



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 6207/1
File Number: DER2014/001678-1
Duration of Permit: From 22 November 2014 to 22 November 2017

PERMIT HOLDER

Mark Ryan Eaton

LAND ON WHICH CLEARING IS TO BE DONE

Lot 77 on Deposited Plan 222501 (Gledhow 6330)

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 2.3 hectares of native vegetation within the area hatched yellow on attached Plan 6207/1.

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;

2. Vegetation management

The Permit Holder shall not clear native vegetation within 10 metres of any *watercourse* located within the area cross-hatched yellow on Plan 6207/1.

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;

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.

A handwritten signature in black ink, appearing to read "M Warnock".

M Warnock
SENIOR MANAGER
CLEARING REGULATION

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

23 October 2014

Plan 6207/1



LEGEND

- Cadastre for labelling
- Road Centrelines
- Local Government Authorities
- Clearing Instruments
- Areas Approved to Clear

Albany Townsite 20cm
Orthomosaic - Landgate
2007



Scale 1:3000
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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

M Warnock Date *23/06/14*
M Warnock

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 acknowledged
by the agency acronym in the legend.



Government of Western Australia
Department of Environment Regulation

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Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6207/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: MR Mark Ryan Eaton

1.3. Property details

Property: LOT 77 ON PLAN 222501 (House No. 62 HARROGATE GLEDHOW 6330)
Local Government Area: City of Albany
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.3		Mechanical Removal	Grazing & Pasture

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 23 October 2014

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 3 is described as medium forest; jarrah-marri (Shepherd et al 2001).	The proposed clearing of 2.3 hectares of native vegetation within Lot 77 on Deposited Plan 222501, Gledhow is for the purpose of the removal of pest species and grazing.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The Department of Water (DoW 2014) advised that the area under application is dominated by Taxandria sp., Melaleuca sp. and sedges
Mapped Beard vegetation association 968 is described as medium woodland; jarrah, marri & wandoo (Shepherd et al 2001).		To	Invasive species are present and well established within the area under application (Commissioner of Soil and Land Conservation 2014).
		Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	

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 application is to clear up to 2.3 hectares of native vegetation within Lot 77 on Deposited Plan 222501, Gledhow for the purpose of removal of pest species and grazing. The applicant has advised that currently the grazing consists of two alpacas and two miniature goats and that they do not intend to add any additional livestock on the property.

The area under application is in a degraded to good (Keighery 1994) condition.

The area under application is dominated by Taxandria sp., Melaleuca sp. and sedges (DoW 2014). Invasive species area present and well established within the area under application (Commissioner of Soil and Land Conservation 2014).

A number of fauna species listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 have been recorded within the local area (10 kilometre radius) including: Woylie (*Bettongia penicillata* subsp.

ogilbyi), Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii* subsp. *naso*), Baudin's Cockatoo (*Calyptorhynchus baudinii*), Carnaby's Cockatoo (*Calyptorhynchus latirostris*), Chuditch (*Dasyurus geoffroii*), Western Mud Minnow (*Galaxiella munda*), Bilby (*Macrotis lagotis*), Southern Brush-tailed Phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*), Western Ringtail Possum (*Pseudocheirus occidentalis*) and Quokka (*Setonix brachyurus*) (DEC 2007-).

Numerous priority flora species have been recorded within the local area (10 kilometre radius), the closest being a Priority 3 flora species located approximately 600 metres south east of the area under application. This species is found within winter-wet swamps and creeklines (Western Australian Herbarium 1998-). Given a watercourse intersects the application area suitable habitat for this species may be located within the area under application. However Priority 3 taxa are generally known from collections from several different localities not under imminent threat and therefore the clearing as proposed is not likely to have a significant impact on the conservation status of this species. The area under application has been previously cleared, contains vegetation in a good to degraded (Keighery 1994) condition and has invasive weed species present. Therefore the clearing as proposed is not likely to contain or have a significant impact on the conservation status of priority flora species.

Nine rare flora species have been recorded within the local area (10 kilometre radius). The area under application does not contain suitable habitat for any of the rare flora species and therefore it is unlikely that rare flora species are located within the area under application.

The clearing proposed may indirectly impact remnant vegetation within and adjacent to Lot 77 through the spread of weeds and dieback. Weed and dieback management practices will help mitigate this risk.

Given the above the clearing as proposed is not likely to comprise a high biological diversity. Therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology

References:

- Commissioner of Soil and Land Conservation (2014)
- DEC (2007-)
- DoW (2014)
- Keighery (1994)
- Western Australian Herbarium (1998-)

GIS Databases:

- SAC Datasets accessed - August 2014

(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 local area (10 kilometre radius) including: Woylie (*Bettongia penicillata* subsp. *ogilbyi*), Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii* subsp. *naso*), Baudin's Cockatoo (*Calyptorhynchus baudinii*), Carnaby's Cockatoo (*Calyptorhynchus latirostris*), Chuditch (*Dasyurus geoffroii*), Western Mud Minnow (*Galaxiella munda*), Bilby (*Macrotis lagotis*), Southern Brush-tailed Phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*), Western Ringtail Possum (*Pseudocheirus occidentalis*) and Quokka (*Setonix brachyurus*) (DEC 2007-).

The area under application is dominated by *Taxandria* sp., *Melaleuca* sp. and sedges (DoW 2014).

The application area may provide habitat for ground dwelling fauna including the Chuditch and Quokka. However, the area under application has been previously cleared, is in a degraded to good (Keighery 1994) condition and is prone to weed invasion. Therefore the area under application is not likely to provide significant habitat for local fauna species.

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

Methodology

References:

- DEC (2007-)
- DoW (2014)

GIS Databases:

- SAC Datasets accessed - August 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

Nine rare flora species have been recorded within the local area (10 kilometre radius). The closest being recorded approximately two kilometres south west of the area under application. This species is found within heathland on flat to gentle slope growing in white sand or laterite gravel with the parent soil material being laterite. This species is found within vegetation consisting of *Allocasuarina humilis*, *Banksia grandis*, *Adenanthos cuneatus*, *Hakea ruscifolia* and *Melaleuca thymoides* (Department of the Environment 2014). The vegetation within the area under application is dominated by *Taxandria* sp., *Melaleuca* sp. and sedges and therefore suitable habitat for this species is not located within the area under application.

In addition suitable habitat for the remaining eight rare flora species is not likely to be located within the area under application.

Given the above the vegetation proposed to be clearing is not likely to include or be necessary for the continued existence of rare flora.

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

Methodology

References:

- Department of the Environment (2014)

GIS Databases:

- SAC Datasets accessed - August 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

No threatened ecological communities (TEC) have been recorded within the local area (10 kilometre radius).

Therefore the vegetation proposed to be cleared is not likely to comprise of or be necessary for the maintenance of a TEC.

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

Methodology

GIS Databases:

- SAC Datasets accessed - August 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 54 per cent of its Pre European vegetation extent remaining (Government of Western Australia 2013).

The vegetation under application is mapped as Beard Vegetation Associations 3 and 978 which have approximately 68 and 50 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).

The local area (10 kilometre radius) surrounding the area under application retains approximately 25 per cent vegetation cover.

Given the vegetation representations outlined above, the clearing as proposed is not considered to be located within an extensively cleared area.

The vegetation under application is not considered to comprise a high biological diversity, priority or rare flora or significant habitat for fauna, therefore the clearing as proposed is not considered to be a significant remnant.

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

Lands	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed (%)
IBRA Bioregion*				
Jarrah Forest	4,506,660	2,457,731	54	68
Shire*				
City of Albany	431,370	166,839	39	25
Beard Vegetation Association in Bioregion*				
978	140,823	71,035	50	50
3	2,390,591	1,629,894	68	80

* Government of Western Australia (2013)

Methodology References:

- Commonwealth of Australia (2001)
- Government of Western Australia (2013)

GIS Databases:

- Local Government Authorities - Landgate
- 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 **Proposal is at variance to this Principle**

A minor watercourse intersects the area under application. This water course feeds into a network of drains and modified water courses into the Gledhow wetlands, an unclassified wetland system located approximately 1.8 kilometres downstream.

The Department of Water (DoW 2014) has advised that a Multiple Use wetland is mapped over the entire application area. Multiple Use wetlands are said to be wetlands with few important ecological attributes and functions remaining (Water and Rivers Commission 2001). Therefore the clearing of 2.3 hectares of native vegetation is not likely to have a significant environmental impact on wetland conservation values.

DoW (2014) has advised that two minor waterways drain through the property which drains into the Robinson Drain and ultimately Princess Royal Harbour.

Given the presence of the watercourse and wetland within the area under application the vegetation proposed to be cleared is considered to be growing in association with a wetland or watercourse.

Therefore the clearing as proposed is at variance to this principle.

The requirement for a 10 metre buffer to this watercourse will help mitigate impacts to the environmental values of the watercourse.

Methodology References:

- DoW (2014)
- Water and Rivers Commission (2001)

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

The soils on the areas proposed to be cleared have been mapped as Dempster Slope Phase, map unit 242KgDMs. These are gentle slopes on sand and deeply weathered siltstone, duplex sandy gravels and pale deep sand gravel soils (Commissioner of Soil and Land Conservation 2014).

The application area is located in the mid slope position in the landscape. Although the landscape generally falls to the south, there is an absence of defined natural drainage lines in the vicinity of the application area. An eroded drain runs through the property and appears to be connected to the drain flowing to the harbour at Lockyer Bay about four kilometres away (Commissioner of Soil and Land Conservation 2014).

The proposed clearing has a low risk of water and wind erosion because of the land slope and soil types present within the area under application (Commissioner of Soil and Land Conservation 2014). The Commissioner of Soil and Land Conservation (2014) has advised that the risk of appreciable land

degradation occurring as a result of the proposed land clearing is low. However, this assumes that the cleared vegetation will be replaced with kikuyu perennial pasture and that the potential incremental increase in nutrient export is offset by the control of the weed species

Therefore 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 is not likely to be at variance to this Principle**

Gledhow Nature Reserve is located approximately 500 metres south west of the application area. A Conservation Park is located approximately 700 metres south west of the application area.

Given the distance to the closest conservation area the clearing as proposed is not likely to impact on any conservation areas.

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

Methodology GIS Databases:
- Parks and Wildlife, Tenure

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

Comments **Proposal is not likely to be at variance to this Principle**

A minor watercourse intersects the area under application. This watercourse feeds into a network of drains and modified water courses into the Gledhow wetlands, an unclassified wetland system, approximately 1.8 kilometres downstream.

DoW (2014) has advised the entire application area is mapped as a multiple use wetland. Multiple Use wetlands are said to be wetlands with few important ecological attributes and functions remaining (Water and Rivers Commission 2001).

DoW (2014) has advised that two minor waterways drain through the property which drain into the Robinson Drain and ultimately Princess Royal Harbour.

The clearing as proposed may increase runoff and sedimentation into the watercourse intersecting the application area. However, the impacts are likely to be minimal and short term and therefore the clearing as proposed is not likely to cause deterioration in the quality of surface water.

The requirement to retain a 10 metre buffer to the wetland will help mitigate impacts to this watercourse.

Groundwater salinity is mapped between 500-1000 milligrams per litre total dissolved solids (TDS) which is considered to be marginal. Given the low salinity levels of the area under application the clearing of 2.3 hectares of native vegetation 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 References:
- DoW (2014)
- Water and Rivers Commission (2001)

GIS Databases:
- 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 **Proposal is not likely to be at variance to this Principle**

The Commissioner of Soil and Land Conservation (2014) has advised that the proposed clearing is unlikely to increase the risk of waterlogging or flooding.

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 City of Albany (2014) has advised that the area under application is zoned 'General Agriculture' however Lot 77 is only 3.7 hectares in area and is not conducive to a viable agricultural enterprise. Any primary production would have to be intensive and there is a waterway through the centre of the lot running north to south which would restrict the useable area of the lot. There are also two smaller waterways that join the central waterway at this location. The area under application is very boggy/peaty area and machinery access would likely be limited. The City of Albany (2014) advised that there are some woody and other weeds within the vegetation proposed to be cleared, which would be beneficial to be controlled. Despite the condition of the vegetation, given the watercourse present the City of Albany would usually seek to protect riparian vegetation to a minimum 30 metres either side of the watercourse. Therefore the City of Albany does not support the blanket clearing of 2.3 hectares of native vegetation.

DoW (2014) has advised that the site is wet and not appropriate for the end land use of grazing. DoW (2014) would not support this application.

The applicant has advised that the property is a residential lifestyle property of less than four hectares. Livestock on the property consists of two alpacas and two miniature goats and they do not intend to add any additional livestock on the property. Therefore the impacts associated with grazing are expected to be minimal.

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

Methodology References:
- City of Albany
- DoW (2014)

GIS Databases:
- Aboriginal Sites of Significance

4. References

- Brown A., Thomson-Dans C. and Marchant N. (1998). Western Australia's Threatened Flora, Department of Conservation and Land Management, Western Australia.
- City of Albany (2014) Advice for Clearing Permit CPS 6207/1. Western Australia. DER Ref: A802249
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- DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed August 2014
- Department of the Environment (2014). *Calectasia cyanea* in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: <http://www.environment.gov.au/sprat>. Accessed October 2014
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- 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.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western 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.
- Water and Rivers Commission (2001) Position Statement: Wetlands, Water and Rivers Commission, Perth.
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <http://florabase.dpaw.wa.gov.au/> (Accessed August 2014).