



1. Application details

1.1. Permit application details

Permit application No.: 893/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: MR Jeffrey James Woods

1.3. Property details

Property: LOT 11030 ON PLAN 203155 (CATTERICK 6255)
LOT 11031 ON PLAN 203155 (CATTERICK 6255)

Local Government Area: Shire Of Bridgetown-Greenbushes

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
4.71		Mechanical Removal	Hazard reduction or fire control

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: Unit 3 - Medium forest; jarrah-marri.	4.71 hectares of vegetation containing predominantly <i>Corymbia calophylla</i> (marri) with severe weed invasion.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	Vegetation condition established through site visit.
Mattiske: Catterick (CC1) - Open-forest of <i>Eucalyptus marginata</i> subsp. <i>marginata</i> - <i>Corymbia calophylla</i> mixed with <i>Eucalyptus patens</i> on slopes, <i>Eucalyptus rudis</i> and <i>Banksia littoralis</i> on valley floors in the humid zone.		Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	
Dwellingup High Rainfall (D1) - Open-forest of <i>Eucalyptus marginata</i> subsp. <i>marginata</i> - <i>Corymbia calophylla</i> on lateritic uplands in mainly humid and subhumid zones.		Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	
Hedde: Dwellingup and Hester Complex in High Rainfall-Central and South - Open-forest of jarrah-marri.		Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	
Catterick Complex in Medium to High Rainfall - Predominantly open-forest of jarrah-marri, lesser extent open-forest of jarrah-marri-yarri.		Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	

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 at variance to this Principle**
The condition of the vegetation proposed to be cleared is Completely Degraded (Keighery 1994) due to

extensive weed invasion, grass weeds and *Solanum americanum* (glossy nightshade) with virtually no native mid storey or under storey species present, and virtually only *Corymbia calophylla* (marri) is present in the over storey.

Due to the condition of the vegetation and the lack of native species, it is unlikely the area proposed to be cleared holds a high level of biological diversity.

Methodology Site visit (February 2006)
Keighery (1994)

(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 condition of the vegetation proposed to be cleared is Completely Degraded (Keighery 1994) with virtually no native species present except for *Corymbia calophylla* (marri) in the over storey.

There is no distinct mid storey or understorey, and ground cover consists of extensive weed species.

The lack of structure of the vegetation and native species within the area proposed to be cleared severely reduces the possibility of significant habitat for fauna existing within this area.

Methodology Site visit (February 2006)
Keighery (1994)

(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 mapped Declared Rare Flora (DRF) or Priority Flora populations within the local area (10km radius) of the proposed clearing.

Due to the Completely Degraded (Keighery 1994) condition of the vegetation proposed to be cleared and the lack of mapped DRF and Priority Flora within the local area it is unlikely the proposed clearing is at variance to this Principle.

Methodology Keighery (1994)
GIS databases:
- Declared Rare and Priority Flora List - CALM 13/08/03

(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 occurrences of Threatened Ecological Communities (TEC) or Threatened Plant Communities (TPC) within the local area (10km radius) of the proposed clearing.

Due to the Completely Degraded (Keighery 1994) condition of the vegetation proposed to be cleared and the lack of mapped TEC's and TPC's within the local area it is unlikely the proposed clearing is at variance to this Principle.

Methodology Keighery (1994)
GIS databases:
- Threatened Ecological Communities - CALM 15/7/03
- Threatened Plant Communities - DEP 06/95

(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 application is located in the Jarrah Forest Bioregion in the Shire of Bridgetown-Greenbushes. The extent of native vegetation in these areas is 58.3% and 67.9% respectively (Shepherd et al. 2001).

The vegetation of the area applied to be cleared is a component of Beard Unit 3 (Hopkins et al. 2001) of which there is 72.1% (Shepherd et al. 2001) of the pre-European extent remaining, and therefore of 'least concern' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

The vegetation of the area applied to be cleared is a component of Matiske Catterick (CC1) (Havel 2002) of which there is 70.1% of the pre-European extent remaining and therefore of a 'least concern' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

The vegetation of the area applied to be cleared is a component of Mattiske Dwellingup High Rainfall (D1) (Havel 2002) of which there is 88.0% of the pre-European extent remaining and therefore of a 'least concern' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

The vegetation of the area applied to be cleared is a component of Heddle Catterick Complex Medium to High Rainfall (Heddle et al. 1980) of which there is no information available on the pre-European extent remaining and therefore of unknown status for biodiversity conservation (Department of Natural Resources and Environment 2002).

The vegetation of the area applied to be cleared is a component of Heddle Dwellingup and Hester Complex High Rainfall Central and South (Heddle et al. 1980) of which there is no information available on the pre-European extent remaining and therefore of unknown status for biodiversity conservation (Department of Natural Resources and Environment 2002).

Due to the Completely Degraded (Keighery 1994) condition of the vegetation proposed to be cleared and the high percentage of vegetation remaining within the local area (10km radius), the area proposed to be cleared is not considered to be at variance to this Principle.

Methodology Keighery (1994)
Department of Natural Resources and Environment (2002)
Havel (2002)
Heddle et al. (1980)
Hopkins et al. (2001)
Shepherd et al. (2001)
GIS databases:
- Mattiske Vegetation - CALM 24/3/98
- Heddle Vegetation Complexes - DEP 21/06/95
- Interim Biogeographic Regionalisation of Australia - EM 18/10/00
- Local Government Authorities - DLI 8/07/04
- Pre European Vegetation - DA 01/01

(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 is a minor perennial watercourse on the property under application but not directly within the areas proposed to be cleared. The areas proposed to be cleared are not connected by vegetation to this watercourse and is therefore not considered to be growing in association with this watercourse.

The Dalgarp Brook is located 7.3km west of the area proposed to be cleared. There is no vegetation linking this River with the area proposed to be cleared and is therefore not likely to impact on this watercourse.

There are not EPP area or EPP lakes within the local area of the proposed clearing.

There are no Geomorphic, RAMSAR or ANCA wetlands within the local area of the proposed clearing.

The area proposed to be cleared is not considered to be in association with any watercourse or wetland and is therefore not at variance to this Principle.

Methodology Site visit (February 2006)
GIS databases:
- ANCA, Wetlands - CALM 08/01
- EPP Areas - DEP 06/95
- EPP Lakes - DEP 28/07/03
- Geomorphic Wetlands, Augusta to Walpole - DoE 18/6/03
- Hydrography Linear - DoE 1/2/04
- RAMSAR, Wetlands - CALM 21/10/02
- Bridgetown 1m Orthomosaic - DOLA 01

(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

There is no mapped Acid Sulphate Soils (ASS) risk for the area proposed to be cleared.

Groundwater salinity for the area proposed to be cleared is mapped at 500-1000 mg/L.

There is no mapped salinity risk for the area applied to be cleared.

The area proposed to clear is unlikely to cause appreciable land degradation due to the size of the proposed clearing.

- Methodology** GIS databases:
- Acid Sulfate Soil Risk Map, SCP - DoE 01/02/04
 - Salinity Risk LM 25m - DOLA 00.
 - Groundwater Salinity, Statewide - 22/02/00

(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**
Four CALM Managed Lands were found within the local area (10km radius) of the proposed clearing.

The Hester Conservation Park is located 2.6km south of the area proposed to be cleared. There is no direct vegetation link between this Park and the area proposed to be cleared.

An un-named Reserve is located 3.3km north west of the area proposed to be cleared. There is no direct vegetation link between this Reserve and the area proposed to be cleared.

The Wilga State Forest is located 4km north of the area proposed to be cleared. There is no direct vegetation link between this Forest and the area proposed to be cleared.

The Hester State Forest is located 4.7km south west of the area proposed to be cleared. There is no direct vegetation link between this Forest and the area proposed to be cleared.

As there are no direct vegetation links between any of these CALM Managed Lands and the area proposed to be cleared, it is unlikely the proposed clearing would affect the environmental values of these conservation areas.

There are no Registered National Estates within the local area of the proposed clearing.

- Methodology** GIS database:
- CALM Managed Lands and Waters - CALM 1/06/04
 - Register of National Estate - EA 28/01/03
 - Bridgetown 1m Orthomosaic - DOLA 01

(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 area proposed to be cleared is within the southern part of the Hardy Estuary - Blackwood River Hydrographic Catchment Area and is not within a Public Drinking Water Source Area.

The area proposed to be cleared is not within a RIWI ground water or RIWI surface water area.

Due to the scale of the proposed clearing it is unlikely the proposal will cause deterioration of water quality in the local area.

- Methodology** GIS databases:
- Hydrographic Catchments, Catchments - DoE 3/4/03
 - Public Drinking Water Source Areas (PDWSAs) - DOE 29/11/04
 - RIWI Act Ground Water Areas - WRC 13/06/00
 - RIWI Act Surface Water Areas - WRC 18/10/02

(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**
Due to the scale of the proposed clearing, flooding impacts are unlikely to occur.

- Methodology** GIS databases:
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The area proposed to be cleared is zoned Rural 1 - Extensive Farming in the Town Planning Scheme Zones.

No submissions were received from the Shire of Bridgetown-Greenbushes or from the Bridgetown-Greenbushes LCDC.

Methodology

GIS database:
- Town Planning Scheme Zones - MFP 8/98

4. Assessor's recommendations

Purpose	Method Applied	area (ha)/ trees	Decision	Comment / recommendation
Hazard reduction or fire control	Mechanical Removal	4.71	Grant	Proposal is not likely to be at variance to any of the Principles.

5. References

- 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.
- Havel, J.J. and Mattiske Consulting Pty Ltd (2002) Review of management options for poorly represented vegetation complexes, Conservation Commission.
- Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, 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, BJ (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.

6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
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 DoE)

