

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 5997/1

File Number:

DER2014/000455-1

Duration of Permit: From 7 June 2014 to 7 June 2016

PERMIT HOLDER

Mark Allen Osbourne-Orme Miriam Barbara Osbourne-Orme

LAND ON WHICH CLEARING IS TO BE DONE

Lot 241 on Deposited Plan 56078 (Brookhampton 6239)

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 8 hectares of native vegetation within the area hatched yellow on attached Plan 5997/1.

CONDITIONS

1. 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:

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

M Warnock

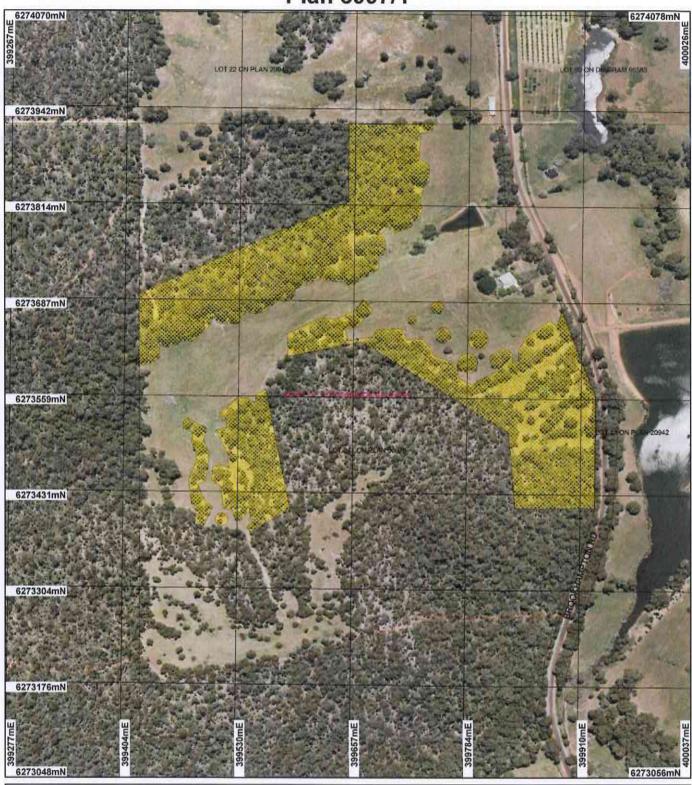
SENIOR MANAGER

CLEARING REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

8 May 2014

Plan 5997/1



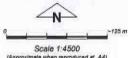


Boad Centrelines Local Government Authorities

Clearing Instruments

Areas Approved to Clear

Donnybrook 50cm Orthomosaic - Landgate 2004



Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric

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

Information derived from this map should be confirmed with the data custodian acknowleged by the agency acronym in the legend.



Government of Western Australia Department of Environment Regulation

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Clearing Permit Decision Report

Government of Western Australia Department of Environment Regulation

1. Application details

Permit application details

Permit application No.:

5997/1

Permit type:

Area Permit

1.2. Proponent details

Proponent's name:

Mark Allen and Miriam Barbara Osbourne-Orme

Property details 1.3.

Property:

LOT 241 ON PLAN 56078 (House No. 1268 BROOKHAMPTON BROOKHAMPTON 6239)

Local Government Area:

Shire Donnybrook-Balingup

Colloquial name:

Application

Clearing Area (ha) No. Trees Method of Clearing

For the purpose of:

Mechanical Removal

Dam construction or maintenance

Decision on application

Decision on Permit Application:

Grant

Decision Date:

8 May 2014

2. Site Information

Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

Mapped Beard Vegetation Association 1184 is described as medium woodland, fringing consisting of jarrah, marri, Eucalyptus rudis & Agonis flexuosa (Shepherd et al, 2001).

Mapped Mattiske Vegetation complex 'Hester Complex' (BLf) consists of tall open forest to open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla on lateritic uplands in perhumid and humid zones (Mattiske and Havel 1998).

Mapped Mattiske Vegetation complex 'Balingup Complex' (BL) consists of open forest of Eucalyptus marginata subsp. marginata, Corymbia calophylla on slopes and woodland of Eucalyptus rudis on the valley floor in the humid zone (Mattiske and Havel 1998).

Mapped Heddle Vegetation complex 'Lowdon Complex' consists of open forest of Corymbia calophylla, Eucalyptus marginata subsp. marginata, Agonis flexuosa with some Eucalyptus wandoo and occasional Corymbia haematoxylon on slopes, and woodland of Eucalyptus rudis, Melaleuca rhaphiophylla on valley floors in the humid zone (Heddle et al, 1980).

Clearing Description

The clearing of 8 hectares of native vegetation within Lot 241 on Deposited Plan 56078 is for the purposes of constructing a dam, grazing and fire hazard.

Vegetation Condition

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)

Comment

The condition and description of the vegetation was determined by a site inspection undertaken by the Department of Environment Regulation (DER 2014).

The application area is described as a tall open forest of Eucalyptus marginata and Corymbia calophylla with an understorey dominated by Pteridium esculentum in a good (Keighery 1994) condition (DER 2014). The vegetation comprises a lot of regrowth (Commissioner of Soil and Land Conservation 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 Proposal is not likely to be at variance to this Principle

The clearing of 8 hectares of native vegetation within Lot 241 on Deposited Plan 56078 is for the purposes of constructing a dam, grazing and fire hazard reduction.

The application area is described as a tall open forest of Eucalyptus marginata and Corymbia calophylla with an understorey dominated by Pteridium esculentum in a good (Keighery 1994) condition (DER 2014).

Several priority flora species have been recorded within the local area (10 kilometre radius). The closest being a Priority 2 flora species located approximately 5.7 kilometres south east of the application area. This species is found on red-grey sandy clay over quartzite upon steep westerly slopes (Western Australian Herbarium 1998-). Given the soils within the application area consisted of earths, duplexes and gravels (Commissioner of Soil and Land Conservation 2014) it is unlikely that this species occurs within the application area. The vegetation comprises a lot of regrowth (Commissioner of Soil and Land Conservation 2014).

There are no priority or threatened ecological communities mapped within the local area (10 kilometre radius).

A number of fauna species listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 have been recorded the Shire of Donnybrook-Balingup including: Forest Red-tailed Black-Cockatoo (Calyptorhynchus banksii subsp. naso), Baudin's Cockatoo (Calyptorhynchus baudinii), Carnaby's Cockatoo (Calyptorhynchus latirostris), Chuditch (Dasyurus geoffroii), Malleefowl (Leipoa ocellata), Numbat (Myrmecobius fasciatus), Southern Brush-tailed Phascogale (Phascogale tapoatafa subsp. tapoatafa), Western Ringtail Possum (Pseudocheirus Occidentalis) and Quokka (Setonix brachyurus).

The application area may provide foraging habitat for the black cockatoo species however there are large areas of remnant vegetation in similar or better quality vegetation within the adjacent East Kirup State Forest (comprises approximately 2100 hectares). There are several large mature Eucalyptus marginata and Corymbia calophylla within the application area that could possibly provide breeding habitat for the black cockatoo species, however a site inspection undertaken by DER (2014) did not identify any hollows suitable for breeding by the black cockatoo species.

There is approximately 55 per cent of native vegetation remaining in the local area (10 kilometre radius).

The vegetation under application is located adjacent to a mapped South West Regional Ecological Linkage. These linkages are recognised for their significance in facilitating indigenous fauna movement across the landscape (Molloy et al, 2009). Given the presence of extensively vegetated conservation areas adjacent to the application area, the proposed clearing will not result in fragmentation of this linkage and is unlikely to significantly impact fauna movement across the landscape.

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

Methodology

References:

- -Keighery (1994)
- -DER (2014)
- Molloy et al (2014)
- -Western Australian Herbarium (1998-)
- -Commissioner of soil and land conservation (2014)

GIS Databases:

- -NLWRA, Current Extent of Native Vegetation
- -SAC Bio Datasets (Accessed August 2013)
- -DEC Tenure
- -SWREL-AL

(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 Proposal is not likely to be at variance to this Principle

A number of fauna species listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 have been recorded within the Shire of Donnybrook Balingup including: Forest Red-tailed Black-Cockatoo (Calyptorhynchus banksii subsp. naso), Baudin's Cockatoo (Calyptorhynchus baudinii), Carnaby's Cockatoo (Calyptorhynchus latirostris), (Dasyurus geoffroii) Chuditch, Malleefowl (Leipoa ocellata), Numbat (Myrmecobius fasciatus), Southern Brush-tailed Phascogale (Phascogale tapoatafa subsp. tapoatafa), Western Ringtail Possum (Pseudocheirus Occidentalis) and Quokka (Setonix brachyurus).

Black cockatoo's forage on the seeds, nuts and flowers of proteaceous species (banksia, hakea, grevillea), as well as allocasuarina and eucalyptus species (Valentine and Stock, 2008). Suitable foraging habitat is located within the application area and during a site inspection undertaken by DER (2014) black cockatoos were observed within the application area. However, there are large areas of native vegetation in similar or better

condition occurring within the adjacent East Kirup State Forest (comprising approximately 2100 hectares) that is likely to provide significant foraging habitat for the black cockatoo species. The clearing of 8 hectares of native vegetation within Lot 241 is not likely to have an impact on significant foraging habitat available to this species.

A number of large mature Eucalyptus marginata and Corymbia calophylla were present throughout the application area. Although these trees were of an age and size to produce suitable breeding hollows for black cockatoos, no obvious nest hollows were recorded during the site inspection undertaken by DER (2014). The applicant has advised that some large trees will be retained for shade within the area proposed to be cleared for grazing in the most south eastern portion of the application. Suitable breeding habitat is likely to be located within the adjacent state forest and therefore the clearing as proposed is not likely to have a significant impact on breeding habitat for the black cockatoo species.

Given the good (Keighery 1994) condition of the vegetation under application, suitable habitat for ground dwelling fauna maybe located within the application area. However, suitable habitat in a better condition is located within the adjacent state forest and no loss of significant habitat for ground dwelling fauna is expected.

The vegetation under application is located adjacent to a mapped South West Regional Ecological Linkage. These linkages are recognised for their significance in facilitating indigenous fauna movement across the landscape (Molloy et al, 2009). Given the presence of extensively vegetated conservation areas adjacent to the application area, the proposed clearing will not result in fragmentation, and is unlikely to significantly impact fauna movement associated with this linkage.

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

Methodology

References:

- DER (2014)
- Keighery (1994)
- Valentine and Stock (2008)
- Molloy et al (2009)

GIS Databases:

- SAC Bio Datasets - accessed April 2014

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

Comments

Proposal is not likely to be at variance to this Principle

One rare flora species has been recorded within the local area (10 kilometre radius) being recorded approximately 6.8 kilometres north of the application area.

This species is located on sandy or sandy clay soils, winter-wet flats, granite (Western Australian Herbarium 1998-).

Given the soils within the application area consist of earths, duplexes and gravels (Commissioner of Soil and Land Conservation 2014) it is unlikely that this species occurs within the application area.

Given the above the vegetation proposed to be cleared is not likely to contain rare flora species.

Therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology

References:

- Northcote et al (1960-68)
- Western Australian Herbarium (1998-)

GIS Database:

- SAC Bio Datasets - accessed April 2014

(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

Proposal is not likely to be at variance to this Principle

There are no threatened ecological communities mapped within the local area (10 kilometre radius), therefore the application area is not likely to comprise the whole or part of, or be necessary for the maintenance of a threatened ecological community.

Methodology

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

GIS Database:

- SAC Bio Datasets - accessed April 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 Proposal is not likely to be at variance to this Principle

The area under application is located within the Jarrah Forest Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 55 per cent of its Pre European vegetation extent remaining (Government of Western Australia 2013).

The vegetation under application is mapped as Beard Vegetation Associations 1184, Mattiske Vegetation Complexes 'Hester' and 'Balingup' and Heddle Vegetation Complex 'Lowden which have approximately 41, 75, 32 and 42 per cent of their Pre-European extent remaining in the Jarrah Forrest bioregion respectively (Government of Western Australia 2013).

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).

Digital imagery indicates that the local area (10 kilometre radius) surrounding the area under application retains approximately 55 per cent vegetation cover.

The majority of the vegetation under application is in a good (Keighery, 1994) condition (DER 2014) and is located within close proximity to an ecological linkage, however given the vegetation representations outlined above, the area under application is not likely to be a significant remnant in an extensively cleared area.

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

	Pre-European	Current Exter	30019 B	Extent in DEC Manag	jed Lands
	(ha)	(ha)	(%)	(%)	
IBRA Bioregion*					
Jarrah Forest	4,506,660	2,459,298	55	68	
Shire*					
Shire of Donnybrook Balingup 156,003		88,337	57	83	
Beard Vegetation Assoc	iation in Bioregion*				
1184	63,562	25,788	41	56	
Mattiske Vegetation Con	nplex	Treat - The Property			
Hester Complex	32,250	24,492	75	68	
Balingup Complex	59,447	18,823	32	15	
Heddle Vegetation Comp	CM6500 N=0406000	0.6000000000000000000000000000000000000			
Lowdon Complex	63	430	26 549	42	22.5

^{*}Government of Western Australia (2013)

Methodology

References:

- -Commonwealth of Australia (2001)
- -Government of Western Australia (2013)
- -Mattiske and Havel (1998)
- -Heddle et al (1980)
- -Keighery (1994)
- -DER (2014)

GIS Databases:

-NLWRA, Current Extent of Vegetation Remaining

(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 Proposal may be at variance to this Principle

A minor non-perennial watercourse is located adjacent to the application area.

A major watercourse, 'Thomson Brook South' is located approximately 90 metres from the application area. The minor watercourse adjacent to the application area is a tributary of this major watercourse.

Given a minor watercourse is located adjacent to the area under application the clearing proposed may be growing in association with this watercourse. Given the purpose of clearing includes constructing a dam, the clearing proposed may impact the adjacent minor watercourse by increasing runoff. However runoff is expected to be short term and minimal and only a small amount of riparian vegetation may be impacted upon by the proposed clearing therefore no significant impacts to the environmental values of the watercourse is

^{**}Mattiske and Havel (1998)

^{***} Heddle (1980)

expected.

Given the above the clearing as proposed may be at variance to this principle.

Methodology

GIS Databases:

- Hydrology, linear

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

Comments

Proposal is not likely to be at variance to this Principle

A site inspection undertaken by the Department of Agriculture and Food Western Australia identified the dominate landform and soil type with the application area as 'Balingup moderate slopes phase' (255LvBL4) which consists of moderate valley slopes on colluviums over gneiss and granite. Friable red-brown earths, brown loamy earths, brown deep loamy duplexes and loamy gravels (Commissioner of Soil and Land Conservation 2014).

The Commissioner of Soil and Land Conservation (2014) advised that the risk of flooding, waterlogging, wind erosion and salinity causing land degradation is low given the soil types present within the application area.

The Commissioner of Soil and Land Conservation (2014) has advised that the risk of land degradation occurring as a result of the proposed clearing is low, although there is some risk of accelerated soil erosion during the clearing and development phase. Earthworks could be employed to reduce any risk of soil erosion. The intended land use and permanent pasture cover would also lessen the risk of soil erosion (Commissioner of Soil and Land Conservation 2014).

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

Methodology

References:

-Commissioner of Soil and Land Conservation (2014)

GIS Databases:

- Soils, statewide

(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

Proposal may be at variance to this Principle

The application area is located adjacent to East Kirup State Forest. A number of conservation areas are located within the local area (10 kilometre radius).

The application area is located within close proximity of a mapped South West Regional Ecological Linkage. These linkages act as stepping stones of high quality habitat thereby facilitating the maintenance of ecological processes and are recognised for their significance in facilitating indigenous fauna movement across the landscape (Molloy et al, 2009).

Given the presence of extensively vegetated conservation areas adjacent to the application area, the proposed clearing will not result in fragmentation of the linkage and is unlikely to significantly impact fauna movement across the landscape.

The clearing proposed may indirectly impact the adjacent conservation area through the spread of weeds and dieback. Weed and dieback management measures will help mitigate this risk.

Given the above the clearing as proposed may be at variance to this principle.

Methodology

References:

- Molloy et al (2009)

GIS Databases:

- DEC, Tenure

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Comments

Proposal is not likely to be at variance to this Principle

A minor non-perennial watercourse is located adjacent to the application area.

A major watercourse, 'Thomson Brook South' is located approximately 90 metres from the application area. The minor watercourse adjacent to the application area is a tributary of this major watercourse.

Given the purpose of clearing includes constructing a dam, the clearing proposed may impact the surface water quality of the adjacent minor watercourse by increasing runoff. However, impacts to this watercourse are expected to be short term and minimal and no significant impacts to the environmental values of the minor

watercourse are expected.

Groundwater Salinity ranges from 500 -1000 milligrams per litre of Total Dissolved Solids (TDS) which is considered to be marginal. Given the low salinity level and the extensively vegetation areas adjacent to the application area the clearing proposed is not likely to cause deterioration in the quality of underground water.

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

Methodology

GIS Databases:

Hydrology, 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

Proposal is not likely to be at variance to this Principle

The clearing of 8 hectares of native vegetation is unlikely to significantly increase surface run off, which would contribute to stream flows and therefore result in flooding (Commissioner of Soil and Land Conservation 2014). The risk of flooding is low (Commissioner of Soil and Land Conservation 2014).

Therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology

References:

-Commissioner of Soil and Land Conservation (2014)

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments

The Shire of Donnybrook-Balingup (2014) has advised there are no town planning controls relating to the proposed clearing in the current or proposed Town Planning Scheme within the 'General Farming - Pastoral zone'. There is no requirement for a planning application.

No submissions from the public have been received for the proposed clearing.

The application area is mapped within the Aboriginal Site of Significance, 'Kirup'. This applicant will be notified of their obligations under the Aboriginal Heritage Act 1972.

Methodology

References:

- Shire of Donnybrook-Balingup (2014)

GIS Databases:

- Aboriginal Sites of Significance

4. References

- Commissioner of Soil and Land Conservation (2014); Land Degradation Advice and Assessment Report for clearing permit application CPS 5997/1 received 10 April 2014; Department of Agriculture and Food Western Australia (DER Ref: A747237).
- DEC (2007) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: http://naturemap.dec.wa.gov.au/. Accessed April 2014
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.
- Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249.

 Department of Agriculture Western Australia. South Perth.
- Shire of Donny Brook Balingup (2014) Advice for Clearing Permit Application CPS 5997/1. Western Australia. DER Ref: A734093.
- Western Australian Herbarium (1998-) FloraBase The Western Australian Flora. Department of Parks and Wildlife. http://florabase.dpaw.wa.gov.au/ (Accessed April 2014).