



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 5478/1
File Number: 2011/006815-1
Duration of Permit: From 24 May 2013 to 24 May 2015

PERMIT HOLDER

Shire of Bruce Rock

LAND ON WHICH CLEARING IS TO BE DONE

Lot 300 on Deposited Plan 75837 (Reserve 19359, KWOLYIN 6385)
Kwolyin Street road reserve (KWOLYIN 6385) (PIN: 1361973)
Norwich Street road reserve (KWOLYIN 6385) (PIN: 1361972)
Un named Road reserve (KWOLYIN 6385) (PIN: 1361974)

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 1.8 hectares of native vegetation within the area hatched yellow on attached Plan 5487/1a.

CONDITIONS

1. 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*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *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. Offset - Revegetation Plan

The Permit Holder must, within the area shaded red on attached Plan 5478/1b, implement and adhere to the offset commitments as outlined in the "Clearing Permit Application 5478/1 – Offset Project" received via email (Appendix A), dated 11 April 2013 and to the Supplementary Information received via email, dated 22 April 2013 and 24 April 2013 (Appendix B and Appendix C).

3. Records must be kept

In relation to the Offset – Revegetation of areas pursuant to condition 2:

- (a) the location of any area of offsets recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
- (b) a description of the offset activities undertaken; and
- (c) the size of the offset area (in hectares); and

4. Reporting

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
 - (i) of records required under condition 3 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.
- (c) Prior to 24 February 2013, the Permit Holder must provide to the CEO a written report of records required under condition 3 of this Permit where these records have not already been provided under condition 4(a) of this Permit.

DEFINITIONS

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

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 declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*;
or
- (b) published in the Department of Environment and Conservation Regional Weed Assessments, regardless of ranking; or
- (c) not indigenous to the area concerned.



M Warnock
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH





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

2 May 2013

Plan 5478/1a



LEGEND

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

Kellerberrin 50cm
Orthomosaic - Landgate 2004



Scale 1:4890
(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 *2/5/13*

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.



Department of Environment and Conservation

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Plan 5478/1b



LEGEND

- Road Centrelines
- Cadastre for labelling
- Clearing Instruments
- Areas Subject to Conditions

Kellerberrin 50cm
Orthomosaic - Landgate 2004



0 ————— 125 m

Scale 1:4900

(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 *2/5/13*

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.



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1. Application details

1.1. Permit application details

Permit application No.: 5478/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Bruce Rock

1.3. Property details

Property: KWOLYIN TOWNSITE LOT 69 (House No. 1 KOARIN KWOLYIN 6385)
ROAD RESERVE (KWOLYIN 6385)
ROAD RESERVE (KWOLYIN 6385)
Local Government Area: Shire of Bruce Rock
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.8		Mechanical Removal	Building or Structure

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 2 May 2013

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 1023 is described as medium woodland; York gum, wandoo & salmon gum (Eucalyptus salmonophloia) (Shepherd et al 2001).	The application proposes to clear up to 1.8 hectares of native vegetation for the purpose of constructing camping areas, toilets, kitchen, parking, caravan sites and an access road.	Completely Degraded; No longer intact; completely/almost completely without native species (Keighery 1994)	The condition of the vegetation under application was determined by aerial imagery (Kellerberrin 50cm Orthomosaic - Landgate 2001)
Mapped Beard vegetation association 954 is described as shrublands; thicket, Jam & Allocasuarina huegeliana (Shepherd et al 2001).	The application area is described as disturbed woodland which has been degraded through informal recreation in the past (DEC 2013). The applicant has advised that the site has traditionally been a recreation reserve and has seen football oval, tennis courts and club and netball courts. The vegetation proposed to be cleared consists of mostly jam woodland species (Acacia acuminata).	To	
	The applicant has advised the clearing will consist mainly of jam woodland species and that they hope to retain all Eucalypts. The majority of the clearing will be able to route around trees and preserve as much standing timber as possible. The application area of 1.8 hectares indicates only the area to be disturbed.	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 may be at variance to this Principle

The application proposes to clear up to 1.8 hectares of native vegetation for the purpose of constructing camping areas, toilets, kitchen, parking, caravan sites and an access road.

The application area is described as disturbed woodland which has been degraded through informal recreation in the past (DEC 2013). The applicant has advised that the site has traditionally been a recreation reserve and has seen football oval, tennis courts and club and netball courts. The vegetation proposed to be clearing will consist of mostly jam woodland species (Acacia acuminata).

The local area (10 kilometre radius) retains approximately 8 per cent vegetation cover.

One fauna species, *Petrofale lateralis* subsp. *Lateralis* (Black-flanked wallaby), listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 has been recorded within the local area (10 kilometre radius) (DEC 2007-). The application area may provide habitat for the Black-flanked wallaby however given the small area under application (1.8 hectares) within a larger footprint (4.75 hectares), vegetation remaining within Lot 300 and the adjacent nature reserve will provide habitat for the Black-flanked wallaby and no significant loss to this species habitat is expected.

Numerous priority and rare flora have been recorded within the local area. Suitable habitat for one Priority 1 and one Priority 3 species may occur within the application area. The Priority 3 species is found on lateritic gravelly soils and the Priority 1 species is found on white or grey clayey sands (Western Australian Herbarium 1998-). Given the disturbed nature of the area proposed to be cleared and the small amount of clearing (1.8 hectares within a 4.75 hectare footprint) if these priority flora species did occur within the application the clearing as proposed would not likely have a significant impact on the conservation status of these species. Weed and Dieback practices will help mitigate impacts to these priority flora species.

Given the application area is located within an extensively cleared area and may contain priority flora and habitat for fauna the clearing as proposed maybe at variance to this principle

Methodology

References:

- DEC (2007-)
- DEC (2013)
- Western Australian Herbarium (1998-)

GIS Databases:

- Kellerberrin 50 cm Orthomosaic - Landgate 2004
- SAC Biodata sets - accessed March 2013

(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 at variance to this Principle

One fauna species listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 has been recorded within the local area (10 kilometre radius). The *Petrofale lateralis* subsp. *lateralis*'s (Black-flanked Rock-wallaby) habitat varies between colonies but always involves grassland habitat for feeding in close proximity to cliff, rock-pile, talus or escarpment refuge habitat. Rock cliffs or other steep substrates with adequate shelter and refuge are essential for breeding. The Black-flanked Rock-wallaby feeds on grasses, herbs, leaves and fruits (Department of Sustainability, Environment, Water, Population and Communities (2013).

The application area may provide feeding habitat for the Black-flanked wallaby however given disturbed nature and small area under application (1.8 hectares) within a larger footprint (4.75 hectares), vegetation remaining within Lot 300 and the adjacent nature reserve will provide habitat for the Black-flanked wallaby.

Digital imagery (Kellerberrin 50cm Orthomosaic - Landgate 2001) indicates that the local area (10 kilometre radius) retains approximately 8 percent vegetation cover.

Given the low vegetation representation within the local area and distances to conservation reserves and other remnants of native vegetation, the applied area is a significant as a stepping stone to link these areas ecologically, and facilitate the gene transfer that sustains their viability and conservation value. The proposed clearing will increase the distance fauna has to negotiate between remnant patches of vegetation, increasing the risk of predation.

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

To address the environmental impacts identified in this assessment the applicant has proposed an offset package that proposes to undertake a tree planting programme within the remnant vegetation surrounding the proposed clearing area within Lot 300.

Dieback and weed control measures will assist in preventing further indirect impacts to the surrounding

Methodology

References:

- DEC (2007-)
- DEC (2013)
- Department of Sustainability, Environment, Water, Population and Communities (2013)
- Shire of Bruce Rock (2013)

GIS Database:

- SAC Biodata sets - accessed March 2013

(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

Four species of rare flora have been recorded in the local area (10 kilometre radius). The shallow, stoney sandy soil type of the application area is not the preferred soil type for the rare flora species located within the local area.

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

Methodology GIS Database:
- SAC Biodata sets - accessed March 2013

(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 in the local area (10 kilometre radius).

The closest TEC is 'Perched wetlands of the Wheatbelt region with extensive stands of Casuarina obesa and Melaleuca strobophylla' located approximately 84 kilometres south west from the application area.

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

Methodology GIS Databases:
- SAC Biodata sets - accessed March 2013

(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 at variance to this Principle

The area under application is located within the Swan Coastal Plain Interim Biogeographic Regionalisation of Australia (IBRA) region. This IBRA bioregion has approximately 18 per cent of its Pre European vegetation extent remaining (Government of Western Australia).

The vegetation under application is mapped as Beard Vegetation Associations 1023 and 954 which have approximately 11 and 25 percent of their Pre European extent remaining in the Avon Wheatbelt Bioregion respectively (Government of Western Australia 2011).

Digital imagery (Kellerberrin 50cm Orthomosaic - Landgate 2001) indicates that the local area (10 kilometre radius) retains approximately 8 percent vegetation cover.

Although the vegetation under application has been disturbed by previous recreational activities, the vegetation provides habitat for fauna species located in the local area. Given the vegetation representation in the local area it is considered that the vegetation under application is significant as a remnant in an area that has been extensively cleared.

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

To address the environmental impacts identified in this assessment the applicant has proposed an offset package that proposes to undertake a tree planting programme within the remnant vegetation surrounding the proposed clearing area within Lot 300.

Dieback and weed control measures will assist in preventing further indirect impacts to the surrounding remnant vegetation.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Avon Wheatbelt	9,517,110	1,732,027	18	10
Shire*				
Shire of Bruce Rock	272,505	24,383	9	18
Beard Vegetation Association in Bioregion*				
1023	1,522,676	166,796	11	10
954	6,502	1,616	25	20

* Government of Western Australia 2011

Methodology Reference:
-Government of Western Australia. (2011).

GIS Database:
-Kellerberrin 50cm Orthomosaic - Landgate 2008
- NLWRA, Current Extent of Native
-Sac bio datasets - accessed March 2013

(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 not likely to be at variance to this Principle**
No watercourses or wetlands are located within the application area.

Two minor perennial watercourses are located approximately 130 metres south east and 145 metres west of the application area. The closest major watercourse is Lockhart River located approximately 6.5 kilometres north east of the application area.

Given distance to the closest watercourse the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Database:
- 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**
Northcote et al (1968) describes mapped soil type JJ16 as 'Broken terrain characterized by rock outcrops (granitic bosses and tors) which may cover very large areas within the unit: shallow and often stony or gritty sandy soils form a soil scree around the areas of bare rock.

Given small area proposed to be cleared (1.8 hectares) within a larger foot print (4.75 hectares) and the soil type within the application area the clearing as proposed is not likely to cause appreciable land degradation.

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

Methodology References:
-Northcote et al (1968)

GIS Database:
-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 at variance to this Principle**
The vegetation under application is in an area that has been significantly cleared. The vegetation under application is part of a relatively large (approximately 136 hectares) remnant of native vegetation. Approximately 90 hectares of this remnant is designated to a Class C Nature Reserve.

Numerous conservation areas are located within the local area (10 kilometre radius). The application area is located approximately 15 metres east of a Class C Nature Reserve.

The disturbance resulting from the proposed clearing may increase the risk of weeds and dieback spreading into this conservation area. Weed and dieback management practices would assist in mitigating this risk.

Digital imagery (Kellerberrin 50cm Orthomosaic - Landgate 2001) indicates that the local area (10 kilometre radius) retains approximately 8 percent vegetation cover.

Given the low vegetation representation within the local area and distances to conservation reserves and other remnants of native vegetation, the applied area is a significant as a stepping stone to link these areas ecologically, and facilitate the gene transfer that sustains their viability and conservation value.

The proposed clearing of 1.8 hectares of this remnant is at variance to this principle.

To address the environmental impacts identified in this assessment the applicant has proposed an offset

package that proposes to undertake a tree planting programme within the remnant vegetation surrounding the proposed clearing area within Lot 300. Additional details of this proposal are required.

Methodology 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**
No watercourses or wetlands are located within the application area.

Two minor perennial watercourses are located approximately 130 metres south east and 145 metres west of the application area. The closest major watercourse is Lockhart River located approximately 6.5 kilometres north east of the application area.

Groundwater salinity is mapped as ranging between 14000-35000 mg/L which is considered Highly Saline. The clearing of 1.8 hectares within a larger remnant is not likely to cause deterioration in the quality of underground water.

Given the small size of the application area and the distance to the closest watercourse the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Database:
- 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**
Given the soil type and the relatively low mean rainfall (400mm) the clearing as proposed is not likely to cause or exacerbate the incidence or intensity of flooding.

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

Methodology GIS Database:
- Rainfall, Mean Annual
- Soils, statewide

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

Comments

The application proposes to clear up to 1.8 hectares of native vegetation for the purpose of constructing camping areas, toilets, kitchen, parking, caravan sites and an access road.

The purpose of the proposed construction of the camping area and associated infrastructure is to alleviate growing numbers of overnight stays at Kokerbin Rock Nature Reserve, located 10 kilometres north west of the application area. This reserve is small (90 hectares) and is home to the endangered black flanked wallaby, due to increasing numbers of campers at this site campers have resulted camping within this reserve. The completion of this project will enable the camping grounds at Kokerbin Rock Nature Reserve to close and provide day visiting only and therefore reduce the impacts associated with camping upon this nature reserve.

Lot 300 is zoned 'Camping and Recreation' under the local town planning scheme.

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

No Submissions have been received.

Methodology

4. References

- DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed March 2013
- DEC (2013) Regional Advice for Clearing Permit CPS 5481/1. Department of Environment and Conservation. Wheatbelt Region. DEC Ref: A618160.
- Department of Sustainability, Environment, Water, Population and Communities (2013). Petrogale lateralis lateralis in Species Profile and Threats Database, Department of Sustainability, Environment, Water, Population and Communities
- 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.

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 Bruce Rock (2013) Clearing Permit Application - Kwolyin - Supporting Information. DEC Ref: A597488.

Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed March 2013).

5. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment
DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DEC)