



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 5481/1
File Number: 2013/000726-1
Duration of Permit: From 14 June 2013 to 14 June 2015

PERMIT HOLDER

Michael Jason Peter Drake
Rebecca Louise Drake

LAND ON WHICH CLEARING IS TO BE DONE

Lot 9785 on Deposited Plan 203085, Collins

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 10 hectares of native vegetation within the area hatched yellow on attached Plan 5481/1.

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*:

- clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- shall only move soils in *dry conditions*;
- ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- 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;

dry conditions means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

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 -

- that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- published in the Department of Environment and Conservation Regional Weed Assessments, regardless of ranking; or
- not indigenous to the area concerned.

A handwritten signature in blue ink, appearing to read "M Warnock", written over a horizontal line.

M Warnock
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

23 May 2013

Plan 5481/1



LEGEND

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

Manjimup 50cm Orthomosaic - Landgate 2007



Scale 1:8000

(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 23/5/13

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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1. Application details

1.1. Permit application details

Permit application No.: 5481/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Michael Jason Peter and Rebecca Louise Drake

1.3. Property details

Property: LOT 9785 ON PLAN 203085 (House No. 139 PARKE COLLINS 6260)
Local Government Area: Shire of Manjimup
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
10		Mechanical Removal	Dam construction or maintenance
		Mechanical Removal	Grazing & Pasture

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 23 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 1144 is described as tall forest; karri & marri (<i>Corymbia calophylla</i>) (Shepherd et al 2001)	The applicant proposes to clear 10 hectares of native vegetation within Lot 9785 on Plan 203085, Collins, for the purpose of increasing pasture and extending a dam.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The condition of the vegetation under application was determined by a site inspection undertaken by the Department of Environment and Conservation (DEC, 2013).
Hedde vegetation complex 3 is described as Medium forest; jarrah-marri (Hedde 1980).	The dominant species within the application area Marri and Jarrah with some Karri in the eastern section of the application area.	To	
Mattiske vegetation complex Cry is described as tall open forest of <i>Corymbia calophylla</i> with mixture of <i>Eucalyptus marginata</i> subsp. <i>marginata</i> and <i>Eucalyptus diversicolor</i> on uplands in hyperhumid and perhumid zones (Mattiske and Havel 1998).	The western section consists of a ground layer of introduced grasses, Bracken fern, <i>Patersonia</i> and <i>Hibbertia</i> sp. The middle storey consists of <i>Persoonia longifolia</i> , <i>Trymalium spathulatum</i> .	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	
Mattiske vegetation complex LF is described as tall open forest of <i>Eucalyptus diversicolor</i> - <i>Corymbia calophylla</i> on slopes and low woodland of <i>Agonis juniperina</i> - <i>Callistachys lanceolata</i> on lower slopes in hyperhumid and perhumid zones (Mattiske and Havel 1998).	The eastern section consists of a ground layer of grasses, Blackberry, Bracken Fern, <i>Patersonia</i> and <i>Hibbertia</i> sp. The middle storey consists of <i>Trymalium spathulatum</i> .		
	The small area in the centre of Lot 9785 consists of ground layer of grasses, Blackberry and Bracken Fern. The upper storey also contains <i>Agonis flexuosa</i> .		
	The application area on the west side of the property has been completely cleared approximately 15 – 20 years ago; Vegetation in this area is regrowth from the initial clearing. The eastern part of the property has previously had silvicultural thinning, trees that remain are larger regrowth trees (DEC 2013).		

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments **Proposal is not likely to be at variance to this Principle**
The applicant proposes to clear 10 hectares of native vegetation for the purpose of increasing pasture, extending an existing dam and constructing an access track.

The condition of vegetation under application ranges from completely degraded to very good (Keighery, 1994). The majority of vegetation in the western section is in a good to degraded (Keighery 1994) condition, this area has previously been completely cleared. The majority of the vegetation in the east section is in a good to very good (Keighery 1994) condition (DEC 2013).

Eight 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) being, *Calyptorhynchus banksii* subsp. *naso* (Forest Red-tailed Black Cockatoo), *Calyptorhynchus baudinii* (Baudin's Cockatoo), *Calyptorhynchus latirostris* (Carnaby's Cockatoo), *Dasyurus geoffroii* (Chuditch), *Phascogale tapoatafa* subsp. *tapoatafa* (Southern Brush-tailed Phascogale), *Pseudocheirus occidentalis* (Western Ringtail Possum) and *Setonix brachyurus* (Quokka). The fauna habitats within the area proposed to be cleared are well represented elsewhere within the local and regional area, and no significant loss of habitat for fauna indigenous to Western Australia is expected.

Two priority flora species have been recorded within the local area (10 kilometre radius). A priority 3 species is located on seasonally moist grey sandy clay or peat within seasonally inundated valleys (Western Australian Herbarium 1998). A priority 2 species has been identified on hillsides on bare gravelly cryptogamic brown clay over ironstone and on exposed stone on hillside with bare stony crusted limestone valleys (Western Australian Herbarium 1998). Suitable habitat for these species has not been identified within the application area and therefore it is unlikely the area proposed to be cleared will contain priority flora.

The vegetation proposed to be cleared is well represented elsewhere within the local and regional area. Given the above the vegetation within the application is not likely to comprise of a high level of biological diversity.

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

Methodology References:
-DEC (2007-)
-DEC (2013)
- Western Australian Herbarium (1998)

GIS Database:
- 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 not likely to be at variance to this Principle

Eight 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) being, *Calyptorhynchus banksii* subsp. *naso* (Forest Red-tailed Black Cockatoo), *Calyptorhynchus baudinii* (Baudin's Cockatoo), *Calyptorhynchus latirostris* (Carnaby's Cockatoo), *Dasyurus geoffroii* (Chuditch), *Phascogale tapoatafa* subsp. *tapoatafa* (Southern Brush-tailed Phascogale), *Pseudocheirus occidentalis* (Western Ringtail Possum) and *Setonix brachyurus* (Quokka)(DEC 2007-).

A site inspection conducted by DEC (2013) did not identify significant habitat for the above fauna species. Given the young age of the regrowth and the previous disturbance the areas are unlikely to provide habitat for the Black Cockatoo species or the Western Ringtail possum.

Some *Agonis flexuosa* trees were identified within the application area, no evidence of use by the Western Ringtail Possum was observed.

The fauna habitats within the area proposed to be cleared are well represented elsewhere within the local and regional area, and no loss of significant habitat for fauna indigenous to Western Australia is expected.

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

Methodology References:
-DEC (2007-)
-DEC (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

One record of rare flora species is located approximately 8.8 km south west of the application area.

The species of rare flora is found on sand, clayey loam, laterite. Margins of winter-wet flats, swamps and freshwater lakes (Western Australian Herbarium 1998-). Suitable habitat is not located within the application area.

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

Methodology References:
Western Australian Herbarium (1998-)

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) are located within the local area (10 km radius).

The closest record of a TEC is 'Scott River Ironstone Association' located approximately 63 kilometres west of the area under application.

Given the distance to the closest TEC is unlikely the vegetation proposed to be cleared is necessary for the maintenance of a TEC. Therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Database:
- 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 not at variance to this Principle**
The area under application is located within the Warren Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 80 per cent of its Pre European vegetation extent remaining (Government of Western Australia 2011).

The application area is mapped as Beard Vegetation Associations 3 and 1144 and Mattiske Vegetation Complexes LF and Cry, which retain approximately 79, 79, 83 and 74 per cent of their respective pre-European extents within the Warren IBRA bioregion (Government of Western Australia 2011, Mattiske and Havel 1998).

Digital imagery (Manjimup 50cm Orthomosaic - Landgate 2007) indicates that the local area (10 kilometre radius) surrounding the area under application retains approximately 70 per cent vegetation cover.

Given the vegetation representation within the local area it is unlikely that the vegetation under application is significant as a remnant in an extensively cleared landscape.

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

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion* Warren	833,982	664,123	80	83
Shire* City of Manjimup	697,370	589,098	84	92
Beard Vegetation Association in Bioregion*				
3	250,263	198,873	79	80
1144	160,315	127,222	79	91
Mattiske Vegetation Complex ***				
LF	20,125.53	16,811.85	83	74
Cry	33,764.55	25,111.89	74	67

* Government of Western Australia (2011)

** Mattiske and Havel (1998)

Methodology Reference:

- Government of Western Australia. (2011).
- Mattiske and Havel (1998)

GIS Database:

- Manjimup 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

One minor watercourse intersects the application area. The closest major watercourse is the 'Warren River' located approximately 2.1 km south of the application area.

Given a watercourse intersects the application area the vegetation proposed to be cleared is considered to be growing in association with a watercourse. Therefore the clearing as proposed is 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

The area under application has been mapped as soil type UC1 which is described as steep hilly to hilly dissected lateritic plateau with steep valley side slopes: chief soils are hard, and also sandy, neutral, and also acidic, yellow and yellow mottled soils, with conspicuous but relatively smaller areas of red earths. Associated are areas of block laterite, gravelly and bouldery and soils on tops of rises and their colluvial slopes; some areas of leached sands soils on terraces of major streams (Northcote et al 1960 - 1968).

Wind erosion is unlikely on the type of soil located within the application area (Commissioner of Soil and Land Conservation 2013).

The area proposed to be cleared is generally well drained, the risk of waterlogging is unlikely to occur with the clearing of native vegetation on these soil types. The area proposed to be cleared has a risk of water erosion as a result of the land slopes present within Lot 9785. However the steepest areas are not located within the application and therefore the risk of water erosion is considered to be low (Commissioner of Soil and Land Conservation 2013).

Given the above the clearing as proposed is not likely to cause appreciable land degradation and therefore is not likely to be at variance to this principle.

Methodology References:
- Commissioner of Soil and Land Conservation (2013)
- Northcote et al (1968)

(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 two conservation areas, CALM Ex Body Freehold and Warren State Forest. Sir James Mitchell National Park is located approximately 220 metres east of the application area.

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

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

Methodology GIS Database:
- 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 may be at variance to this Principle

One minor watercourse intersects the application area.

The closest major watercourse is the Warren River located approximately 2.1 km south of the application area.

The proposed clearing site lies within the 1 September 1978 Country Areas Water Supply Act 1947 (CAWS Act) gazetted Warren River Water Reserve. The Lot is not currently located in a Public Drinking Water Source area hence no priority source protection area has been assigned or is proposed (DoW 2013a). The Warren River catchment has however been subject to CAWS Act native vegetation clearing controls since December 1978 to prevent salinisation of water resources (DoW 2013a).

No CAWS Act compensation has been paid to retain native vegetation on Lot 9785. The 10 hectares of vegetation proposed to be cleared will result in approximately 15.9 hectares (approximately 33 per cent) of native vegetation remaining within lot 9785, which is above the CAWS Act 10 per cent retention requirement. Therefore the DoW(2013a) does not object to the proposed clearing (DoW 2013a).

Given a watercourse intersects the application area the removal of native vegetation may increase sedimentation into this watercourse. Therefore the clearing as proposed may be at variance to this principle.

Methodology References:
- DoW (2013a)

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 area under application is well drained and is therefore not likely to cause or exacerbate the incidence or intensity of flooding (Commissioner of Soil and Land Conservation 2013).

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

Methodology References:
- Commissioner of Soil and Land Conservation (2013)

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

Comments

The applicant proposes to clear 10 hectares of native vegetation for the purpose of increasing pasture, extending an existing dam and constructing an access track.

The Shire of Manjimup (2013) has advised that it has no objection to the proposed clearing and that there are no planning or other matters which would affect the proposal. Lot 9785 is zoned by Local Planning Scheme No. 4 as 'General Agriculture', and the Shire does not set building envelopes for properties in this zone.

The proposed clearing site lies within the 1 September 1978 Country Areas Water Supply Act 1947 (CAWS Act) gazetted Warren River Water Reserve. The Lot is not currently located in a Public Drinking Water Source area hence no priority source protection area has been assigned or is proposed. The Warren River catchment has however been subject to CAWS Act native vegetation clearing controls since December 1978 to prevent salinisation of water resources (DoW 2013a).

No CAWS Act compensation has been paid to retain native vegetation on Lot 9785. The 10 hectares of vegetation proposed to be cleared will leave approximately 15.9 hectares (approximately 33 per cent) of native vegetation remaining within lot 9785, which is above the CAWS Act 10 per cent retention requirement. Therefore the Department of Water does not object to the proposed clearing (DoW 2013a).

Lot 9785 is located within the Warren River and Tributaries Surface Water Area as proclaimed under the Rights in Water and Irrigation Act 1914 (RIWI Act). Department of Water (2013b) issued a licence to take water (SWL177285) and a permit to interfere with the beds and banks of a watercourse (PMB1747284) on the 14 May 2013 under the RIWI Act for Lot 9785 Parke Road Collins.

Methodology References:
-DoW (2013a)
-DoW (2013b)
-Shire of Manjimup (2013)

4. References

Commissioner of Soil and Land Conservation (2013) Advice for Clearing Permit CPS 5481/1. Department of Agriculture and Food, Western Australia. (DEC Ref: A617141)
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) Site Inspection Report for Clearing Permit Application CPS 5481/1, Lot 9785 on Plan 203085, Collins. Site inspection undertaken 28 March 2013. Department of Environment and Conservation, Western Australia (DEC Ref: A615099).
- DoW (2013a) Advice for Clearing Permit CPS 5481/1. Department of Water, Land and Clearing (CAWSA) Management, Western Australia. (DEC Ref: 5481/1).
- DoW (2013b) Issue of PMB 177284 and SWL 177285 under the Rights in Water and Irrigation Act 1914 – Lot 9785 Parke Road Collins. Department of Water, Western Australia. DEC Ref: A630103
- 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.
- Hedde, 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.
- 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 Manjimup (2013) Advice for Clearing Permit CPS 5481/1. Western Australia. (DEC Ref: A6053147)
- 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)