



## 1. Application details

### 1.1. Permit application details

Permit application No.: 3127/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Joseph Bendotti

### 1.3. Property details

Property: LOT 101 ON PLAN 29736 (Lot No. 101 GOLF LINKS PEMBERTON 6260)  
LOT 100 ON PLAN 29736 (Lot No. 100 GOLF LINKS PEMBERTON 6260)

Local Government Area: Shire Of Manjimup  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.5		Mechanical Removal	Dam construction or maintenance
		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
<p>Beard Vegetation Complex:</p> <p>1144 - Tall forest; karri &amp; marri (Corymbia calophylla) (Shepherd et al., 2007)</p> <p>Mattiske Vegetation Complexes:</p> <p>PEMBERTON (PM1) - Tall open forest of Eucalyptus diversicolor with mixtures of Corymbia calophylla on valley slopes and low forest of Agonis juniperina-Banksia seminuda-Callistachys lanceolata on valley floors in the perhumid zone.</p> <p>WHEATLEY (WH1) : Tall open forest of Eucalyptus diversicolor (Karri) - Corymbia calophylla (Marri) on slopes and tall open forest of Eucalyptus patens (Blackbutt) on valley floor in perhumid and humid zones (Mattiske, 1998).</p>	<p>The application is for the clearing of 2.5 ha of native vegetation for the construction of two dams. The vegetation within the application area is considered to be in a good (Keighery, 1994) condition for most of the eastern dam site and in a degraded (Keighery, 1994) condition for the majority of the western dam site (DEC, 2009). The vegetation is a closed scrubland consisting of a middlestorey of Melaleuca esculentum, Agonis parviceps and Agonis flexuosa over Leptopsermum sp. and Pteridium esculentum in the eastern area and open scrubland with groundcover of reeds in western area (DEC, 2009). Both sites have been disturbed by stock grazing (DEC, 2009).</p>	<p>Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)</p>	<p>The condition of the vegetation was assessed through aerial photography and a site visit (DEC, 2009).</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

The application is for the clearing of 2.5 ha of native vegetation for the construction of two dams. The vegetation is considered to be in a good (Keighery, 1994) condition for most of the eastern dam site and in a degraded (Keighery, 1994) condition for the majority of the western dam site (DEC, 2009). The applicant has advised that the eastern dam site contains some paperbarks and small trees, but is however overrun with blackberries (DEC

TRIM Ref: DOC92481).

The vegetation is a closed scrubland consisting of a middlestorey of *Melaleuca esculentum*, *Agonis parviceps* and *Agonis flexuosa* over *Leptoserium* sp. and *Pteridium esculentum* in the eastern area and open scrubland with groundcover of reeds in western area (DEC, 2009). Both sites have been disturbed by stock grazing (DEC, 2009). In their present states, the application areas are unsuitable for most threatened fauna or flora (DEC, 2009).

The local area (10km radius) is partially vegetated with native vegetation (approximately 60% remaining) with a number of DEC managed lands in the vicinity constituting approximately 40% of this. Watercourses and associated riparian vegetation have been highly modified in the local area due to the large number of dams and clearing for agriculture.

Although it is in a good to degraded (Keighery, 1994) condition, the riparian vegetation may play a significant role as habitat, refuge and as a wildlife corridor for local fauna populations.

**Methodology** DEC (2009)  
Keighery (1994)  
GIS Layer:  
- Sac Biodatasets 200509

**(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**

There are a number of threatened and endangered fauna species recorded within the local area (10km radius), including Black Striped Minnow, Western Mud Minnow, Pouched Lamprey and Water-rat Rakali. Watercourses and associated riparian vegetation have been highly modified in the local area due to the large number of dams and clearing for agriculture.

Threatened and endangered fauna species may be found within the application area, however, in their present states, the application areas are unsuitable for most (DEC, 2009).

Although it is in a good to degraded (Keighery, 1994) condition, the riparian vegetation may play a significant role as habitat, refuge and as a wildlife corridor for local fauna populations.

**Methodology** DEC (2009)  
GIS Layer:  
- Sac Biodatasets 200509

**(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 record of rare flora was recorded within the local area (10km radius). *Caladenia christineae*, was recorded 4.1km SE of the application area. This species occurs within the same soil type as the application area but different vegetation type. It is unlikely that *C. christineae* would exist in the application area as the vegetation type is not associated with species and the area is infested with weeds (DEC, 2009).

Three priority flora species have been recorded in the vicinity. *Thomasia brachystachys* (P1), *Asplenium aethiopicum* (P4) and *Rulingia apella* (P1). All are found within the same soil type as the application area but differing vegetation type. In their present states, the application areas are unsuitable for most threatened flora species (DEC, 2009).

Given the above it is unlikely that the proposal is at variance to this principle.

**Methodology** DEC (2009)  
GIS Layer:  
- Sac Biodatasets 200509

**(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**

Within the local area (10km radius) there are no known Threatened Ecological Communities (TEC). Given this, it is unlikely that the proposed clearing would be at variance to this principle.

**Methodology** GIS Layer:  
- Sac Biodatasets 200509

**(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 (ha)	Current extent (ha)	(%)
IBRA Bioregion* Warren	835,925	675,836	80.85
Shire* Manjimup	697,359	595,561	85.40
Mattiske Vegetation Complex**			
WH1	183,280	142,945	78.00
PM1	258,061	169,317	65.60
Beard Vegetation Association*			
1144	160,314	131,412	81.97
Beard Vegetation Association in Bioregion*			
1144	159 668	131 169	82.15

\*(Shepherd, et al. 2007)

\*\* (Mattiske, 1998)

Approximately 80.85% and 85.40% of the Pre-European vegetation remains in the IBRA Warren Bioregion and Shire of Manjimup, within which this proposal is located (Shepherd et al., 2007).

Based on the above, the proposed clearing is not likely to be variance to this Principle.

**Methodology** Mattiske (1998)  
Shepherd et al. (2007)

**(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**  
The application area consists of Gully Landform systems (DEC, 2009). Two minor perennial watercourses (tributaries of Lefroy Brook) are within the application area. Lefroy Brook is located 750m north of the application area.

The vegetation under application is within a watercourse and its buffer and consists of riparian vegetation. Watercourses and associated riparian vegetation have been highly modified in the local area due to the large number of dams and clearing for agriculture.

Given the application involves the clearing of riparian vegetation which acts as a buffer to the watercourse, the current proposal is at variance to this principle.

**Methodology** DEC (2009)  
GIS Layer:  
- Hydrography linear - 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**  
The proposed clearing site lies within the Warren River Water Reserve. The Warren River catchment has been subject to Country Areas Supply Act 1947 (CAWS Act) native vegetation clearing controls since December 1978 to prevent salinisation of water resources (DoW, 2009).

The application area is in Zone D, a low salinity risk part of the catchment, where DoW Policy and Guidelines of the "Granting of Licences to Clear Indigenous Vegetation" provide for the unconditional grant of a licence subject to the retention of native vegetation on at least 10% of the owner's holding area. Imagery from 2004 suggests that only ~9.4 ha of native vegetation remains on the applicants holding which equates to 7.8% of that holding (DoW, 2009).

The DoW Policy and guidelines also provide for the grant of a licence to clear small degraded stands subject to

the establishment of a vegetation offset of twice the approved area. In this case the DoW sees that the proposal could therefore be permitted conditional upon the planting up of 5.0 ha of currently cleared land provided a statutory mechanism is in place to ensure such an offset is maintained and protected in perpetuity. Ideally the offset would be established as a buffer around the proposed dam reservoirs (DoW, 2009).

Given the above the proposal may be at variance to this principle.

**Methodology** DoW (2009)  
DEC (2009)  
Northcote et al. (1960-68)

**(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**

Conservation areas within 10km radius of the application area include:

- Big Brook Forest Estate (State Forest - 850m north)
- Donnelly State Forest (2.8km southwest)
- Warren State Forest (2km southeast)
- Timber Reserve (1.8km south)
- Pemberton National Parks - Registered (460m north)

The application area is positioned between these conservation areas and may serve as a north-west to south-east ecological linkage within the landscape.

**Methodology** GIS Layer:  
- CALM Managed Lands and Waters - CALM 01/06/05  
- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02  
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005

**(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 at variance to this Principle**

The proposed clearing site is in Zone D, a low salinity risk part of the catchment, where DoW Policy and Guidelines of the 'Granting of Licences to Clear Indigenous Vegetation' provide for the unconditional grant of a licence subject to the retention of native vegetation on at least 10% of the owner's holding area. Imagery from 2004 suggests that only ~9.4 ha of native vegetation remains on the applicants holding which equates to 7.8% of that holding (DoW, 2009).

The DoW Policy and guidelines also provide for the grant of a licence to clear small degraded stands subject to the establishment of a vegetation offset of twice the approved area. In this case the DoW sees that the proposal could therefore be permitted conditional upon the planting up of 5.0 ha of currently cleared land provided a statutory mechanism is in place to ensure such an offset is maintain and protected in perpetuity. Ideally the offset would be established as a buffer around the proposed dam reservoirs (DoW, 2009).

Groundwater water salinity is 500-1000mg/L with rainfall of 1200mm and an evapotranspiration rate of 900mm per annum. It is recommended that the impact of clearing vegetation on the hydrology of the area should be investigated prior to clearing approval (DEC, 2009a). The applicant has advised that he proposes to plant 15 hectares of avocado trees adjacent to Golf Links Road, which are high consumers of water, to address salinity issue (DEC TRIM Ref: DOC92481). The establishment of avocado trees would not be acceptable especially considering there would be no certainty that those trees would be sustainable in perpetuity (DoW, 2009b).

Additionally, the application is to clear riparian vegetation for the purpose of a dam. This will cause short term turbidity and eutrophication. Riparian vegetation buffers act as protective barriers to the impacts of contaminants on water quality. Riparian vegetation protects against erosion, pathogens, turbidity, nutrient enriched run off and the spread of water borne weeds as well as providing habitat for fauna.

**Methodology** DoW (2009)  
DEC (2009a)  
GIS Layer:  
- Topographic contours statewide - DOLA and ARMY 12/09/02  
- Evapotranspiration Isopleths - WRC 29/09/98  
- Groundwater Salinity 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 likely to be at variance to this Principle**

The proposed clearing is likely to incrementally increase recharge, however, it is for a relatively small area and is unlikely to cause flooding.

Given the above, the proposed clearing is not likely to cause, or exacerbate, the incidence or intensity of flooding.

**Methodology GIS Databases:**

- Hydrogeology, Statewide - DOW 13/07/06

- Manjimup 50cm Orthomosaic - DLI04

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

**Comments**

Additional advice was received from the applicant on 5 August 2009 in response to DEC letter dated 3 July 2009. Where applicable the information provided has been addressed under the relevant principles. The applicant acknowledges that there is less than 10% native vegetation remaining on his property, but does not agree 5 hectares is a suitable trade off for clearing approval to be granted.

The proposed clearing site is in Zone D, a low salinity risk part of the catchment, where DoW Policy and Guidelines of the "Granting of Licences to Clear Indigenous Vegetation" provide for the unconditional grant of a licence subject to the retention of native vegetation on at least 10% of the owner's holding area. 2004 imagery suggests that only ~9.4 ha of native vegetation remains on the applicant's holding which equates to 7.8% of that holding (DoW, 2009).

The DoW Policy and guidelines also provide for the grant of a licence to Clear small degraded stands subject to the establishment of a vegetation offset of twice the approved area. In this case the DoW sees that the proposal could therefore be permitted conditional upon the planting up of 5.0 ha of currently cleared land provided a statutory mechanism is in place to ensure such an offset is maintain and protected in perpetuity. Ideally the offset would be established as a buffer around the proposed dam reservoirs (DoW, 2009).

The *Country Areas Water Supply Act 1947* provides:

s.12E(1) "*regard shall be had to the requirement that not less than one-tenth part of the land in question should, in the interests of good agricultural and conservation practice, be left under tree cover including the indigenous undergrowth*" and further

s.12C(3) "*The Minister may refuse any application for the grant or transfer of a clearing licence and, unless the Minister is satisfied that there are exceptional reasons for not refusing an application, shall do so where, in the opinion of the Minister after the clearing that would otherwise be authorised there would be less than one-tenth part of the land in question left under tree cover including the indigenous undergrowth.*"

The applicants holding already has <10% native vegetation hence the application should be refused unless exceptional circumstances apply. Those exceptional circumstances could be considered to apply if the clearing purpose was for a dam and a larger area of local provenance species was re-established to offset (compensate) for the loss of the proposed clearing area of vegetation (DoW, 2009b).

Under these circumstances the establishment of avocado trees would not be acceptable especially considering there would be no certainty that those trees would be sustainable in perpetuity (DoW, 2009b).

The application area is outside of the mapped RIWI Act areas however advice from the DoW suggests that a permit to Interfere with Bed and Banks may be required from the DoW (DoW, 2009).

Town Planning Scheme zoning for the application area is Rural.

No Aboriginal Sites of Significance are within the application area.

**Methodology DoW (2009)**

**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 is at variance to Principles (f) and (i), may be at variance to Principle (a), (b), (g), (h) and (i) and is not likely to be at variance to the remaining clearing Principles.

## 5. References

- DEC (2009) Site Inspection Report for Clearing Permit Application CPS 3127/1, Lot 100 and 101 on Plan 29736. Site inspection undertaken 05/06/2009. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC87024).
- Department of Water (2009). Country Area Water Supply Advice. DEC TRIM Ref: DOC88389.
- 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)