



1. Application details

1.1. Permit application details

Permit application No.: 2653/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Ronald Kenneth, Murray Stephen, James Walter Fouracres

1.3. Property details

Property: LOT 3727 ON PLAN 133921 (GLENORAN 6258)
LOT 3727 ON PLAN 133921 (GLENORAN 6258)
LOT 3727 ON PLAN 133921 (GLENORAN 6258)
LOT 3728 ON PLAN 133920 (GLENORAN 6258)
LOT 3728 ON PLAN 133920 (GLENORAN 6258)
LOT 3728 ON PLAN 133920 (GLENORAN 6258)
LOT 3729 ON PLAN 133927 (GLENORAN 6258)
LOT 3729 ON PLAN 133927 (GLENORAN 6258)
LOT 3729 ON PLAN 133927 (GLENORAN 6258)
LOT 3730 ON PLAN 133919 (GLENORAN 6258)
LOT 3730 ON PLAN 133919 (GLENORAN 6258)
LOT 3730 ON PLAN 133919 (GLENORAN 6258)
LOT 6105 ON PLAN 81562 (GLENORAN 6258)
LOT 6105 ON PLAN 81562 (GLENORAN 6258)
LOT 6105 ON PLAN 81562 (GLENORAN 6258)

Local Government Area: Shire Of Manjimup
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
256		Mechanical Removal	Timber Harvesting

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
Beard Vegetation Association: (1144) & (3) 1144 is described as tall forest; karri & marri (Corymbia calophylla). 3 is described as medium forest; jarrah-marri (Shepherd et al. 2001)	The vegetation is closed regrowth forest with some mature and senescent trees. Dominant species are Jarrah, Marri and Karri.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	A DEC site visit was conducted on 15 September 2008.

Mattiske Vegetation Association: (BE1), (CRb) & (WA)

Bevan 1 (BE1) is described as tall open forest of Corymbia calophylla (Marri) - Eucalyptus marginata subsp. marginata (Jarrah) on uplands in perhumid and humid zones.

Crowea (CRb) is described as tall open forest of Corymbia calophylla (Marri) - Eucalyptus

diversicolor (Karri) on upper slopes with *Allocasuarina decussata* (Karri Sheoak) - *Banksia grandis* (Bull Banksia) on upper slopes in hyperhumid and perhumid zones.

Warren (WA): is described as tall open forest of *Eucalyptus diversicolor* (Karri) - *Corymbia calophylla* (Marri) on the slopes and tall open forest of *Eucalyptus diversicolor* (Karri) - *Corymbia calophylla* (Marri) with some *Eucalyptus patens* (Blackbutt) over *Agonis flexuosa* (Peppermint), *Allocasuarina decussata* (Karri Sheoak) and *Callistachys lanceolata* (Wonnich) on the valley floors in hyperhumid and perhumid zones.

(Mattiske Consulting 1998)

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 proposal is to clear 256ha of native vegetation within the 460ha property for the purpose of silviculture. The vegetation under application is in very good (Keighery, 1994) condition (DEC, 2008).

The local area (10km radius) retains approximately 90% native vegetation cover with approximately 90% of that vegetation within DEC (Department of Environment and Conservation) managed lands.

The vegetation under application has been previously cleared possibly with some grazing, there is also the presence of *Phytophthora* within the applied area (DEC, 2008).

Given the level of disturbance within the applied area and taking into account that there are nearby areas of vegetation in a similar or better condition, the vegetation under application is not likely to contain a high level of biodiversity in a local context.

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

Methodology References:
DEC (2008)
Keighery (1994)

GIS Database:
CALM Managed Lands and Waters - CALM 01/06/05
SAC Biodatasets - accessed 17 October 08
Pre European Vegetation - DA 01/01
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 is not likely to be at variance to this Principle**

The local area is approximately 90% vegetated with 90% of which occurring within DEC managed lands with some level of protection.

Given the presence of disease and the history of disturbance to this area associated with past clearing and grazing the vegetation under application is not likely to be significant habitat for fauna indigenous to Western Australia in a local context.

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

Methodology GIS Databases:
SAC Biodatasets - accessed 17 October 08

Hydrography linear - DOW 13/7/06
 Hydrography linear (hierarchy) - DoW 13/7/06
 Topographic contours statewide - DOLA and ARMY 12/09/02

(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**
 There is one known record of rare flora within the local area (10km radius), namely *Caladenia harringtoniae*.
- This flora is known to occur in winter wet flats, along margins or lakes, creeklines and granite outcrops (WA Herbarium, 1998-).
- District populations of this species do not occur in the same soil type as the area under application. It is unlikely that the species occurs along the watercourses (DEC, 2008).
- Methodology** DEC (2008)
 WA Herbarium (1998-)
- GIS Database:
 Pre European Vegetation - DA 01/01
 SAC Biodatasets - accessed 11 Feb 08
 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 Threatened Ecological Communities (TECs) within the local area (10km radius).
- Therefore the clearing as proposed is not likely to be at variance to this principle as the vegetation under application is not likely to comprise or be necessary for the maintenance of a know TEC.
- Methodology** GIS Database:
 SAC Biodatasets - accessed 17 October 08

(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**
- | | Pre-European | Current area (ha) | Remaining % extent (ha) | % in reserves/DEC-managed land |
|----------------------------------|--------------|-------------------|-------------------------|--------------------------------|
| Bioregion: | | | | |
| Warren * | 835,925 | 675,836 | 80.85 | 82.37 |
| Shire of Manjimup * | 697,359 | 595,561 | 85.40 | 92.17 |
| Beard vegetation associations ** | | | | |
| 3 | 2,661,405 | 1,863,719 | 70.0 | 79.98 |
| 1144 | 160,314 | 131,412 | 81.97 | 91.08 |
| Mattiske vegetation complex *** | | | | |
| BE1 (Bevan 1) | 767,844 | 657,120 | 85.6 | - |
| CL1 (Corbalup) | 151,768 | 115,381 | 76 | - |
| CRb (Crowea) | 527,433 | 428,454 | 81.2 | - |
| WA (Warren) | 86,219 | 77,431 | 89.8 | - |

* (Shepherd 2007)

** (Shepherd et al., 2001; Hopkins et al., 2001)

*** (Mattiske Consulting, 1998)

The local area (10km radius) retains approximately 90% native vegetation, with approximately 90% of which, within DEC managed lands.

There for the area has not been extensively cleared and given the history of disturbance (through previous clearing and grazing) and the presence of disease (*Phytophthora*) within the area, the vegetation under application is also not considered to be significant as a remnant in the local area.

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

- Methodology** References:

Hopkins et al. (2001)
Shepherd et al. (2001)
Shepherd (2007)
Mattiske Consulting (1998)

GIS Databases:

- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Local Government Authorities - DLI 8/07/04
- Mattiske Vegetation (01/03/1998)
- Pre European Vegetation - DA 01/01
- 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 may be at variance to this Principle

There are 8 mapped minor perennial watercourses within the area under application which are tributaries to the Donnelly River (adjacent east of the applied area).

There are also 8 mapped earth dams within the applied area.

The area proposed for clearing has vegetation within 30m of an identified stream existing on the property. The area under application therefore is growing in association with a watercourse and thus the proposed clearing may be at variance to this principle. A 30m buffer (WRC, 1996; DoW, 2005) from either side of streams has been placed on the permit to mitigate any impacts on water quality to the streams, any connecting watercourses and riparian vegetation.

Methodology GIS Databases:

- 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 may be at variance to this Principle

Given the nature of the clearing, thinning (not clear felling), the proposal is not likely to result in appreciable land degradation as a high proportion of vegetation cover will persist within the property.

DAFWA (2008) advise that the proposed thinning may cause land degradation in the form of soil erosion and land degradation. 'The land degradation risks associated with the proposed thinning operations that are planned to be carried out over a ten year period would be minimised if undisturbed buffers are left near to drainage lines, harvesting operations are carried out during summer months and disturbed areas are encouraged to regenerate' (DAFWA, 2008).

A vegetation management condition has been imposed on this permit to reduce potential impacts.

Methodology References:

DAFWA (2008)

GIS Databases:

- Average Annual Rainfall Isohyets - WRC 29/09/98
- Annual Evaporation Contours (Isopleths) - WRC 29/09/98
- Soils, Statewide DA 11/99
- Topographic contours statewide - DOLA and ARMY 12/09/02

(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 bordered on all sides by DEC (Department of Environment and Conservation) managed lands (State Forest, Ex DiR Freehold and Timber Reserve).

Given the history of disturbance associated with past clearing and grazing within the area under application and the occurrence of Phytophthora within the vegetation under application clearing within the applied area may result in spread of weeds and / or disease into areas of conservation significance (DEC, 2008; Native Forest Management Plan, 2008).

Therefore the clearing as proposed may be at variance to this principle.

Dieback and Weed Management conditions will be placed on this permit to mitigate the potential for spread of weeds and disease into areas of conservation significance.

Methodology **References:**
DEC (2008)
Native Forest Management Plan (2008)

GIS Databases:
- CALM Managed Lands and Waters - CALM 01/06/05

(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**
There are 8 mapped minor perennial watercourses within the area under application which are tributaries to the Donnelly River (adjacent east of the applied area). There are also 8 mapped earth dams within the applied area.

Clearing of vegetation in association with these watercourses may result in sedimentation of waterways as a result of increased water flow over steep slopes, therefore causing deterioration in the quality of water within these channels.

A 30m buffer condition has been imposed on the permit to reduce potential impacts.

Methodology **References:**
DAFWA (2008)
GIS Databases:
- Evapotranspiration Isopleths - WRC 29/09/98
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Topographic Contours, Statewide - DOLA 12/09/02
- Hydrography linear - DOW 13/7/06
- Hydrography linear (hierarchy) - DoW 13/7/06

(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 nature of the clearing, thinning (not clear felling), the proposal is not likely to cause or exacerbate the incidence or intensity of flooding as a high proportion of vegetation cover will persist within the property.

DAFWA ADVICE (2008)

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

Methodology **References:**
- DAFWA (2008)
GIS Databases:
- Hydrography linear - DOW 13/7/06
- Hydrography linear (hierarchy) - DoW 13/7/06

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

Comments
The Shire of Manjimup provided comments on the proposal which included a request for a footnote to be included on any approval granted. (DOC64800)

Methodology

4. Assessor's comments

Comment
The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing may be at variance to principles (f), (g), (h) and (i) and is not likely to be at variance to principles (a), (b), (c), (d), (e) and (j).

5. References

DEC (2008) Site Visit Report, Advice to Assessing Officer from Department of Environmental and Conservation Warren Region, unpublished report, DOC63482.

Department of Agriculture and Food (2008) Advice. Commissioner of Soil and Land Conservation. DEC TRIM Ref: DOC67668.

Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.

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. (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.

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Western Australian Herbarium (1998-). FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed 17/10/2008).

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

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)