated rare flora species are not impacted by the proposed clearing.

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

Methodology GIS Database:
SAC Bio datasets – Accessed October 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 is not likely to be at variance to this Principle**
No threatened ecological communities (TEC) have been recorded within the local area (10 kilometre radius). On this basis, the application area is not likely to comprise of, or be necessary for the maintenance of, a TEC.

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

Methodology GIS Database:
SAC Bio datasets – Accessed October 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 application area is located within the Warren Interim Biogeographic Regionalisation of Australia (IBRA) bioregion, which retains approximately 78 per cent of its pre-European vegetation extent (Government of Western Australia, 2015).

The application area is mapped as Beard vegetation associations 3 and 1144, which retain approximately 78 per cent and 80 per cent respectively of their pre-European extents in the Warren bioregion (Government of Western Australia, 2015), and are well-represented within conservation estate.

The application area is mapped as Mattiske vegetation complexes CRy and A, which retain approximately 73 per cent and 88 per cent respectively of their pre-European extents, and are well-represented within conservation estate (Parks and Wildlife, 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 vegetation within the application area is considered to be in a good (Keighery, 1994) condition. Aerial imagery indicates that the local area (10 kilometre radius) retains approximately 65 per cent native vegetation cover. The application area is adjacent to the Warren State Forest. The application area is unlikely to contain rare or priority flora or significant fauna habitat.

On the basis of the above, it is considered that the application area is unlikely to be a significant remnant within an area that has been extensively cleared.

Given the above, the proposed clearing 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*				
Warren	833,986	660,311	78	85
Local government authority*				
Shire of Manjimup	697,368	586,852	84	94
Beard Vegetation Association in Bioregion*				
1144	159,668	128,191	80	92
3	250,263	195,369	78	87
Mattiske Vegetation Complex **				
CRy	33,765	24,498	73	66
A	39,698	34,876	88	79

Methodology References:
Commonwealth of Australia (2001)
Government of Western Australia (2015)
Keighery (1994)
Parks and Wildlife (2015)

GIS Databases:
Imagery
Pre-European 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 not likely to be at variance to this Principle

Two minor, perennial watercourses intersect the application footprint area. These watercourses flow northwards into Warren River. No wetlands are mapped in the vicinity of the application area.

The applicant advised that the proposed clearing will not include native vegetation within 30 metres of any watercourse.

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

Methodology

GIS Databases:
Geomorphic Wetlands, Augusta to Walpole
Hydrography, linear
Hydrography, hierachy

(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

The application area has been mapped as soil type Wd8, which is described as gently undulating drainage divides developed on quartzite with the chief soils being sandy yellow mottled soils with leached sands, sometimes associated with ironstone gravelly (Northcote et al., 1960-68).

These soils have a very high risk of waterlogging most likely associated with watercourses (Commissioner of Soil and Land Conservation 2013). The risk of wind or water erosion causing land degradation is low. The risk of salinity causing land degradation is also low (Commissioner of Soil and Land Conservation, 2013).

The applicant advised that the proposed clearing will not include native vegetation within 30 metres of any watercourse. It is considered that the retention of a 30 metre buffer to watercourses will assist in mitigating the risk of waterlogging.

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

Methodology

References:
Commissioner of Soil and Land Conservation (2013)
Northcote et al. (1960-68)

References:
Annual Rainfall, Statewide
Soils, Statewide
Topography

(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 Warren State Forest is located adjacent to the southern boundary of the application area and is also located 270 metres north of the application area.

An ecological linkage, defined by the South West Regional Ecological Linkage (SWREL) Report (Molloy et al., 2009) is mapped approximately 2.6 kilometres west of the application area. The SWREL report (Molloy et al.,2009) defines an ecological linkage as "A series of (both contiguous and non-contiguous) patches of native vegetation which, by virtue of their proximity to each other, act as stepping stones of habitat which facilitate the maintenance of ecological processes and the movement of organisms within, and across, a landscape".

The application is to parkland clear 13 hectares of native vegetation. The applicant advised that the proposed clearing will not include large trees or native vegetation within 30 metres of any watercourse. It is considered that the retention of a 30 metre buffer to watercourses will ensure that an ecological linkage is retained for the movement of fauna between areas of remnant vegetation, including to the Warren State Forest.

The proposed clearing may indirectly impact on the environmental values of the adjoining conservation area through the spread of weed species and dieback. Weed and dieback management practices will assist in reducing these impacts.

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

Methodology

References:
Molloy et al. (2009)

GIS Databases:

(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

Groundwater salinity mapped within the application is 500-1,000 milligrams per litre (measured as total dissolved solids). This level of groundwater salinity is considered to be marginal. It is considered that the proposed parkland clearing of 13 hectares within a local area (10 kilometre radius) that retains approximately 65 per cent native vegetation cover is unlikely to result in an increase in groundwater salinity.

Two minor, perennial watercourses intersect the application footprint area. These watercourses flow northwards into Warren River. The applicant advised that the proposed clearing will not include native vegetation within 30 metres of any watercourse. It is considered that

Although two watercourses are located within the application footprint, the applicant intends on retaining a 30 metre buffer to the watercourses. This buffer should be sufficient to ensure that the proposed clearing does not impact surface water quality.

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

Methodology

GIS Databases:
Hydrography, linear
Hydrography, hierachy
Geomorphic Wetlands, Augusta to Walpole
Groundwater salinity

(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 chief soils within the application area are sandy acidic yellow mottled soils (Northcote et al., 1960-68). Given the porous nature of the soils and the slope of the application area (elevation ranges from 170 metres to 150 metres) the proposed clearing is not likely to cause, or exacerbate, the incidence or intensity of flooding.

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

Methodology

References:
Northcote et al. (1960-68)

References:
Annual Rainfall, Statewide
Soils, Statewide

Planning instruments and other relevant matters.

The application area is located within the Warren River and Tributaries Surface Water Area proclaimed under the *Rights in Water and Irrigation Act 1914*. The Department of Water (DoW) advised that the application area is also located within the unproclaimed Kerri Groundwater Area (DoW, 2016a). The taking and use of surface water is subject to assessment and licencing by DoW, and any proposed interference with a watercourse, drain, dam or reservoir that flow over or is situated on the land is also subject to assessment and approval under a permit (DoW, 2016a).

DoW noted that the application provides no details on whether or not the proposed clearing for additional grazing area would be accompanied by greater stocking rate. If the stocking rates were to be increased with additional land opened up to grazing, the risk to water quality in terms of nutrient input (via manure and urine) would be increased as well (DoW, 2016a). DoW further noted that the application states that 30 metres of the watercourse would not be touched, however, no information on how the riparian area would be protected from stock is provided (DoW, 2016a). DoW recommended the following conditions to ensure that water quality is managed and minimal risk to the proclaimed Warren River and Tributaries Surface Water Area:

- the riparian buffers along the tributaries of the Warren River be fenced from stock; and
- the remnant native vegetation that comprised of the remaining ten per cent of native vegetation that must be retained under the *Country Areas Water Supply Act 1947* (CAWS Act) be fenced from stock to ensure grazing does not clear the area by default and prevent natural regeneration processes.

As stated in the *Environmental Protection Act 1986*, the definition of clearing includes grazing of stock. The applicant is advised that clearing by grazing within areas not authorised to be cleared is not permitted.

The application area is located within the 1 September 1978 CAWS Act gazetted Warren River Water Reserve (Warren River catchment). The application area is located in Zone D, a low salinity risk area of the catchment, where DoW Policy and Guidelines for the "Granting of Licences to Clear Native Vegetation" allow for the granting of a licence subject to the retention of riparian vegetation and the retention of native vegetation on at

least ten per cent of the holding (DoW, 2016b). DoW advised that 2014 imagery suggests there is currently approximately 26.4 hectares of native vegetation on the holding, hence there would still be approximately 25 per cent native vegetation if the current clearing application is granted (DoW, 2016b).

The application was advertised in *The West Australian* newspaper on 3 October 2016 by the Department of Environment Regulation inviting submissions from the public within a 21. No submissions were received in relation to this application.

The Shire of Manjimup has advised that the land is zoned as 'Priority Agriculture' and planning approval for clearing of native vegetation is not required in this zone (Shire of Manjimup, 2016). The Shire of Manjimup advises that it has no objection and that there are no planning or other matters which would affect the application (Shire of Manjimup, 2016).

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

Methodology

References:
DoW (2016a)
DoW (2016b)
Shire of Manjimup (2016)

GIS Databases:
Aboriginal Sites of Significance
RIWI, Surface Water Areas
CAWSA Areas

4. References

Commissioner of Soil and Land Conservation (2013) Land Degradation Advice and Assessment Report for clearing permit application CPS 5895/1 received 16/12/2013; Department of Agriculture and Food Western Australia (DER Ref A706203).

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

Department of Environment and Conservation (DEC) (2008) Forest Black cockatoo (Baudin's cockatoo) (*Calyptorhynchus baudinii*) and forest red-tailed back cockatoo (*Calyptorhynchus banksii naso*) Recovery Plan. Department of Environment and Conservation, Perth, Western Australia.

Department of Environment and Conservation (DEC) (2012) Fauna profiles, Brush-tailed Phascogale, *Phascogale tapoatafa*. Department of Environment and Conservation, 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 October 2016.

Department of Parks and Wildlife (Parks and Wildlife) (2015) 2015 South West Forest and Swan Coastal Plain Vegetation Complex Statistics: a report prepared for the Department of Environment Regulation. Current as of March 2015. Department of Parks and Wildlife, Perth, Western Australia.

Department of Water (2016a) *Rights in Water and Irrigation Act 1914* advice for Clearing Permit Application CPS 7254/1 (DER Ref: A1182949).

Department of Water (2016b) *Country Area Water Supply Act 1947* advice for Clearing Permit Application CPS 7254/1 (DER Ref: A1185266).

Government of Western Australia (2015). 2015 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2015. WA Department of Parks and Wildlife, Perth.

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Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whisson, G. (2009) South West Regional Ecological Linkages Technical Report. DEC, WALGA and Planning South West.

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Shire of Manjimup (2016) Planning advice for Clearing Permit Application CPS 7254/1 (DER Ref: A1176603).

Threatened Species Scientific Committee (TSSC) (2016) Advice to the Minister for the Environment and Heritage from the Threatened Species Scientific Committee (TSSC) on Amendments to the list of Threatened Species under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) http://www.environment.gov.au/system/files/pages/d11008c5-6d1a-429a-a0a9-3bfc4078a95d/files/galaxiella-munda-advice.pdf. Accessed 10 October 2016.

Valentine, L.E. and Stock, W. (2008) Food Resources of Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) in the Gnangara Sustainability Strategy Study Area. Edith Cowan University and Department of Environment and Conservation. December 2008.