



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 3185/1

File Number: DEC11789

Duration of Permit: From 20 September 2009 to 20 September 2011

PERMIT HOLDER

Garry Charles Smith

LAND ON WHICH CLEARING IS TO BE DONE

LOT 810 ON PLAN 301864 (RINGBARK 6258)

AUTHORISED ACTIVITY

Clearing of up to 5.4 hectares of native vegetation within the area hatched yellow on attached Plan 3185/1.

CONDITIONS

Dieback and weed control

- (a) 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*:
- (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (ii) shall not move soils in wet conditions;
 - (iii) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - (iv) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (b) At least once in each 12 month period for the *term* of this Permit, the Permit Holder must remove or kill any *weeds* growing within areas cleared under this Permit.

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;

term means the duration of this Permit, including as amended or renewed;

weed/s means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*

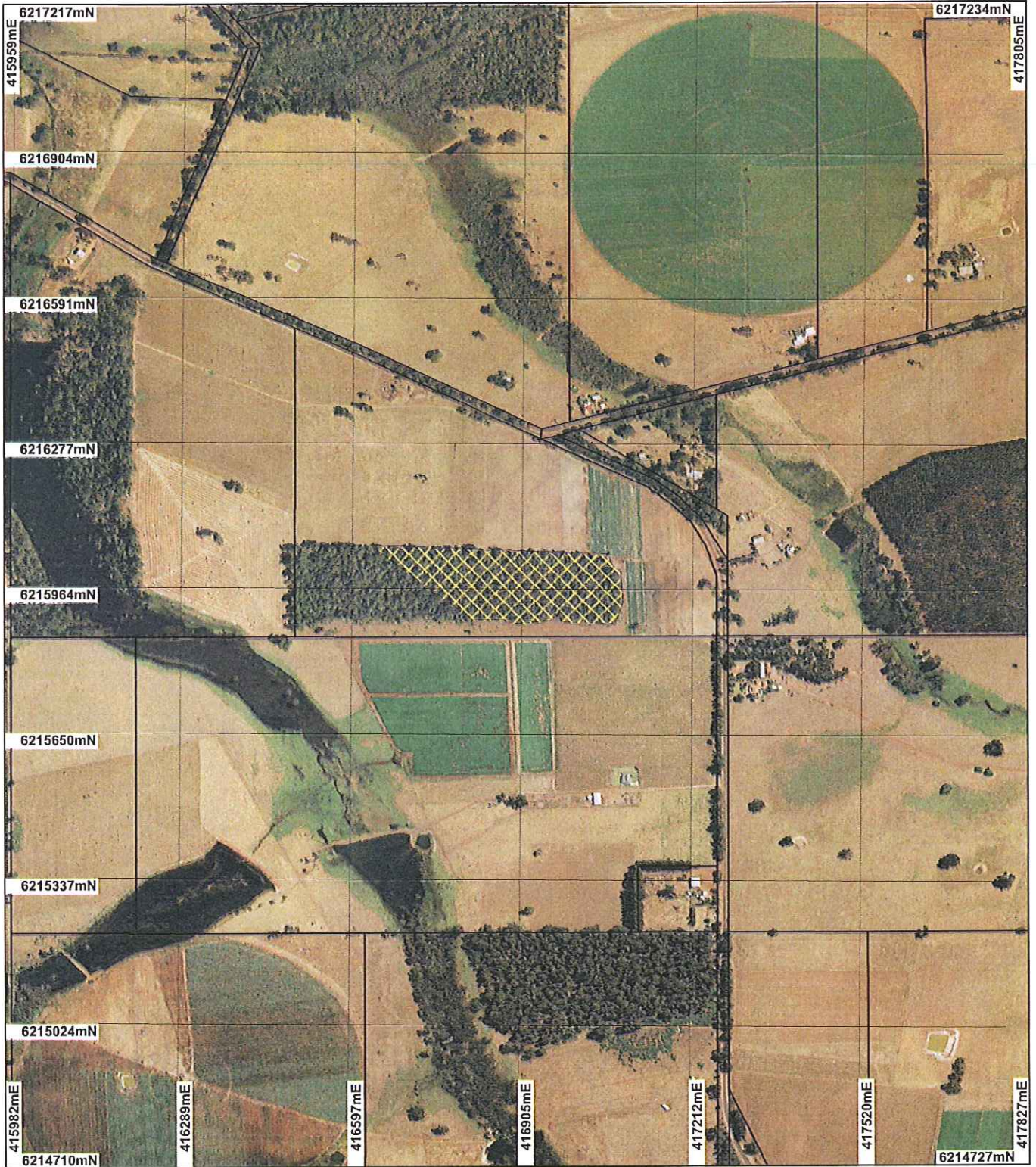


Keith Claymore
A/ ASSISTANT DIRECTOR
NATURE CONSERVATION DIVISION

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

20 August 2009

Plan 3185/1



LEGEND

- Clearing Instruments**
-  Areas Approved to Clear
 -  Cadastre
- Manj/mup 50cm Orthomosaic
Landgate 2004



Scale 1:10990

(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.

Kirsty Claymore 20/8/09
Date

K Claymore

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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* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.



1. Application details

1.1. Permit application details

Permit application No.: 3185/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Garry Charles Smith

1.3. Property details

Property: LOT 810 ON PLAN 301864 (RINGBARK 6258)
Local Government Area: Shire Of Manjimup
Colloquial name:

1.4. Application

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

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
The vegetation under application is composed of Beard vegetation association 3: Medium forest; jarrah-marri (Shepherd, 2007) and Mattiske complex (Bevan) BE1: Tall open forest of <i>Corymbia calophylla</i> (Marri) - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> (Jarrah) on uplands in perhumid and humid zones (Mattiske, 1998).	The vegetation consists of a closed forest of predominately Marri (<i>Corymbia calophylla</i>) and Jarrah (<i>Eucalyptus marginata</i>), with ground cover consisting of mainly Bracken (<i>Pteridium esculentum</i>) with occasional Emu bush (<i>Podocarpus drouynianus</i>). The middle storey is composed of a small amount of occasional Banksia (DEC, 2009c).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The description and condition of the vegetation under application was determined via the use of aerial imagery and a DEC conducted site inspection (DEC, 2009).

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 at variance to this Principle

The 5.4 hectares of native vegetation under application is considered to be in good (Keighery, 1994) condition. The vegetation consists of a closed forest of predominately Marri (*Corymbia calophylla*) and Jarrah (*Eucalyptus marginata*), with ground cover consisting of mainly Bracken (*Pteridium esculentum*) with occasional Emu bush (*Podocarpus drouynianus*). The middle storey is composed of a small amount of occasional Banksia (DEC, 2009c).

The vegetation types occurring within the applied area are well represented within the bioregion and a large percentage of vegetation is secured as managed land by the DEC. The local Shire and Bioregion have high percentages of remaining vegetation and the local area (10km radius) retains approximately 60% of native vegetation.

The vegetation is unlikely to provide significant habitat for flora (DEC, 2009b) or fauna species (DEC, 2009a; DEC, 2009c) within the local area.

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

To further reduce the impact clearing may have on the local area, weed and dieback control conditions will be placed on the permit.

Methodology DEC (2009a)

- DEC (2009b)
 DEC (2009c)
 Keighery (1994)
 GIS DataSets:
 - CALM Managed Lands and Waters - CALM 01/06/05
 - SAC Biodatasets - accessed 22 July 09
 - Manjimup 50cm Orthomosaic (9/10/2007)
 - Mattiske Vegetation (01/03/1998)
 - Pre European Vegetation - DA 01/01
 - Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
 - NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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 may be at variance to this Principle

The following fauna species were recorded within the local area (10km radius):

- Brush-tailed Phascogale (*Phascogale tapoatafa*) (VU) 14 occurrences in local area
- Quenda (*Isoodon obesulus fusciventer*) (P5) 4 occurrences in local area
- Water-rat, Rakali (*Hydromys chrysogaster*) (P4)
- Chuditch (*Dasyurus geoffroii*) (VU)
- Western Ringtail Possum (*Pseudocheirus occidentalis*) (VU) 8 occurrences in local area
- Peregrine Falcon (*Falco peregrinus*) (OTHER SPECIALLY PROTECTED FAUNA) 3 occurrences in local area
- Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii naso*) (VU) 9 occurrences in local area
- Numbat, Walpurti (*Myrmecobius fasciatus*) (VU) 2 occurrences in local area
- Baudin's Black-Cockatoo (*Calyptorhynchus baudinii*) (EN) 2 occurrences in local area
- Scorpionfly (*Austromerope poultoni*) (P2) 4 occurrences in local area
- Quokka (*Setonix brachyurus*) (VU)

The vegetation under application is unlikely to offer significant habitat for the Quenda (*Isoodon obesulus fusciventer*) (P5), as this species prefers areas with dense understorey vegetation, particularly around swamps and along watercourses, that provides ample protection from predators. The Water rat (*Hydromys chrysogaster*) also prefers vegetation along watercourses and the Quokka (*Isoodon obesulus fusciventer*) prefers dense areas of coastal heath. The lack of peppermint trees (*Agonis flexuosa*), and the sparseness of the vegetation within the applied area reduces the potential of the vegetation under application to offer suitable habitat for the Western Ring-tailed possum.

The Brush tailed phascogale (*Phascogale tapoatafa*) and Numbat, Walpurti (*Myrmecobius fasciatus*) may be able to utilise the application area as habitat, depending on the presence of suitable habitat trees, this can also be said for the Chiditch (*Dasyurus geoffroii*), which occupies a large home range and can utilise remnants.

The vegetation under application may offer foraging habitat for the Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii naso*), however the vegetation is not considered to be significant habitat for this species, Baudin's Black-Cockatoo (*Calyptorhynchus baudinii*) or Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) (DEC, 2009a).

- Methodology** DEC (2007)
 DEC (2009a)
 DEC (2009c)
 GIS DataSets:
 - CALM Managed Lands and Waters - CALM 01/06/05
 - SAC Biodatasets - accessed 22 July 09

(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

The following flora species were recorded within the local area (10km radius):

- *Andersonia annelsii* (R)
- *Astartea* sp. Scott River (D. Backshall 88233) (P4)
- *Caladenia christineae* (R)
- *Caladenia erythrochila* (P2)
- *Caladenia harringtoniae* (R)
- *Calytrix pulchella* (P3)
- *Chamelaucium forrestii* subsp. *forrestii* (P2)

- *Hemigenia microphylla* (P3)
- *Drosera occidentalis* subsp. *occidentalis* (P4)

The soil typed mapped for the application area (Tc6) is described as dissected lateritic plateau of hilly relief at moderate elevation: chief soils of the dissected hilly areas are hard acidic yellow mottled soils and with some hard acidic red mottled soils and brown earths all containing ironstone gravels (Northcote et al. 1960-68).

The vegetation under application is composed of Beard vegetation association 3: Medium forest; jarrah-marri and Matiske complex (Bevan) BE1: Tall open forest of *Corymbia calophylla* (Marri) - *Eucalyptus marginata* subsp. *marginata* (Jarrah) on uplands in perhumid and humid zones (Shepherd et al. 2007; Matiske 1998).

Given the habitat preferences for the majority of the abovementioned flora species, It is considered unlikely that the vegetation under application would be suitable habitat for rare or priority listed flora (DEC, 2009b).

Methodology DEC (2009b)
Matiske (1998)
Northcote et al. (1960 -68)
Shepherd et al. (2007)
GIS DataSets:
- Matiske Vegetation (01/03/1998)
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 22 July 09
- Soils, Statewide DA 11/99

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Comments **Proposal is not likely to be at variance to this Principle**
There are no known records of threatened or priority ecological communities (TECs or PECs) within the local area (10km radius) or within the application area.

Given that the applied area has been subjected to grazing pressures, it is considered unlikely that vegetation under application comprises or is necessary for the maintenance of a TEC.

Methodology GIS DataSets:
- SAC Biodatasets - accessed 22 July 09

(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**
As the below table indicates, the vegetation types mapped as occurring within the applied area are well represented within the bioregion (84.08% & 70.03% remaining respectively) and a large percentage of vegetation is secured as managed land by the DEC. The local Shire and Bioregion have high percentages of remaining vegetation and the local area (10km radius) retains approximately 60% of native vegetation.

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

		Pre-European (ha)	Current extent (ha)	Remaining (%)	% In reserves DEC Managed Land
IBRA Bioregions*					
Jarrah Forest^	4,506,655	2,440,940	54.16	69.26	
Shire*					
Manjimup	697,359	595,561	85.40	92.17	
Matiske Vegetation Complex**					
BE1	76,781.61	64,556.00	84.08	N/A	
Beard Vegetation Association*					
3	2,661,405	1,863,719	70.03	79.98	
Beard Vegetation Association with Bioregion*					
3		2,390,590	1,657,274	69.32	79.56

* (Shepherd et al. 2007)

** (Mattiske Consulting 1998)

- Methodology** Mattiske (1998)
Shepherd et al. (2007)
GIS DataSets:
- CALM Managed Lands and Waters - CALM 01/06/05
 - SAC Biodatasets - accessed 22 July 09
 - Manjimup 50cm Orthomosaic (9/10/2007)
 - Mattiske Vegetation (01/03/1998)
 - Pre European Vegetation - DA 01/01
 - Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
 - NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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

There are a number of watercourses that are within close proximity of the application area. The closest being a minor perennial watercourse situated 330 metres south west and another is located 400 metres north east. Lefroy Brook (major perennial) is 6.8km south of the application area.

There are several dams surrounding the applied area, five dams are situated within 700 metres of the application area, the closest is 340 metres north.

The vegetation under application is not considered to be growing in association with a watercourse, the proposed clearing is not considered to be at variance to this principle.

- Methodology** GIS Databases:
- CALM Managed Lands and Waters - CALM 01/06/05
 - EPP Lakes Policy Area - DEP 14/05/97
 - EPP, Wetlands 2004 (DRAFT) - EPA 21/7/04
 - Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
 - Hydrography linear - DOW 13/7/06
 - Hydrography linear (hierarchy) - DoW 13/7/06

(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 local area (10km radius) is well vegetated (approximately 60% remaining), the elevation of the application area ranges from 250 to 255 metres and the annual rainfall is 1000 mm.

The application area falls within the Donnelly River Catchment and is within a "Not Assigned" Public Drinking Water Source Area where its future use may be required. In the event that this source is required, it is likely to be assigned a priority 3 area where management would be needed to control the risk of pollution from catchment activities. Best management practices would be for the land owner to establish a 30 metre vegetated buffer along the banks of Ringbark Brook to protect the waterway from the adjoining land use (DoW, 2009). However the vegetation under application consists mostly of regrowth Marri with a lower proportion of regrowth Jarrah. The area also appears to have been cleared or heavily disturbed in the past and has since regrown (DEC, 2009c). Given the size and condition of the vegetation under application, the proposed clearing is unlikely to cause appreciable land degradation.

- Methodology** DoW (2009)
GIS DataSets:
- Average Annual Rainfall Isohyets - WRC 29/09/98
 - Annual Evaporation Contours (Isopleths) - WRC 29/09/98
 - Hydrogeology, statewide - DOW 13/07/06
 - Hydrographic catchments, catchments - DoW 01/06/07
 - Hydrographic catchments, subcatchments - DoW 01/06/07
 - Hydrography, linear - DOW 13/7/06
 - Salinity Risk LM 25m - DOLA 00
 - Soils, Statewide DA 11/99
 - Topographic contours statewide - DOLA and ARMY 12/09/02
 - Hydrogeology, Statewide 05 Feb 2002

(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

Four conservation areas are located within the local area (10km radius. North Donnelly state forest is situated 1.2km north, Faunadale nature reserve is 3.4km south, Palgarup state forest is 5.5km east and the Donnelly state forest is situated 6.6km south west.

The local area (10km radius) is well vegetated (approximately 60% remaining) and a large percentage of vegetation is secured as managed land by the DEC. It is unlikely that there will be any significant impacts to the abovementioned conservation areas as a result of the proposed clearing.

To further reduce the impact clearing may have conservation areas, weed and dieback control conditions will be placed on the permit.

Methodology GIS DataSets:

- CALM Managed Lands and Waters - CALM 01/06/05
- SAC Biodatasets - accessed 22 July 09
- Manjimup 50cm Orthomosaic (9/10/2007)
- Matiske Vegetation (01/03/1998)
- Pre European Vegetation - DA 01/01
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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

The application area falls within the Donnelly River Catchment and is within a "Not Assigned" Public Drinking Water Source Area where its future use may be required. In the event that this source is required, it is likely to be assigned a priority 3 area where management would be needed to control the risk of pollution from catchment activities. Best management practices would be for the land owner to establish a 30 metre vegetated buffer along the banks of Ringbark Brook to protect the waterway from the adjoining land use (DoW, 2009). However the vegetation under application consists mostly of regrowth Marri with a lower proportion of regrowth Jarrah. The area also appears to have been cleared or heavily disturbed in the past and has since regrown (DEC, 2009c). Given the condition of the vegetation under application, the quality of surface and underground water quality is unlikely to be impacted by the actual clearing.

Methodology DoW (2009)

GIS DataSets:

- Evapotranspiration Isopleths - WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Salinity Risk LM 25m - DOLA 00
- Topographic Contours, Statewide - DOLA 12/09/02

(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 application area shows no signs of being subject to inundation (DEC, 2009c). The local area (10km radius) is well vegetated (approximately 60% remaining), the elevation of the application area ranges from 250 to 255 metres and the annual rainfall is 1000 mm. It is not anticipated that the proposed clearing will result in an increased flooding risk.

Methodology DEC (2009c)

GIS DataSets:

- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DoW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The Department of Water has advised that while the area under application has not yet been assigned a

priority, it is likely to be a priority 3 area in the future (DoW, 2009).

The Department of Water also advised that a current water allocation licence is held for Lot 810 and the applicant is actively engaging in horticultural activities (Trim Ref: DOC93584).

Methodology DoW (2009)

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matter in accordance with s510 of the Environmental Protection Act 1986 has found:

- Principle (b) may be at variance
- Principles (e) & (f) are not at variance
- Principles (a), (c), (d), (g), (h), (i) & (j) are not likely to be at variance

5. References

- DEC (2009a) Species and Communities Branch Advice. Department of Environment and Conservation Trim Ref DOC92978
- DEC (2009b) Flora Advice. Department of Environment and Conservation Trim Ref DOC92880
- DEC (2009c) Site Inspection Report for Clearing Permit Application CPS 3185/1, Lot 810 on Plan 301864, Ringbark. Site inspection undertaken 22/07/2009. Department of Environment and Conservation, Western Australia (Trim Ref DOC91371).
- DoW (2009) PDWSA, South West Region Advice. Department of Environment and Conservation Trim Ref DOC93041
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Shepherd, D.P. (2007). Adapted from: 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. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

6. 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)