



GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 4529/1

File Number: 2011/002489

Duration of Permit: From 17 October 2011 to 17 October 2015

PERMIT HOLDER

Battista Pessotto

Bruno Pessotto

LAND ON WHICH CLEARING IS TO BE DONE

Lot 9380 on Deposited Plan 203168 (Middlesex 6258)

AUTHORISED ACTIVITY

Clearing of up to 1.17 hectares of native vegetation within the area cross hatched yellow on attached Plan 4529/1.

CONDITIONS

1. Revegetation

The Permit Holder shall establish and maintain trees within the area cross hatched red on attached Plan 4529/1 in accordance with the following requirements:

- (a) trees shall be established and maintained to an average planting density of 50 trees per hectare;
- (b) planting is to commence within twelve months of clearing any area authorised under this Permit.

2. Records must be kept

In relation to the planting of areas pursuant to condition 1 of this Permit:

- (a) the location of any areas planted, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
- (b) a description of the planting activities undertaken; and
- (c) the number of trees and density planted.

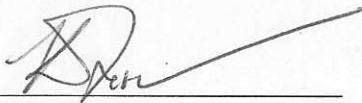
3. Reporting

- (a) The Permit Holder must provide to the CEO, on or before 30 June of each year, a written report of records required under condition 2 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 10 July 2015, the permit holder must provide to the CEO a written report of records required under condition 2 of this Permit where these records have not already been provided under condition 3(a) of this Permit.

DEFINITIONS

The following meanings are given to terms used in this Permit:

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species.

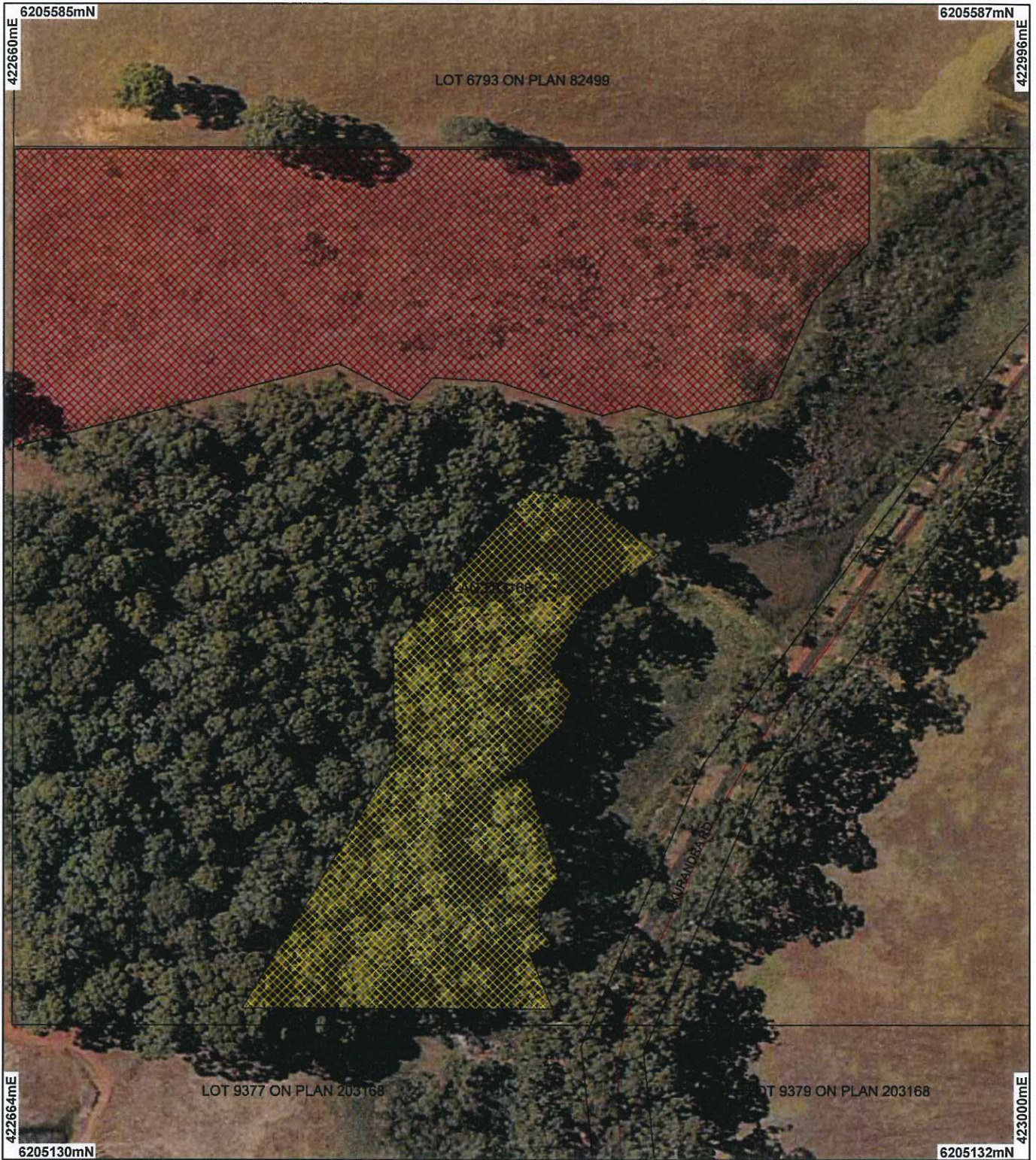


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH







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

22 September 2011

Plan 4529/1



LEGEND

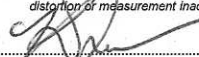
-  Road Centrelines
-  Cadastre for labelling
-  Clearing Instruments
-  Areas Subject to Conditions (cont)
-  Areas Approved to Clear
-  Manjimup 50cm Orthomosaic - Landgate 2007



Scale 1:2000
(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.

 Date 22/9/06
K Faulkner

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.: 4529/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Battisto and Bruno Pessotto

1.3. Property details

Property: LOT 9380 ON PLAN 203168 (MIDDLESEX 6258)
Local Government Area: Shire of Manjimup

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.17		Mechanical Removal	Dam construction or maintenance

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 15 September 2011

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: Tall forest; karri & marri (<i>Corymbia calophylla</i>) (Shepherd, 2009)	The proposed clearing of 1.17ha is for the purpose of dam construction.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The description and condition of the vegetation was determined through a site visit conducted by Department of Water (DoW) officers on 27 July 2011 (DoW, 2011) and a Department of Environment and Conservation (DEC) site visit conducted on 31 August 2011 (DEC, 2011).
Mattiske vegetation complex PM1: Tall open forest of <i>Eucalyptus diversicolor</i> with mixtures of <i>Corymbia calophylla</i> on valley slopes and low forest of <i>Agonis juniperina</i> - <i>Banksia seminuda</i> - <i>Callistachys lanceolata</i> on valley floors in the perhumid zone (Shepherd, 2007).	The 1.17ha of vegetation proposed to be cleared is part of a mature karri regrowth forest that has no understory other than scattered blackberry weeds and grass (DoW, 2011, DEC, 2011).		

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 proposed clearing of 1.17ha is for the purpose of dam construction.

The 1.17ha of native vegetation proposed to be cleared is part of a mature karri regrowth stand (approximately 50-60year old) that has no understory other than scattered blackberry weeds (DoW, 2011). It is considered to be in a good (Keighery, 1994) condition (DEC, 2011).

The local area (10km radius) has approximately 40% of vegetation remaining, largely within DEC managed land. Watercourses and associated riparian vegetation have been modified in the local area due agricultural land use inclusive of a large number of dams This is also relevant for the watercourse for which this application is a part which retains ~ 20% vegetation.

A Priority Ecological Community (PEC), 'epiphytic Cryptogams of the karri forest,' is mapped approximately 4kms east of the area under application but is unlikely to occur within the area under application as this PEC comprises liverworts, mosses and lichens found on mature (15 years or greater) understory species associated with Karri forests, primarily *Trymalium floribundum* (DEC, 2011). As the area has been recently burnt there are no understorey species remaining.

The regrowth karri trees are unlikely to have the potential to develop hollows (DEC 2011) therefore are unlikely to impact on the nesting habitat of hollow-utilising native fauna that have been recorded in the local area.

As this proposed clearing of 1.17ha of mature karri trees is unlikely to contain a PEC, comprises low biodiversity values and is not significant habitat for native fauna, it is unlikely the vegetation under application is at variance to this Principle.

Methodology References:
DEC, 2011
DEC, 2007-
DoW, 2011
Keighery, 1994

GIS Databases:
- Manjimup 50cm Orthomosaic
- NLWRA Current Extent of Native Vegetation
- Hydrography linear
- SAC Biodatasets (Accessed 22 August 2011)

(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 (10kms) has been extensively cleared with approximately 40% vegetation remaining, largely within DEC managed land, resulting in fragmented areas of vegetation.

The regrowth karri trees are unlikely to have the potential to develop hollows (DEC 2011) therefore are unlikely to impact on the nesting habitat of the Western Ringtail Possum (*Pseudocheirus occidentalis*), Carnaby's Cockatoo (*Calyptorhynchus latirostris*), Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*), Baudin's Black Cockatoo (*Calyptorhynchus baudinii*), Brush-tailed phascogale (*Phascogale tapoatafa ssp.*) that have been mapped in the local area (10km radius).

In addition to the abovementioned species, there are 5 species listed as ?rare or likely to become extinct? under the Wildlife Conservation Act 1950 and 6 priority species that have been recorded within the local area (10kms) (DEC, 2007).

Due to the young age and small size of the karri trees and lack of native understorey, it is unlikely these fauna species will be impacted upon the clearing of 1.17ha of regrowth karri trees.

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

Methodology References:
DEC, 2011
DEC, 2007-
DoW, 2011
Keighery, 1994

GIS Databases:
- Manjimup 50cm Orthomosaic
- Hydrography linear
- DEC Tenure
- SAC Biodatasets (Accessed 22 August 2011)

(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) there are three recorded species of declared rare flora (DRF) species:

- *Caladenia christineae*
- *Andersonia annelsii*
- *Caladenia harringtoniae*

Caladenia christineae is found in winter-wet flats, swamps and freshwater lakes, *Andersonia annelsii* is found in sandy loam or clay, skeletal soils and *Caladenia harringtoniae* is found in winter-wet flats, margins of lakes, creeklines and granite outcrops (WA Herbarium, 2008- 2011).

All 3 DRF species have been recorded in the same soil, but differing vegetation type to the application area. However it is unlikely that these DRF species would occur within the application area given the lack of native understorey and abundance of weeds present (DEC, 2011).

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

Methodology References:
WA Herbarium, 2008-

- GIS Databases:
 - Manjimup 50cm Orthomosaic
 - Mattiske Vegetation
 - SAC Biodatasets (Accessed 22 August 2011)
 - Soils, Statewide

(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 mapped Threatened Ecological Communities.

Given this, it is unlikely that the proposed clearing would be at variance to this principle.

Methodology GIS Databases:
 - SAC Biodatasets (Accessed 22 August 2011)

(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 mapped Beard (1980) vegetation association 1144 has approximately 79.63% of its pre-clearing extent remaining within the Warren bioregion (Shepherd, 2009).

The mapped Mattiske vegetation complex PM1 had approximately 67.33% of its pre-clearing extent remaining within the Warren bioregion (Shepherd, 2007).

The local area (10km radius) has been extensively cleared with approximately 40% native vegetation remaining, resulting in areas of vegetation that are fragmented. However as this clearing is surrounded by parkland cleared properties, comprises low biodiversity values and is not significant habitat for native fauna, it is unlikely the 1.17ha of vegetation under application is significant as a remnant of native vegetation.

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

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Warren	833,981	667,164	80.00	82.49
Shire*				
Manjimup	697,370	589,249	84.50	92.33
Beard Vegetation Association in Bioregion*				
1144	159,668	127,144	79.63	90.85
Mattiske Vegetation Complex ***				
PM1	25,801	17,372	67.33	58.99

***Shepherd, 2007
 *Shepherd, 2009

Methodology References:
 Shepherd, 2007
 Shepherd, 2009

- GIS Databases:
 - NLWRA Current Extent of Native Vegetation
 - Mattiske Vegetation
 - Pre- European Vegetation
 - Road Centerlines
 - Cadastre

(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 vegetation to be cleared is within 50m of a minor, perennial watercourse, Smith Brook, and 36m of the watercourse itself dissects the eastern side of applied area.

Watercourses and associated riparian vegetation have been modified in the local area due agricultural land use inclusive of a large number of dams. This is particularly relevant for the watercourse for which this application is a part, Smith Brook, which retains ~ 20% vegetation.

As a watercourse is within the applied area and the vegetation under application is within the riparian zone and remnants of riparian vegetation along this watercourse, the proposed clearing is at variance to this principle.

It is noted the applicant intends to revegetate a 2.71ha area north of the applied area on the same property to mitigate loss of watercourse associated vegetation. The DoW requires offset planting of 2.4ha, twice the size of the applied clearing area, and agrees to the 2.71ha revegetation site proposed by the applicant (DoW, 2011). DoW advised this part of Lot 9380 to the west of Kuranda Road would then be no longer suitable for stock grazing and would form part of the riparian zone of Smith Brook (DoW, 2011).

Requirements to revegetate and rehabilitate will assist in mitigating the loss of the 1.17ha of riparian vegetation.

Methodology References:
DoW, 2011

GIS Databases:

- Manjimup 50cm Orthomosaic
- NLWRA Current Extent of Native Vegetation
- Hydrography linear
- SAC Biodatasets (Accessed 22 August 2011)

(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 area under application is mapped as Tc6 (Northcote et al, 1960- 68) which 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 with some hard acidic red mottled soils and brown earths, all containing ironstone gravels; some soils on major stream terraces.

Groundwater salinity of the application area is mapped as 500-1000mg/L (medium) however a DEC site visit did not record any evidence of the area being subject to salinity (DEC, 2011).

The area under application is within the Warren River Water Reserve. The Warren River catchment has been subject to Country Areas Water Supply Act 1947 (CAWS Act) native vegetation clearing controls since December 1978 to prevent salinisation of water resources (DoW, 2011).

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

Requirements to revegetate and rehabilitate will assist in mitigating potential land degradation impacts such as salinity.

Methodology References:
DEC, 2011
DoW, 2011
Northcote et al, 1960- 68

GIS Databases:

- Manjimup 50cm Orthomosaic
- NLWRA Current Extent of Native Vegetation
- Hydrography linear
- CAWSA Part IIA Clearing Control Catchments
- Soils, Statewide

(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 local area (10km radius) is partially vegetated (approximately 40% remaining) with the DEC managed state

forests of Tone, Jarnadup, Donnelley and Warren constituting the majority of this remaining native vegetation.

The closest reserve is Tone State Forest, which is approximately 1.6km east of the application area.

Given the distance between the conservation reserves and the application area, it is unlikely that the proposal is at variance to this principle.

- Methodology** GIS Databases:
- Manjimup 50cm Orthomosaic
 - NLWRA Current Extent of Native Vegetation
 - Hydrography linear
 - DEC Tenure
 - SAC Biodatasets (Accessed 22 August 2011)

(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 application is to clear 1.17ha of riparian vegetation for the purpose of a dam. This will cause short term turbidity and sedimentation of the Smith Brook that runs through the eastern edge of the application area, and is likely to incrementally increase groundwater recharge.

The area under application is within the Warren River catchment which has been subject to Country Areas Water Supply Act 1947 (CAWS Act) native vegetation clearing controls since December 1978 to prevent salinisation of water resources (DoW, 2011). The proposed clearing site is located in Zone C, a moderate salinity risk part of the catchment. The DoW Policy and Guidelines 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 2.4ha of currently cleared land. The DoW agrees with the 2.71ha area proposed for revegetation that the applicant submitted to DEC (DoW, 2011).

Riparian vegetation acts as protective barriers to the impacts of contaminants on water quality of aquatic environments. Riparian vegetation stabilises the banks of watercourses and protects against erosion, sedimentation, turbidity, run off and the spread of water borne weeds as well as providing habitat for fauna.

A requirement to revegetate an area of at least 2.4ha will assist in mitigating the impacts of salinity within the Warren River catchment.

Therefore, the proposed clearing is at variance to this principle.

- Methodology** GIS Databases:
- Manjimup 50cm Orthomosaic
 - NLWRA Current Extent of Native Vegetation
 - Hydrography linear
 - DEC Tenure

(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 for a relatively small area (1.17ha) and is unlikely to cause, or exacerbate, the incidence or intensity of flooding.

Given the above, the proposed clearing is not likely to be at variance to this principle.

- Methodology** GIS Databases:
- Manjimup 50cm Orthomosaic
 - Hydrography linear

Planning instruments, Native Title, Previous EPA decisions or other matters.

Comments

The Shire of Manjimup advises their footnote is to be included in any approval granted by DEC: ?The applicant is advised to confer with the Shire of Manjimup with respect to the need to comply as relevant with all requirements relating to its Town Planning Scheme, local laws and legislation relating to the movement of heavy vehicles and the repair of road damage resultant from the use of those vehicles? (Shire of Manjimup, 2011).

It is noted the applicant has a previously granted Area Permit (granted 22 November 2009) also for the purpose dam construction (CPS 3070/1). The applicant has advised the clearing has been completed under this Permit,

the dam has been constructed and approximately half of the revegetation (as required under Condition 2 of the Permit) has been completed. The remainder of the revegetation will be completed in winter 2012.

The area under application is within the Warren River Water Reserve. The Warren River catchment has been subject to Country Areas Water Supply Act 1947 (CAWS Act) native vegetation clearing controls since December 1978 to prevent salinisation of water resources (DoW, 2011).

The proposed clearing site is located in Zone C, a moderate salinity risk part of the catchment, where DoW Policy and Guidelines for the 'Granting of Licences to Clear Indigenous Vegetation' provide for the grant of a licence for the construction of a dam. The CAWS Act however requires the retention of native vegetation on at least 10% of the owner's holding area and 2004 imagery suggests that only ~36 ha of native vegetation remains there (excluding a number of obvious plantations totalling ~4.1 ha). 36 ha is below the 10% requirement of 45.7 ha for the current holding. On-site verification of these desk top calculations is required but is unlikely to change below the 10% status (DoW, 2011).

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. Consequently the DoW sees that the proposal could therefore be permitted conditional upon the planting up of 2.4 ha of currently cleared land. DoW agree with the area proposed by the applicant for revegetation (DoW, 2011). The part of Lot 9380 to the west of Kurandra Road would then no longer be suitable for stock grazing and would form part of the riparian zone on Smith Brook (DoW, 2011).

The DoW has received appropriate RIWI Act applications to construct a dam at the subject site and has given an undertaking to issues a bed and banks permit and a surface water allocation subject to clearing being approved (DoW, 2011).

Methodology References:
DoW (2011)
Shire of Manjimup (2011)

4. References

- DEC (2011) Regional Advice Report for Clearing Permit Application CPS 4529/1, Loc 9394, Pt of Loc 3768 Middlesex Road, Manjimup. Site inspection undertaken 31/8/2011. Department of Environment and Conservation, Western Australia (DEC REF A430066).
- 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. (2009) 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.
- Shire of Manjimup (2011) Direct Interest Submission for clearing permit application CPS 4529/1 Received 24/8/2011. Shire of Manjimup, Western Australia (DEC REF A424274).
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed 22 August 2011).

5. 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)