



1. Application details

1.1. Permit application details

Permit application No.: 2566/1
 Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Jarnadup Investments Pty Ltd

1.3. Property details

Property: LOT 2 ON PLAN 17088 (SMITH BROOK 6258)
 Local Government Area: Shire Of Manjimup
 Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
6		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: Tall forest; karri & marri (Corymbia calophylla)	The proposal is for the clearing of 6ha of native vegetation of very good condition for the purpose of silviculture.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Vegetation condition was determined from aerial mapping Manjimup 50cm Orthomosaic (DLI 04), and site photographs provided by the proponent.
Mattiske Vegetation Complex Wheatly: Tall open forest of Eucalyptus diversicolor-Corymbia calophylla on slopes and tall open forest of Eucalyptus patens on valley floor in perhumid and humid zones.			

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 proposal is for the thinning of approximately 6 hectares of karri, marri and blackbutt forest. The vegetation under application is ranges in condition from degraded to very good (Keighery 1994, DEC Site Visit 2008), and has been open to grazing for many years.

The area under application is located within the Warren Bioregion, which retains approximately 79.7% (Shepherd 2006) of the pre-clearing vegetation extent. The Shire of Manjimup is approximately 84.6% vegetated, and 40% of the local area (10km radius) is State forest. Therefore, the 6ha under application may represent an area of low biodiversity, as they are small in a local context and in a degraded state.

District advice identified the potential for a Priority Ecological Community, named 'Epiphytic Cryptogams of the karri forest' and is listed as a Priority 3 community, to exist within the application area. 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 the creek line areas, which will be excluded from clearing.

The clearing is to selectively thin karri, marri and blackbutt trees, however burning of the understorey is also proposed. As the proposed clearing is adjacent to conservation areas, recruitment post clearing should be healthy and diverse. In order to maximise regeneration of the cleared areas and minimise impacts to surrounding uncleared areas weed and dieback management conditions will be imposed.

Methodology **References:**

- Keighery 1994
- DEC Site Visit 2008
- Shepherd 2006

GIS Databases:

(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

Eleven threatened and 1 priority fauna species have been recorded within the local area (10km). All of these were recorded in similar vegetation complexes to the proposed clearing area. The vegetation under application are remnants of varied condition from degraded to very good.

While there are several fauna species that may utilise the proposed areas for feeding, there are larger areas of similar vegetation within the surrounding area that can be utilised. The proposed clearing is not likely to represent a significant habitat for indigenous fauna as the local area (10km radius) is not a heavily cleared area, with 84.6% remaining in the Shire or Manjimup, and 40% of the local area (10km radius) being within State forest.

Therefore, given the consolidated condition of the vegetation association within the area, the clearing of this 6ha area is unlikely to compromise significant habitat for fauna, and is unlikely to be at variance to this principle.

Methodology References:

- DEC Site Visit 2008
- Naturebase 2008

GIS databases:

- SAC Biodatasets - accessed 14 Jul 08
- Pre-European Vegetation - DA 01/01
- Mattiske Vegetation Complexes (01/03/1998)

(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 no known records of rare flora within the local area (10km of the proposal area). Therefore, it is unlikely the clearing as proposed is at variance with this principle.

Methodology References:

- DEC Site Visit

GIS databases:

- SAC Biodatasets - accessed 14 Jul 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 likely to be at variance to this Principle

There are no known threatened ecological communities mapped within the local area (10km radius). Therefore, the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS database:

- SAC Biodatasets - accessed 14 Jul 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

The vegetation within the application area is a component of Beard Vegetation Association 1144 (Hopkins et al, 2001) of which there is approximately 79.5% of the pre-European extent remaining (Shepherd, 2006). The vegetation proposed for clearing is also a component of Mattiske vegetation complex Wheatly, of which 78% of the pre-European extent is remaining (Mattiske, 1998).

The proposed clearing falls within the Interim Biogeographic Regionalisation of Australia bioregion Warren, of which 79.7% of the pre-European vegetation remains. The local area is approximately 50% vegetated with native vegetation, of which there are 5 DEC managed lands. The data suggests that the Shire of Manjimup is also well vegetated, with 84.6% native vegetation remaining.

Given the pre-European extent remaining of the aforementioned vegetation associations and Mattiske vegetation complex, the relatively high proportion of vegetation remaining within the local area the applied area is not considered to be a significant remnant of vegetation in an area that has been extensively cleared.

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

Methodology **References:**
- Shepherd 2006
- Hopkins et al. 2001
- Mattiske 1998

GIS database:
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Local Government Authorities - DLI 8/07/04
- Mattiske Vegetation - CALM 1/03/1998
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 11 Feb 08
- 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 is at variance to this Principle**

A minor perennial stream, a tributary to the Smith Brook and Warren River, lies within the area under application. Therefore the vegetation under application is associated with a watercourse and is at variance to this Principle.

A condition will be placed on the permit to exclude clearing within 30m of the watercourse.

Methodology **GIS Databases:**
- ANCA wetlands - Environment Australia 26/3/99
- CALM Managed Lands and Waters - CALM 01/06/05
- EPP Lakes Policy Area - DEP 14/05/97
- EPP, Wetlands 2004 (DRAFT) - EPA 21/7/04
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- Hydrography linear - DOW 13/7/06
- Hydrography linear (hierarchy) - DoW 13/7/06
- Ramsar wetlands - DEC 03

(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 soils of the area under application are described as hard acidic yellow and red mottled soils and brown earths, containing ironstone gravels; some on major stream terraces (Northcote et al. 1960-68).

The groundwater salinity is 500 to 1000 mg/L and the hydrogeology consists of rocks of low permeability with local aquifers in fractured and weathered rocks.

Clearing is for the purpose of silviculture, so it is unlikely that erosion will increase as a result. Additionally, the clearing is limited to 6ha within a well vegetated area (approximately 50% remaining within a 10km radius), and is therefore unlikely to affect water logging or acid sulfate soils.

However, the proposal lies within CAWS Zone C, and as such rehabilitation and revegetation conditions in line with CAWS Guidelines (Waters and Rivers Commission 1996) will be placed on the proposal to prevent salinity related land degradation.

Methodology **References:**
- Northcote et al. 1960-68
- Waters and Rivers Commission 1996

GIS Databases:
- Acid Sulfate Soil Risk Map, Swan coastal Plain - DEC 07/08/06
- Average Annual Rainfall Isohyets - WRC 29/09/98
- Annual Evaporation Contours (Isopleths) - WRC 29/09/98
- Hydrogeology, statewide - DOW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Salinity Risk LM 25m - DOLA 00
- 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 may be at variance to this Principle

The area under application lies adjacent to DEC managed lands, and is linked with nearby Smith Brook Nature Reserve, Warren State Forest, St James Mitchell National Park and Tone State Forests. The vegetation within these reserves is sensitive to dieback (*Phytophthora cinnamomi*). The proposed clearing may increase the risk of dieback and / or weeds impacting on conservation areas. Therefore the proposal may be at variance to this Principle. Conditions addressing dieback and weed management will be placed on the permit to prevent the transference of pathogens and weeds.

Methodology GIS Databases:

- CALM Managed Lands and Waters - CALM 01/06/05
- Hydrography, linear - DOW 13/7/06
- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02
- System 1 to 5 and 7 to 12 areas - DEC 11/7/06

(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

Given the proposed clearing is for 6ha of tree thinning, and regeneration will occur, it is unlikely that the clearing will impact on groundwater levels significantly. However, as the proposal lies within CAWS Zone C, rehabilitation and revegetation conditions will be placed on the permit, in line with the CAWS guidelines (Waters and Rivers Commission 1996), to prevent salinisation of the surface or ground water.

There may be an increase in sedimentation as a result of clearing into the minor perennial stream which lies within the area under application. A condition excluding clearing within 30m of the watercourse will be placed on the permit to mitigate this potential impact.

Methodology References:

- Waters and Rivers Commission 1996

GIS Databases:

- Evapotranspiration Isopleths - WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Salinity Risk LM 25m - DOLA 00
- Topographic Contours, Statewide - DOLA 12/09/02

(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 selective thinning method within native vegetation, much of which has already had stock access and therefore has degraded understorey, is unlikely to cause or exacerbate the incidence or intensity of flooding. Additionally, as the clearing is thinning of karri, marri and blackbutt trees, and regeneration will occur. Therefore, the clearing is not likely to be at variance to this principle.

Methodology GIS Databases:

- Environmental Impact Assessments - EPA 22/2/07
- Evaporation Isopleths - WRC 29/09/98
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DoW 13/7/06
- 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 proponent advises that a percentage of the salvaged vegetation will be sold. The proponent has applied for a Commercial Producer's Licence under the Wildlife Conservation Act 1950 to the DEC, Flora Licensing Branch. This licence is currently pending on the proponent providing a clearing permit.

The area under application falls within Zone C of the Warren River Water Reserve, managed under the Country Areas Water Supply Act 1947. No compensation has been paid.

A submission was received from the Shire of Manjimup relating to the necessity for proponents to comply with Shire of Manjimup's Town Planning Scheme, local laws and legislation relating to the movement of heavy vehicles and the repair of resultant road damage.

Methodology DEC Flora Licensing Branch 2008
WRC 1996

GIS Database:

- Cadastre - Landgate Dec 07
- Native Title Claims - LA 2/5/07
- RIWI Act, Groundwater Areas - DoW 13/07/06
- RIWI Act, Irrigation Districts - DoW 13/07/06
- Town Planning Scheme Zones - MFP 31/08/98
- Country Area Water Supply Act (Part IIA) Clearing Control Catchments 29/06/2006
- Aboriginal Sites of Significance 26 April 2007
- Public Drinking Water Source Areas (PDWSAs) ? 07/02/06

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 principle (f), may be at variance to principles (a), (g), (h) and (i), and is not likely to be at variance to the remaining clearing principles.

5. References

- DEC Site Visit, July 2008. Trim DOC59680.
- 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.
- Naturebase (2008). Fauna Species Profiles. Available from: <http://www.naturebase.net/>
- 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.
- Water and Rivers Commission (1996) Policy and Guidelines: Granting of Licences to Clear Indigenous Vegetation in Catchments Subject to Clearing Control Legislation. Water and Rivers Commission, 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)

