



1. Application details

1.1. Permit application details

Permit application No.: 2789/1
 Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: MR Charles Parke

1.3. Property details

Property: LOT 9786 ON PLAN 203085 (COLLINS 6260)
 LOT 9785 ON PLAN 203085 (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:
24		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
<p>Beard Vegetation Association (1144): Tall forest; karri & marri (Corymbia calophylla) Shepherd et al. (2001)</p> <p>Mattiske Vegetation Association (CRY) & (LF): Crowea is described as tall open forest of Corymbia calophylla with mixture of Eucalyptus marginata subsp. marginata and Eucalyptus diversicolor on uplands in hyperhumid and perhumid zones.</p> <p>Lefroy is described as tall open forest of Eucalyptus diversicolor-Corymbia calophylla on slopes and low woodland of Agonis juniperina-Callistachys lanceolata on lower slopes in hyperhumid and perhumid zones. Mattiske Consulting (1998)</p>	<p>Area is consists of an even aged stand of Karri and Marri forest. The northern cell is predominantly Marri with occasional Karri and Jarrah. With the southern cell containing a higher proportion of Karri .Top height ranges from 28m-35m (DEC, 2008).</p>	<p>Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)</p>	<p>The area under application has been described from aerial imagery, the proponents Native Forest Management Plan (DOC65102) and a DEC site visit conducted on 23 October 2008 (TRIM DOC69148).</p>

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**
 It is proposed to selectively thin 24ha of karri forest. The area is described as being in a very good (Keighery 1994) condition. The area has been fenced from other areas on his farm so to a large extent the area has remained ungrazed . There is some grass and weed encroachment on edges of area but on the whole native understory vegetation remains in good condition once away from the edge.
 Fire has been excluded for at least the past 15 years (DEC, 2008).

There is one record of the Epiphytic Cryptogams Priority Ecological Community (PEC, Priority 3), the PEC is

10km north of the area under application. Given the dynamic nature of the community it is unlikely that selective clearing will significantly impact up on it. Additionally it is likely that the community lives within creek line areas which are demarcated from clearing in the forest management plan (2008).

There two records of priority flora species recorded within the local area (10km radius), however these species are primarily associated with different soil and vegetation types.

The area under application acts as a linkage to state forests, national parks and nature reserves. Avoid minimise conditions will be placed on the permit to preserved linkages where possible.

Given that the clearing is to selectively thin karri trees, disturbance to the biodiversity is expected to be minimal and short term. As the proposed clearing area is adjacent to national park and state forest, recruitment post clearing should be healthy and diverse. A condition for weed and dieback management be imposed on the permit.

Methodology DEC (2008)
Keighery (1994)
Northcote et al. (1968)
GIS Database:
- Manjimup 50cm ORTHOMOSIAC - Landgate04
- CALM Managed Lands and Waters - CALM 01/06/05
- DEFL, SAC Biodataset (29/10/08)
- TEC Database, SAC Biodatasets - accessed 29/10/08

(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**
Within the local area (10km radius from the proposed clearing) there are 6 records of threatened fauna and 1 record of priority species.

The area under application consists of 24ha of native vegetation which is in a very good (Keighery, 1994) condition and provides habitat for fauna. There is a high possibility of Ringtail Possums, Bandicoots and Phascogales in the area under application (DEC, 2008).

There is 70% remnant vegetation within the local area (10km radius). Therefore the proposed clearing may be at variance with this principle. To mitigate any potential impacts on fauna habitat, the retention of habitat trees will be a condition of the permit and a revegetation condition will be placed on the permit to ensure long term habitat is available.

Methodology DEC (2008)
GIS Database:
- Manjimup 50cm ORTHOMOSIAC - Landgate04
- CALM Managed Lands and Waters - CALM 01/06/05
- Threatened Fauna, SAC Bio Dataset (29/10/08)

(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**
Within the local area (10km radius) of the site under application there is one records of rare flora (Caladenia christineae), however this species is primarily associated with different soil and vegetation types. Therefore is not likely to be at variance to this principle.

Methodology Keighery (1994)
Northcote et al. (1968)
Shepherd et al. (2001)
GIS Database:
- Manjimup 50cm ORTHOMOSIAC - Landgate04
- DEFL, SAC Bio Dataset (29/10/08)

(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 at variance to this Principle**
There are no known Threatened Ecological Communities (TEC) within a 10km radius of the proposed clearing site. Therefore is not at variance to this principle.

Methodology GIS Database:

- Manjimup 50cm ORTHOMOSIAC - Landgate04
- DEFL, SAC Biodataset (29/10/08)
- TEC Database, SAC Biodatasets - accessed 29/10/08

(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 at variance to this Principle		
	Pre-European	Current Extent	Remaining
IBRA Bioregion			
Warren Shire	835,925.47	675,836.26	80.85
Manjimup Beard Vegetation	697,359.72	595,561.57	85.4
1144 Mattiske Vegetation	160,314.85	131,412.09	81.97
Crowea (Cry)	337,605	236,268	70
Lefroy (LF)	201,286	164,947	81.9

The area under application is located in the Warren Bioregion and is in the Shire of Manjimup. The extent of Warren is 80.85%. The extent of the pre-European vegetation (1144) is 81.97% (Shepherd et al. 2001) and within the Shire of Manjimup is 85.4% (Shepherd et al. 2001). The extent of the Mattiske Vegetation Complex, Crowea (Cry) is 70% and Lefroy (LF) is 81.9%. Beard and Mattiske vegetation has not been extensively cleared within this region, and is higher than the desirable 30% threshold level target identified by the EPA (2000). The local area (10km radius) is approximately 70% vegetated and 90% of the native vegetation is managed by DEC. Due to the amount of surrounding vegetation present, the proposed clearing is not at variance to this principle.

- Methodology**
- EPA (2000)
 - Mattiske Consulting (1998)
 - Shepherd (2006)
 - Shepherd et al. (2001)
 - GIS Database:
 - Manjimup 50cm ORTHOMOSIAC - Landgate04
 - Interim Biogeographic Regionalisation of Australia - EA 18/10/00
 - Mattiske Vegetation (01/03/1998)
 - Pre European Vegetation, SAC Bio Dataset (29/10/08)

(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 two perennial watercourses (first order streams) which are 180m west and south of the area in question.

The area under application is not growing in association with any watercourses and thus the proposed clearing is not at variance to this principle.

- Methodology**
- GIS Database:
 - Country Area Water Supply Act (Part IIA) Clearing Control Catchments 29/06/2006
 - 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 topography of the site is between 185 to 205m AHD (Australian Height Datum), with the land sloping south west. The mean annual rainfall is 1100mm per annum and the evapotranspiration rate is 800mm. Given the high rainfall and high relief in topography, water erosion is likely to occur on the site. However, as the proposal is for thinning a proportion of vegetation will remain after clearing making erosion unlikely to occur.

The area under application lies within Zone C of the Warren River Water Reserve gazetted under the County Areas Water Supply Act 1947 (CAWS Act). The CAWS Act controls land clearing within the Warren River Water Reserve in order to protect drinking water quality and was developed in response to increased dryland salinity and increasing concentrations of salts in drinking water within the catchment.

There has been no CAWS Act compensation paid to retain native vegetation on the holding. Under the DoW Policy and Guidelines for the 'Granting of Licences to Clear Indigenous Vegetation' provide for the grant to clear native vegetation subject to retaining a 30m buffer around riparian vegetation (there are no watercourses within

the applied area), the exclusion of any stock grazing within the area for as long as is required for regeneration and sustainable development of regrowth and the rehabilitation of any areas damaged by the silvicultural practises within 12 months of works completion (DoW, 2008).

The groundwater salinity is 500-1000mg/L (low salinity risk). Given the catchment area has not been highly cleared salinity is not considered a risk. As a portion of ground-cover and understorey will remain on the applied area it is not likely that the clearing as proposed will cause appreciable land degradation in any location. Therefore is not likely to be at variance.

Conditions will be placed on the permit to exclude stock and allow the vegetation to regenerate with active revegetation if required. This satisfies CAWS requirements.

Methodology DoW (2008)
Northcote et al. (1968)
GIS Database:
- Country Area Water Supply Act (Part IIA) Clearing Control Catchments 29/06/2006
- Evapotranspiration Isoleths - WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrogeology, statewide DOW 13/07/06
- Mean Annual Rainfall Isohytes (1975 - 2003) DEC 02/08/05
- Topographic Contours, Statewide - DOLA 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 proposed clearing is surrounded by State Forest and National Parks.

Sir James Mitchell National Park is abut the area under application (east), Warren State Forest is abut the area in question (east) and an Ex Dir Freehold land vested for the purpose of conservator of forest is abut the area under application (south).

The local area (10km radius) is approximately 70% vegetated and 90% of the native vegetation is managed by DEC. The area under application is within a dieback risk area and is surrounded by State Forest and a National Park. Therefore there is a risk of the phytophthora disease spreading. Additionally, there is a risk of weeds spreading into the National Park via the clearing disturbance. Dieback and weed conditions will be placed on the Permit to mitigate these potential impacts. The proposed clearing may be at variance to this principles.

Methodology GIS Databases:
- Manjimup 50cm ORTHOMOSIAC - Landgate04
- CALM Managed Lands and Waters - CALM 01/06/05
- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02

(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**
There are two perennial watercourses (first order streams) which are 180m west and south of the area in question.

The area under application lies within Zone C of the Warren River Water Reserve gazetted under the County Areas Water Supply Act 1947 (CAWS Act). The CAWS Act controls land clearing within the Warren River Water Reserve in order to protect drinking water quality and was developed in response to increased dryland salinity and increasing concentrations of salts in drinking water within the catchment.

There has been no CAWS Act compensation paid to retain native vegetation on the holding. Under the DoW Policy and Guidelines for the 'Granting of Licences to Clear Indigenous Vegetation' provide for the grant to clear native vegetation subject to retaining a 30m buffer around riparian vegetation (there are no watercourses within the applied area), the exclusion of any stock grazing within the area for as long as is required for regeneration and sustainable development of regrowth and the rehabilitation of any areas damaged by the silvicultural practises within 12 months of works completion (DoW, 2008).

The area under application is unlikely to impact on water quality to streams, any connecting watercourses and riparian vegetation and thus the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Database:
- Country Area Water Supply Act (Part IIA) Clearing Control Catchments 29/06/2006
- Evapotranspiration Isoleths - WRC 29/09/98

- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrogeology, statewide DOW 13/07/06
- Mean Annual Rainfall Isohytes (1975 - 2003) DEC 02/08/05

(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 at variance to this Principle

The proposal is to selectively thin within karri forest, which will result in a proportion of native vegetation remaining within the area under application. As such, the clearing as proposed will not cause, or exacerbate, the incidence or intensity of flooding and is therefore not at variance to this principle.

Methodology Northcote et al. (1968)

GIS Database:

- Evapotranspiration Isoleths
- WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrogeology, statewide DOW 13/07/06
- 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 Town Planning Scheme for the area under application is zoned as Rural.

Methodology GIS Database:

- Town Planning Scheme Zones - MFP 31/08/98

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 Principle (b) & (h), principles (a), (c), (g) & (i) are not likely to be at variance and the remaining principles are not at variance.

5. References

- DEC (2008) Site Inspection Report for Clearing Permit Application CPS 2789/1, Lot 9785 on Plan 203085 & Lot 9786 on Plan 203085, Manjimup. Site inspection undertaken 23/10/2008. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC69148).
- EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority, Western Australia.
- 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.
- 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., 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.

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)