GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 7187/1
Permit Holder:	Shire of Esperance
Duration of Permit:	15 October 2016 – 15 October 2021

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I – CLEARING AUTHORISED

1. **Purpose for which clearing may be done**
   Clearing for the purpose of road upgrades.

2. **Land on which clearing is to be done**
   Coolinup Road reserve (PINs 11645017 and 11645016) (Condingup and Mount Ney)

3. **Area of Clearing**
   The Permit Holder must not clear more than seven hectares of native vegetation within the area cross-hatched yellow on attached Plan 7187/1.

4. **Application**
   This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

5. **Type of clearing authorised**
   This Permit authorises the Permit Holder to clear native vegetation for the activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those activities under the *Local Government Act 1995* or any other written law.

PART II – MANAGEMENT CONDITIONS

6. **Avoid, minimise etc clearing**
   In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:
   (a) avoid the clearing of native vegetation;
   (b) minimise the amount of native vegetation to be cleared; and
   (c) reduce the impact of clearing on any environmental value.

7. **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;
(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:
dieback means the effect of *Phytophthora* species on native vegetation;

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

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

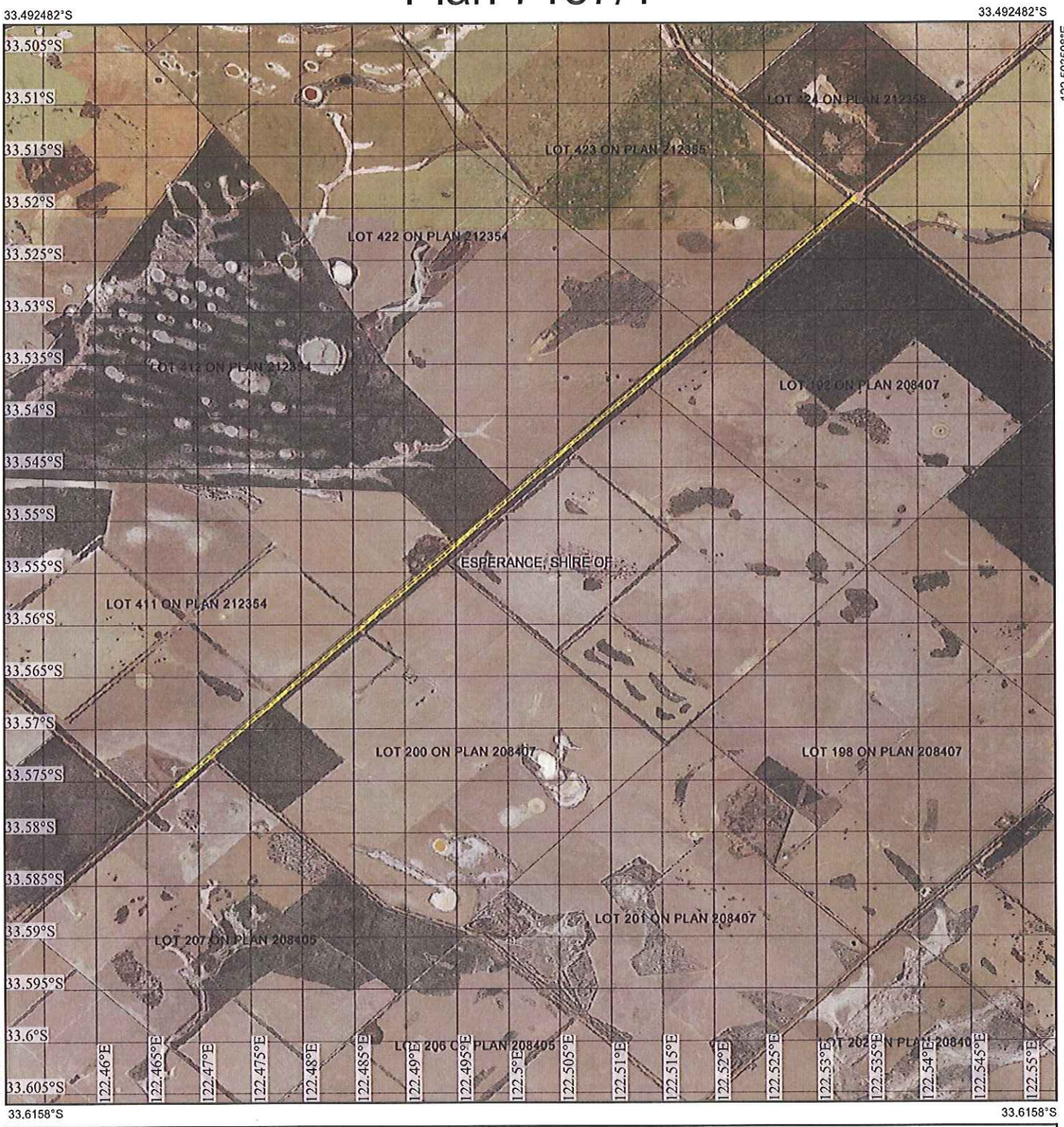
weed/s means any plant -
(a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
(b) published in a Department of Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
(c) not indigenous to the area concerned.

Emma Bramwell
A/ MANAGER
CLEARING REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

15 September 2016

Plan 7187/1



Legend

- Imagery
- Clearing Instruments Activities
- Local Government Authority

N

0 2km

1:50,000

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

E Bramwell Date 15/09/16

E Bramwell

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.: 7187/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Shire of Esperance

1.3. Property details

Property: Coolinup Road reserve (PINs 11645017 and 11645016)
Local Government Authority: Esperance, Shire Of
DER Region: Goldfields
DPaW District: Esperance
Localities: Condingup And Mount Ney

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
7		Mechanical Removal	Road construction or upgrades

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 15 September 2016
Reasons for Decision: The clearing permit application is to clear seven hectares of native vegetation within a 25 hectare footprint for the purpose of road upgrades, and was received on 18 July 2016.

The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*.

The Delegated Officer determined that the proposed clearing is at variance to Principle (d), may be at variance to Principle (h), and is not likely to be or is not at variance to the remaining clearing principles. The Delegated Officer determined that the proposed clearing will impact on a threatened ecological community (TEC), however these impacts are unlikely to be significant or impact the conservation status of the TEC.

The Delegated Officer considered that the implementation of suitable weed and dieback management measures was appropriate to address the impacts of the proposed clearing.

State and other relevant policies have been taken into consideration in this decision.

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
Three Beard vegetation associations have been mapped within the application area: • Beard vegetation association 47 is described as shrublands; tallerack mallee-heath; • Beard vegetation association 516 is described as Shrublands; mallee scrub, black marlock; and • Beard vegetation association 1516 is described as Shrublands; mallee scrub, black marlock and Forrest's marlock (Shepherd et al., 2001).	The applicant has applied to clear up to seven hectares within a 25 hectare footprint for the purpose of road upgrades.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).	The application area consists of an 8.7 kilometre stretch of Coolinup Road. The road is currently approximately 18 metres wide. The application area is 30 metres in width. Vegetation condition was determined by a vegetation assessment conducted by the applicant (Shire of Esperance, 2016).

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 to clear seven hectares within a 25 hectare footprint within the Coolinup Road reserve is for the purpose of road upgrades, in order to expand an 8.7 kilometre section of Coolinup Road from 18 to 30 metres in width. The application area consists of a 25 hectare linear strip 30 metres wide along Coolinup Road, which is located in the centre of a vegetated corridor 100 to 120 metres in width. The vegetated corridor connects other remnants in the immediate area that are located on the edge of road reserves.

A vegetation assessment was conducted by the Shire of Esperance on 7July 2016, which included a Level 1 flora survey and fauna habitat assessment (Shire of Esperance, 2016). The assessment determined that the vegetation within the application area is in excellent (Keighery, 1994) condition (Shire of Esperance, 2016).

According to available databases, no rare and 12 priority flora species have been recorded in the local area (10 kilometre radius). No rare flora species were identified within the application area during the vegetation assessment (Shire of Esperance, 2016). One priority flora species, *Persoonia scabra* (P3), was recorded 20 metres from the roadside at the Coolinup Road - Howick Road intersection (Shire of Esperance, 2016). The applicant advised that this record is not likely to be disturbed by the proposed clearing (Shire of Esperance, 2016).

Approximately 1.98 hectares of vegetation within the application area is representative of the 'Proteaceae dominated kwongkan shrublands of the southeast coastal floristic province of Western Australia' community, which is a threatened ecological community (TEC) listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and listed as a Priority 3 ecological community by the Department of Parks and Wildlife (Shire of Esperance, 2016). This TEC occurs within one 500 metre and one 2.4 kilometre stretch of Coolinup Road reserve (Shire of Esperance, 2016). The total extent of these occurrences is estimated to be approximately 25 hectares. It is considered that the clearing of 1.98 hectares of this TEC is unlikely to cause additional fragmentation or significantly increase edge effects within this occurrence of the TEC, and is unlikely to impact on the conservation status of this occurrence of the TEC.

The vegetated corridor within which the application area is located provides fauna habitat in excellent (Keighery, 1994) condition, which also functions as an ecological linkage between remnants. It is considered that the application area is unlikely to contain a high diversity of fauna compared to surrounding native vegetation, or impact the diversity of fauna that utilise habitat within the vegetated corridor.

The application area contains proteaceous flora species that provides suitable foraging habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*; rare or likely to become extinct under the *Wildlife Conservation Act 1950*) (Shire of Esperance, 2016). The majority of suitable foraging habitat occurs within the 'Proteaceae dominated kwongkan shrublands of the southeast coastal floristic province of Western Australia' TEC of which 1.98 hectares is proposed to be cleared. It is considered that the proposed clearing is unlikely to have a significant impact on the availability of foraging habitat for Carnaby's cockatoo in the local area.

The weed species African lovegrass (*Eragrostis curvula*) was recorded within the application area during the vegetation assessment (Shire of Esperance, 2016). No signs of dieback (*Phytophthora cinnamomi*) were observed. Mechanical clearing increases the risk of spreading weeds and dieback into native vegetation adjacent to the application area. Weeds can decrease the biodiversity value of an area as they out-compete native vegetation for available resources, contribute to land degradation and increase the frequency and intensity of fires (DEC, 2011). Potential impacts to biodiversity outside the application area as a result of the proposed clearing may be minimised by the implementation of weed and dieback management practices.

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:
DEC (2011)
Keighery (1994)
Shire of Esperance (2016)

GIS Databases:
- Aerial imagery
- Remnant vegetation
- SAC bio datasets (accessed September 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 consists of a 25 hectare linear strip 30 metres in width that encompasses an 8.7 kilometre stretch of Coolinup Road. The application area is located in the centre of a corridor of native vegetation 100 to 120 metres in width, which is connected to other corridors of native vegetation within road reserves in the local area. These vegetated corridors function as ecological linkages between remnants of native vegetation. A vegetation assessment determined that native vegetation within the road reserve is in excellent (Keighery, 1994) condition.

The vegetated corridor within Coolinup Road reserve is likely to represent significant fauna habitat as it facilitates the movement of fauna species between larger remnants. The proposed clearing of seven hectares along an 8.7 kilometre stretch of Coolinup Road will not impact the ecological linkage or impact the value of fauna habitat within the road reserve.

The application area contains suitable foraging habitat for Carnaby's cockatoo, most of which is associated with the 'Proteaceae dominated kwongkan shrublands of the southeast coastal floristic province of Western Australia' TEC. A total of 1.98 hectares of this TEC will be impacted by the proposed clearing (Shire of Esperance, 2016). Noting that suitable foraging habitat in excellent (Keighery, 1994) condition is available outside the application area within the adjacent Coolinup Road reserve, it is considered that the proposed clearing is unlikely to have a significant impact on the availability of foraging habitat for Carnaby's cockatoo in the local area.

On the basis of the above, it is considered that the application area is not considered to comprise or be necessary for the maintenance of significant fauna habitat.

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

Methodology

References:
Keighery (1994)
Shire of Esperance (2016)

GIS Databases:
- Aerial imagery
- 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

According to available databases, no rare flora species have been recorded within the local area (10 kilometre radius). A vegetation assessment conducted by the Shire of Esperance utilised a desktop assessment and field survey of the application area to identify impacts to rare flora as a result of the proposed clearing (Shire of Esperance, 2016). No rare flora species were recorded within the application area (Shire of Esperance, 2016).

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

Methodology

References:
Shire of Esperance (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 at variance to this Principle

A vegetation assessment conducted by the Shire of Esperance identified vegetation representative of the 'Proteaceae dominated kwongkan shrublands of the southeast coastal floristic province of Western Australia' TEC within the application area (Shire of Esperance, 2016). This TEC is listed as endangered under the EPBC Act. A total of 1.98 hectares of vegetation in excellent (Keighery, 1994) condition belonging to this TEC will be impacted by the proposed clearing.

Conservation advice for this TEC defines several characteristics that may indicate a significant impact, including susceptibility to edge effects, the presence of good fauna habitat, threatened species and weeds or dieback, connectivity to other remnants, and whether the community has been heavily impacted in the local area (TSSC, 2014).

The vegetation assessment identified one weed species within the application area, which may be further spread by clearing activities (Shire of Esperance, 2016). No evidence of dieback was recorded, however the Shire of Esperance acknowledged that mechanical clearing will increase the risk of introducing dieback into adjacent native vegetation (Shire of Esperance, 2016). Impacts to this TEC as a result of weed and dieback spread may be minimised by the implementation of weed management practices.

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

This TEC occurs within one 500 metre and one 2.4 kilometre stretch of Coolinup Road reserve (Shire of Esperance, 2016). The total extent of these occurrences is estimated to be approximately 25 hectares. It is considered that the clearing of 1.98 hectares of this TEC is unlikely to cause additional fragmentation or significantly increase edge effects within this occurrence of the TEC, and is unlikely to impact on the conservation status of this occurrence of the TEC.

Methodology References:
Keighery (1994)
Shire of Esperance (2016)
TSSC (2014)

(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 Esperance Plains and Mallee Interim Biogeographic Regionalisation of Australia (IBRA) bioregions, with the majority (6.5 of the 8.7 kilometre stretch of Coolinup Road reserve) located within the Mallee IBRA bioregion. Approximately 52 and 57 per cent of the pre-European vegetation remains within the Esperance Plains and Mallee bioregions, respectively (Government of Western Australia, 2015). The mapped Beard vegetation associations within these bioregions retain more than 35 per cent of their pre-European extents.

Approximately 36 per cent of pre-European vegetation remains within the local area (10 kilometre radius). Two large reserves (Kau Rock and Beaumont Nature Reserves) are located within 10 kilometres of the application area. While the local area has been highly modified for agricultural land uses, the application area is not considered to occur within an extensively cleared area.

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). None of the vegetation types mapped within the application area occur at below the 30 per cent threshold (Government of Western Australia, 2015).

The application area is located within a strip of native vegetation 100 to 120 metres in width that forms an ecological linkage between remnants of native vegetation. The proposed clearing will not impact the function of this ecological linkage.

On the basis of the above, it is considered that the application area is unlikely to be significant as a remnant of native vegetation in an extensively cleared area

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*				
Esperance Plains	2,899,941	1,495,046	52	55
Mallee	7,395,894	4,180,977	57	31
Shire*				
Shire of Esperance	4,459,671	3,210,979	72	30
Beard Vegetation Association in Bioregion*				
Within Esperance Plains bioregion:				
47	959,936	336,784	35	52
Within Mallee bioregion:				
516	288,176	113,146	39	49
1516	125,543	59,433	47	40

Methodology References:
Commonwealth of Australia (2001)
*Government of Western Australia (2015)

GIS Databases:
- Remnant 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 at variance to this Principle

There are no wetlands or watercourses mapped within the application area. The nearest waterbody is a lake, located two kilometres from the application area. Noting the distance to the nearest waterbody, the vegetation within the application area is not considered to be growing in association with a watercourse or wetland.

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

Methodology

GIS Databases:
- 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

The application area consists of a linear strip 8.7 kilometres in length and 30 metres in width. The majority of vegetation within the application area has been previously cleared for road construction. No watercourses or wetlands occur within or adjacent to the application area.

There are 12 soil types mapped within the application area (DAFWA, 2016). Of these, one soil type (Esperance C_p phase) may contain areas at risk of waterlogging or salinity within the application area. This soil type is limited to a 100 metre stretch of road within the application area, and is therefore unlikely to contribute to appreciable land degradation as a result of the proposed clearing.

Given the absence of any watercourses or wetlands and the long, linear shape of the application area, it is considered that the proposed clearing is unlikely to cause appreciable land degradation in the forms of erosion, salinity, waterlogging or eutrophication.

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

Methodology

References:
DAFWA (2016)

GIS Databases:
- Aerial imagery
- Hydrography, linear

(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 application area consists of a 25 hectare linear strip 30 metres wide along Coolinup Road, and is located within a vegetated corridor 100 to 120 metres in width. Coolinup Road and the application area divide this corridor into strips of 20 to 30 metres wide on the north-western side of the application area and 45 to 70 metres wide on the south-western side. This corridor provides an ecological linkage between the Kau Rock Nature Reserve and other remnants of native vegetation in the local area. Noting the shape and extent of the proposed clearing, it is considered that the proposed clearing is unlikely to impact this ecological linkage.

The weed species African lovegrass (*Eragrostis curvula*) was recorded within the application area during the vegetation assessment (Shire of Esperance, 2016). No signs of dieback were observed. Given the connectivity between the application area and a nature reserve, the proposed clearing has the potential to increase the spread of weeds and introduce dieback into this conservation area. Potential impacts to the environmental values of Kau Rock Nature Reserve via weed invasion and dieback may be minimised by the implementation of weed and dieback management practices.

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

Methodology

References:
Shire of Esperance (2016)

GIS Databases:
- Parks and Wildlife tenure
- Remnant 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 is not likely to be at vraiance to this Principle

There are no watercourses or wetlands within or near the application area. The proposed clearing is not likely to impact the quality of surface water.

Groundwater salinity within the application area is mapped as 7,000 to 14,000 milligrams per litre total dissolved solids, which is considered to be saline to highly saline. Much of the local area has been cleared for agriculture, with 36 per cent of pre-European native vegetation remaining within a 10 kilometre radius of the application area. It is considered that the proposed clearing of seven hectares within a 25 hectare footprint is not likely to cause further deterioration in the quality of surface water.

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

Methodology

GIS Databases:
- Groundwater salinity, statewide
- 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

There are 12 soil types mapped within the application area, most of which are well-drained and not likely to be susceptible to localised flooding as a result of the proposed clearing (DAFWA, 2016). There are no wetlands or watercourses within or adjacent to the application area. It is considered that the proposed clearing of seven hectares within a footprint of 25 hectares in a linear shape is unlikely to cause or exacerbate the incidence or intensity of flooding in the local area.

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

Methodology

References:
DAFWA (2016)

GIS Databases:
- Hydrography, linear

Planning instruments and other relevant matters.

Comments

The applicant proposes to clear up to seven hectares of native vegetation within Coolinup Road reserve, Condingup and Mount Ney, for the purpose of road upgrades.

The clearing permit application was advertised in *The West Australian* on 15 August 2016 for a 21 day public submission period. No submissions were received.

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

Methodology

GIS Databases:
- Aboriginal Sites of Significance

4. References

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

Department of Agriculture and Food Western Australia (DAFWA) (2016) NRMInfo (Natural Resource Management) Portal. Department of Agriculture and Food Western Australia. URL: http://maps.agric.wa.gov.au/nrminfo/. Accessed September 2016.

Department of Environment and Conservation (DEC) (2011) Invasive Plant Prioritisation, Department of Environment and Conversation, Perth.

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.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Shire of Esperance (2016) Coolinup Road Construction Project. Vegetation, Flora, Fauna and Environmental Considerations Report. Unpublished report prepared by Julie Waters for the Shire of Esperance. DER REF: A1137950.

Threatened Species Scientific Committee (TSSC) (2014). Approved Conservation Advice for Proteaceae Dominated Kwongkan Shrublands of the southeast coastal floristic province of Western Australia. Canberra: Department of the Environment. Available from: http://www.environment.gov.au/biodiversity/threatened/communities/pubs/126-conservation-advice.pdf.