



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 5865/1
File Number: 2013/000726-1
Duration of Permit: From 15 March 2014 to 15 March 2016

PERMIT HOLDER

Michael Jason Peter Drake
Rebecca Louise Drake

LAND ON WHICH CLEARING IS TO BE DONE

Lot 9785 on Deposited Plan 203085 (COLLINS 6260)

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 11 hectares of native vegetation within the area hatched yellow on attached Plan 5865/1.

CONDITIONS

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 -

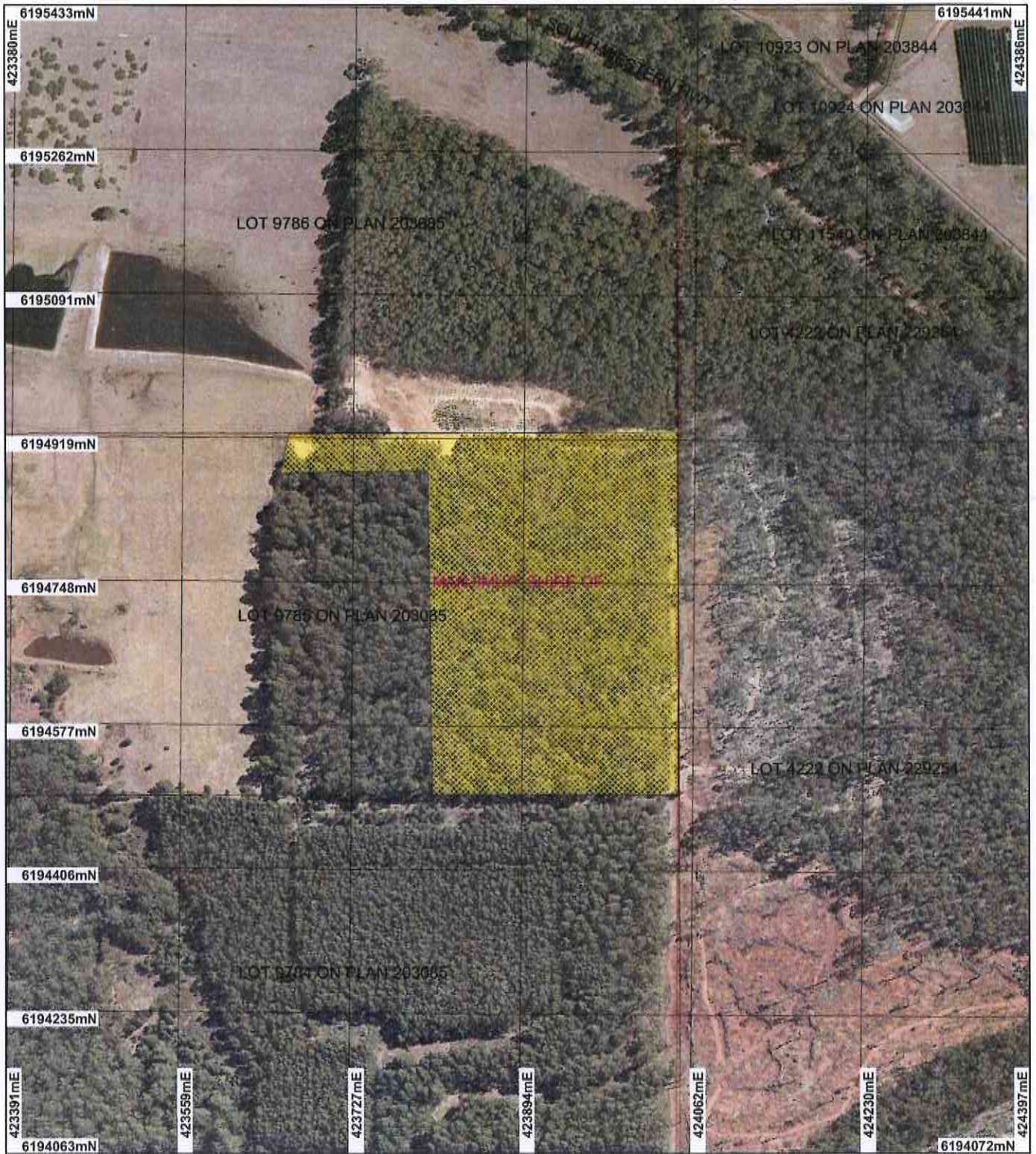
- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*;
or
- (b) published in a Department of Parks and Wildlife Regional Weed Summary, regardless of ranking;
or
- (c) not indigenous to the area concerned.

M Warnock
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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



13 February 2014

Plan 5865/1



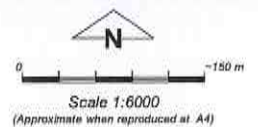
LEGEND

Clearing Instruments

-  Areas Approved to Clear
-  Road Centrelines
-  Cadastre

Cadastre for labelling

-  Local Government Authorities
- Manjimup 50cm Orthomosaic - Landgate 2007



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 13/2/14
 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.: 5865/1
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 (COLLINS 6260)
Local Government Area: Shire of Manjimup

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
11		Mechanical Removal	Horticulture

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 13 February 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 1144 is described as tall forest; karri & marri (<i>Corymbia calophylla</i>) (Shepherd et al 2001).	The clearing consists of 11 hectares of native vegetation within Lot 9785 on Plan 203085, Collins, Shire of Manjimup, for the purpose of an orchard plantation.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The application is to clear 11 hectares of native vegetation for the purpose of an orchard plantation.
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 vegetation under application is in very good (Keighery 1994) condition and consists of marri (<i>Corymbia calophylla</i>), jarrah (<i>Eucalyptus marginata</i>) and karri (<i>Eucalyptus diversicolor</i>) forest on the upper slopes and karri forest on the lower slopes (Commissioner of Soil and Land Conservation 2013). The vegetation shows evidence of being cleared in the last 10 to 30 years as it is predominantly regrowth, and shows some signs of disturbance from livestock grazing.
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 condition and description of the vegetation was determined by a site inspection report from the Commissioner of Soil and Land Conservation (2013) and using aerial imagery (Manjimup 50cm Orthomosaic - Landgate 2007).

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 11 hectares of native vegetation for the purpose of an orchard plantation.

The vegetation proposed to be cleared is in very good (Keighery 1994) condition and has undergone disturbance in the past from clearing and livestock grazing (Commissioner of Soil and Land Conservation 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), including *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) (DPaW 2007-). The fauna habitats within the area proposed to be cleared are well represented elsewhere within the local and regional area, and the loss of habitat for fauna indigenous to Western Australia is not likely to cause significant impact to the conservation status of any fauna species.

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 in equal or better condition and the application area is not likely to comprise a high level of biological diversity in comparison to surrounding remnants.

Therefore, the application is not likely to be at variance to this principle.

- Methodology** References:
- Commissioner of Soil and Land Conservation (2013)
 - DPaW (2007-)
 - Keighery (1994)
 - Western Australian Herbarium (1998)
- GIS Databases:
- SAC Biodatasets - accessed November 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), including *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) (DPaW 2007-).

Given the young age of the regrowth there are unlikely to be mature habitat trees within the application area with hollows suitable for any of above species to use for breeding. The vegetation under application may comprise suitable feeding habitat for fauna of conservation significance, particularly black cockatoos which feed on the seeds of *Eucalyptus* sp. The applicant intends to retain approximately three or four of the largest trees per hectare throughout the application area. Due to the level of disturbance and the availability of foraging habitat in equal or better condition in the local area (10 kilometre radius), the proposed clearing is unlikely to impact upon the conservation status of any fauna species.

Considering the above, the application is not likely to be at variance to this principle.

- Methodology** References:
- DPaW (2007)
- GIS Databases:
- SAC Biodatasets - accessed November 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 species of rare flora has been identified approximately 8.8 kilometres south west of the application area.

This 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 Databases:

(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 a 10 kilometre radius of the application area. Given the distance to the nearest mapped TEC (63 kilometres), the vegetation under application is not likely to be necessary for the maintenance of a TEC.

Therefore, the application is not likely to be at variance to this principle.

Methodology GIS Databases:
 - SAC Biodatasets - accessed November 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 likely to be 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 2013).

The application area is mapped as Beard Vegetation Association 1144 and Matiske Vegetation Complexes LF and Cry, which retain approximately 79, 83 and 74 per cent of their respective pre-European extents within the Warren IBRA bioregion (Government of Western Australia 2013, Matiske 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 likely to be at variance to this principle.

	Pre-European (ha)	Current Extent Remaining (ha)	(%)	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
Matiske Vegetation Complex ***				
LF	20,125.53	16,811.85	83	74
Cry	33,764.55	25,111.89	74	67

* Government of Western Australia (2013)

** Matiske and Havel (1998)

Methodology Reference:
 - Government of Western Australia (2013)
 - Matiske and Havel (1998)
 GIS Databases:
 -Manjimup 50cm Orthomosaic - Landgate 2008
 - NLWRA, Current Extent of Native
 -SAC Biodatasets - accessed November 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 at variance to this Principle**
 A minor perennial watercourse occurs approximately 300 metres to the west of the application area. The closest major watercourse is the Warren River located approximately 2.1 kilometres to the south of the application area.

The proposed clearing is not likely to impact upon these watercourses and does not include any riparian vegetation. Therefore the application is not at variance to this principle.

Methodology GIS databases:
- Hydrography, linear

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

Comments 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, therefore waterlogging is unlikely to occur on these soil types.

The proposed clearing may cause water erosion as a result of the land slopes, especially if the land is left exposed without appropriate management (Commissioner of Soil and Land Conservation 2013, DoW 2013a). In order to mitigate the risk of land degradation caused by water erosion, the original application of 13.5 hectares has been reduced to 11 hectares and the applicant intends to retain three or four trees per hectare throughout the application area and will also retain a native vegetation buffer downhill from the application area. The resulting land use of an orchard plantation will also reduce the level of exposure of the land to water erosion.

Considering the commitment to retain buffering vegetation and replace cleared vegetation with orchard trees, land degradation is not likely to occur to an appreciable extent.

Therefore, the application is not likely to be at variance to this principle.

Methodology References:
- Commissioner of Soil and Land Conservation (2013)
- DoW (2013a)
- 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 area under application is surrounded by conservation areas. Warren State Forest is adjacent to the application area on the eastern boundary and also wraps around to the west and north approximately 800 metres away. A Department of Parks and Wildlife (DPaW) managed Executive Body Freehold is adjacent to the application area on the southern boundary. Sir James Mitchell National Park is located 150 metres to the north east of the application area.

Approximately 50 to 60 per cent of the local area is mapped as conservation reserves. The area under application provides a buffer to the conservation areas therefore the removal of the vegetation under application will increase edge effect to the conservation areas, including the potential for spreading of dieback, increased weeds, and light and wind exposure. Appropriate weed and dieback management will minimise this risk.

Considering the above, the application may be at variance to this principle.

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

A minor perennial watercourse occurs approximately 300 metres to the west of the application area. The closest major watercourse is the Warren River located approximately 2.1 kilometres to the south of the application area.

The proposed clearing has the potential to result in increased sedimentation of surface water running downhill on the exposed slope (DoW 2013a). However, the applicant intends to retain three or four of the larger trees

per hectare throughout the cleared area and replace cleared native vegetation with orchard vegetation. The applicant also intends to retain a native vegetation buffer between the application area and the nearby watercourse. This buffering vegetation will minimise surface water runoff during heavy rainfall events and will filter the majority of sedimentation from the surface water before it enters the watercourse.

The application area is within a 'priority not assigned' Public Drinking Water Source Area, where the protection of water quality against degradation is a priority (DoW 2013a). The Department of Water's (DoW) Water Quality Protection Note (WQPN 6) - 'Vegetated Buffers to Sensitive Water Resources' states that "vegetated buffers are key strategic elements among a series of protection barrier options that reduce the risk of contaminant impact on water quality" (DoW 2013a). Retaining vegetation in between the proposed orchard and the watercourse is important in mitigating risks of degradation (DoW 2013a).

The application area is also within the Country Areas Water Supply Act 1947 (CAWS Act) gazetted Warren River Water Reserve. The application area is within 'Zone C' of the Warren River Water Reserve which has 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 vegetation on Lot 9785 (DoW 2013b).

DoW records show that a licence was granted in 1984 to clear a pro-rata allowance of 12 hectares. A clearing permit exists over a different section of the property (CPS 5481/1) which accounts for 10 hectares of clearing. DoW Policy and Guidelines for Zone C allow for consideration of a further pro-rata allowance of up to 12 hectares, subject to the statutory requirement that 10 per cent of the current holding remains under the cover of native vegetation. Additionally, the extra pro-rata allowance of up to 12 hectares "would normally only be allowed if a detailed site investigation, that would include drilling or documentation of other information, showed that no adverse salinisation would occur from the additional clearing" (DoW 2013b).

The proposed clearing of 11 hectares, when combined with the clearing permitted under CPS 5481/1, would result in approximately 10 per cent of the property being covered by native vegetation, which meets the required threshold. A site inspection report from the Commissioner of Soil and Land Conservation (2013) states that the application is not likely to significantly impact upon salinity levels. Therefore, the application satisfies the CAWS Act requirements.

Considering the applicant's intention to retain three or four trees per hectare within the application area and a native vegetation buffer between the application area and the watercourse, the risk of deterioration of surface or ground water is minimal.

Therefore, the application is not likely to be at variance to this principle.

Methodology References:
- Commissioner of Soil and Land Conservation (2013)
- DoW (2013a)
- DoW (2013b)
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 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 application is to clear 11 hectares of native vegetation for the purpose of an orchard plantation.
An application was originally made to clear 13.5 hectares of native vegetation and has been reduced to 11 hectares in order to satisfy the requirements of the *Country Areas Water Supply Act 1947* (CAWS Act) and to minimise environmental impact. The applicant intends to retain three or four trees per hectare throughout the application area and also intends to retain a native vegetation buffer between the application area and the nearby watercourse, which will minimise erosion and deterioration of surface water.
The application area is within the Warren River and Tributaries Surface Water Area as proclaimed under the Rights in Water and Irrigation Act 1914. Any taking or diversion of surface water in this proclaimed area for the purposes other than domestic and/or stock watering is subject to licensing by the Department of Water (DoW 2013a). It is the applicant's responsibility to contact the Department of Water to ensure that there is sufficient

water available under their current allocation to meet the demands of the proposed orchard. If additional water is required, the applicant is required to amend their licence 'to take' surface water (DoW 2013a).

The Shire of Manjimup advised that the application area is zoned as "general agriculture" under the Local Planning Scheme No. 4 and planning approval for the proposal is not required. The Shire of Manjimup has no objection to the proposed clearing (Shire of Manjimup 2013).

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

No public submissions have been received.

Methodology

References:

- DoW (2013a)
- Shire of Manjimup (2013)

GIS Databases:

- Aboriginal Sites of Significance

4. References

- Commissioner of Soil and Land Conservation (2013) Site inspection report for Clearing Permit Application CPS 5865/1, provided on 29 November 2013, Department of Agriculture and Food Western Australia (DER Ref: A706210).
- DoW (2013a) Advice regarding Clearing Permit Application CPS 5865/1, Department of Water, 19 November 2013 (DER Ref: A696826).
- DoW (2013b) Advice regarding Clearing Permit Application CPS 5865/1, provided by Department of Water, Land and Clearing (CAWSA) Management, 16 December 2013 (DER Ref: A706976).
- DPaW (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>, Accessed November 2013.
- 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.
- 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 regarding Clearing Permit Application CPS 5865/1, provided on 12 November 2013 (DER Ref: A695525).
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <http://florabase.dpaw.wa.gov.au/> (Accessed November 2013).