



1. Application details

1.1. Permit application details

Permit application No.: 1863/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: Mitchell-Leaver Pty Ltd

1.3. Property details

Property: LOT 9064 ON PLAN 201680 (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:
0.23		Mechanical Removal	Dam construction or maintenance

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 area is comprised of Mattiske Pemberton (PM1) vegetation type, consisting of a tall, open forest of karri, with mixtures of marri on valley slopes and low forest of Agonis juniperina-Banksia seminuda-Callistachys lanceolata on valley floors in the perhumid zone (Mattiske Consulting, 1998).	The proposal involves clearing 0.23 ha of riparian vegetation for the expansion of an existing dam. Based on Orthomosaic mapping, the vegetation appears in Good to Very Good condition (Keighery, 1994).	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The description of the clearing application area is based on Orthomosaic mapping (Donnelly 50cm, 2004).

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 area proposed for clearing is considered riparian vegetation and appears in Good to Very Good condition (Keighery, 1994).

The vegetation under application is located in a valley comprised of Beard Vegetation Association 1144 (Hopkins et al. 2001) of which there is 69.7% (Shepherd et al. 2001) of the pre-1750 extent remaining. The local area (10 km radius) is approximately 70% vegetated, with approximately 95% of that vegetation in DEC-managed tenure. Despite the application area containing vegetation that is of good or very good condition; it is unlikely that the vegetation represents an area of higher biological diversity than other, larger areas of remnant vegetation in the local setting.

Based on the small scale of the vegetation under application and the above information, it is unlikely the proposal is at variance to this Principle.

Methodology Keighery (1994);
 Hopkins et al. (2001);
 Shepherd et al. (2001);
 GIS Databases:
 - CALM Managed Lands and Waters - CALM 1/06/04;
 - Donnelly 50cm ORTHOMOSAIC - DLI 04

(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**
There are several records of fauna within the local area (10km radius), including the Western Ringtail Possum (VU), Forest Red-tailed Black Cockatoo (VU) and Quenda (P5).

The local area (10km radius) is over 70% vegetated and the property is surrounded by DEC-managed forest, including the Donnelly, South East Nannup and North Donnelly State Forests, which are likely to offer equal or better habitat than that within the application area.

Given the small scale of clearing proposed and the close proximity to several large state forests, the area under application is not considered to contain significant habitat values for local fauna.

Therefore, the proposal is not likely to be at variance to this Principle.

Methodology GIS Database:
- CALM Managed Lands and Waters - CALM 1/06/04
- SAC Bio datasets 29/05/07

(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 are 2 known records of the Declared Rare Flora (DRF) species *Caladenia harringtoniae* occurring in the local area, (10km radius).

Habitat descriptions on the DEC's Florabase indicate that this species usually inhabits paperbark and flooded gum swamps and flats which are inundated for several months of the year; but may also be found along creeklines in jarrah and karri forest. Given the habitat similarities, this species may occur within the area proposed for clearing.

DEC Regional advice indicates that imagery appears to show that the area proposed to be cleared is included in the property's grazing regime (i.e. not fenced). If this is the case then the habitat will be significantly modified and therefore it would be highly unlikely for *Caladenia harringtoniae* to be present.

Therefore, the proposal is not likely to be at variance to this Principle.

Methodology DEC Regional advice 08/08/07
Florabase (2007);
GIS databases:
- DEFL SAC Bio Datasets 10/05/07

(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 Ecological Communities (TEC) within a 10km radius of the proposed clearing. It is therefore unlikely that the proposed clearing is part of or necessary for the maintenance of a TEC.

The proposal is not likely to be at variance to this Principle.

Methodology GIS Databases:
- Threatened Ecological Communities - CALM 12/04/05;
- SAC Bio datasets 29/05/07

(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 proposed clearing is located in the Shire of Manjimup and within the Warren Bioregion. The extent remaining within these areas is 83.9% and 86.6% respectively.

The vegetation is a component of the Beard Vegetation Association 1144 (Hopkins et al. 2001) of which 69.7% (Shepherd et al. 2001) pre-1750 extent is remaining. The area is also mapped as the Pemberton (PM1) vegetation complex (Mattiske 1998), of which there is 65.6% remaining.

Given the small scale of clearing proposed and the extent of vegetation remaining in the local and bioregional areas, the area under application is not considered to be a significant remnant of native vegetation in an area that

has been extensively cleared; and therefore not likely to be at variance to this Principle.

Methodology Hopkins et al. (2001);
Shepherd et al. (2001);
Mattiske (1998);
GIS Databases:
- Pre-European Vegetation - DA 01/01;
- Mattiske Vegetation - CALM 24/03/98;
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00

(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 at variance to this Principle

There are no mapped wetlands within a 10km radius of the proposed clearing. However, the area is in association with an unnamed minor perennial watercourse which is a tributary of the Donnelly River, 2.2km to the west. Therefore the proposed clearing is at variance with this principle.

To mitigate loss of riparian vegetation associated with the clearing proposal, a condition to revegetate should be imposed in the event that a clearing permit is granted.

Methodology GIS Databases:
- Hydrography, linear - DOE 01/02/04;
- EPP, Areas - DEP 06/95;
- EPP, Lakes - DEP 28/07/03;
- EPP, Wetlands - DEP 21/07/04;
- Anca Wetlands - CALM 08/01;
- Geomorphic Wetlands, Augusta to Walpole - DOE 18/6/03

(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 has no mapped salinity risk and a ground water salinity of 1000-3000 mg/L. Given the size of the area under application, soil type consisting of low permeability, with an westward sloping topography and medium relief, the proposed clearing is unlikely to cause appreciable land degradation.

Therefore, the proposal is not likely to be at variance to this Principle.

Methodology GIS Databases:
- Acid Sulfate Soil Risk Map, Swan Coastal Plain - DEC;
- Groundwater Salinity, Statewide - DOW;
- Hydrogeology, Statewide - DOW;
- Soils, Statewide - DA 11/99

(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

The area under application is surrounded by the Donnelly, North Donnelly and South East Nannup state forests (DEC-managed). The Donnelly River Nature Reserve is located 3km north of the area under application.

Given the small scale of clearing proposed, it is unlikely to impact on the values of nearby conservation reserves.

Therefore, the proposal is unlikely to be at variance to this Principle.

Methodology GIS Database:
- CALM Managed Lands and Waters - CALM 1/06/04

(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 is located within the Donnelly River System. The area proposed for clearing has a low salinity risk (GIS Database) and a groundwater salinity of 500-1000mg/L (GIS Database).

Due to the scale of clearing proposed and the high percentage of vegetation remaining within the local area, the

proposal is not likely to cause deterioration of water quality.

- Methodology** GIS Databases:
- Public Drinking Water Source Areas (PDWSAs) - DOW;
 - Hydrographic Catchments - Subcatchments - DOW;
 - RIWI Act, Surface Water Areas - DOW;
 - RIWI Act, Rivers - DOW;
 - RIWI Act, Irrigation Districts - DOW;
 - RIWI Act, Groundwater Areas - DOW;
 - RIWI Act, Areas - DOW;
 - Topography Contours, Statewide - DOLA 12/09/02;
 - Evaporation Isopleths - BOM 09/98;
 - Mean Annual Rainfall Isohyets (1975-2003)

(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 has a medium relief, the same rainfall and evaporation rates and soils with low permeability. Given the size of the area under application is unlikely to cause or exacerbate the incidence of flooding.

- Methodology** GIS Databases:
- Topography Contours, Statewide - DOLA 12/09/02;
 - Evaporation Isopleths - BOM 09/98;
 - Mean Annual Rainfall Isohyets (1975-2003) - DOW

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

Comments
The proposed clearing is within the Donnelly surface water catchment area gazetted for surface water management under the RIWI Act. DoW Manjimup (DoW, 2007) advise that a Section 17 Permit to Obstruct or Interfere with the bed and banks of a watercourse has been approved, and that works have already been done to increase the dam wall. The area under application for clearing is for the ponding at the tail of the dam, and that the applicant was taking a risk by not gaining clearing approval prior to undertaking works.

A submission was received from the Shire of Manjimup (2007), advising the applicant to contact Shire for advice on other approvals/consent under local legislation.

- Methodology** DoW advice (2007);
Shire of Manjimup (2007)

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Dam construction or maintenance	Mechanical Removal	0.23	The assessment of the vegetation under application revealed the proposal: - is at variance to Principle (f); and - is not or is not likely to be at variance to Principles (a), (b), (c), (d), (e), (g), (h), (i) and (j).

5. References

DEC Regional advice (08/08/07). Department of Environment and Conservation, Manjimup.
Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
DoW Advice (2007). Department of Water, Manjimup. TRIM Ref: DOC27658
Florabase (2007). Department of Environment and Conservation. Site accessed 3/7/07.
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 Consulting (1998) Mapping of vegetation complexes in the South West forest region of Western Australia, CALM.
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.
Shire of Manjimup (2007). Submission in reply to Application to Clear. TRIM Ref: DOC27179.

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)

