



1. Application details

1.1. Permit application details

Permit application No.: 920/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: A & A Fazari

1.3. Property details

Property: LOT 5 ON DIAGRAM 91294
Local Government Area: Shire Of Chittering
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
40.58		Grazing	Grazing & Pasture

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 1027: Mosaic: Medium open woodland; jarrah and marri, with low woodland; banksia/ Medium sparse woodland; jarrah and marri (Shepherd et al 2001, Hopkins et al 2001).	The proposed clearing of 40.58 ha of native vegetation covers the entire Lot 105 Blue Plains Rd and is for the purpose of commercial grazing.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The vegetation condition was assigned a very good condition due to the presence of a large amount (approximately 80%) of the vegetation under application remaining in very good condition (Site Visit, 31 October 2005).
Beard vegetation association 3: Medium forest; jarrah-marri (Hopkins et al. 2001, Shepherd et al. 2001).	The vegetation of the area is comprised Banksia grandis, B. attenuata and B. menziesii and also some Corymbia calophylla at the southern end of the property. Understorey species in the area included Xanthorrea sp., Macrozamia sp. and numerous other understorey plants.		
Hedde Vegetation Complex: Mogumber Complex - South; Open woodland of Eucalyptus calophylla, with some admixture of E. marginata and a second storey of E. todtiana - Banksia attenuata - B. menziesii - B. ilicifolia. (Hedde et al. 1980).	The condition of vegetation ranged from very good at the southern end of the property and good for the northern 20% of the property, excluding the area where the goats were penned which would be classified as degraded (Site Visit, 31 October 2005).		
Mattiske Vegetation Complex: Mogumber Complex; The vegetation is dominated by an open woodland of marri (Corymbia calophylla) with some admixture of jarrah (Eucalyptus marginata subsp. Thalassica) over Eucalyptus todtiana - Banksia attenuata - Banksia menziesii - Banksia ilicifolia (Mattiske Consulting 2002).			
Yalanbee Complex; Woodland of Eucalyptus wandoo-Eucalyptus accedens, less consistently open forest of Eucalyptus marginata subsp.			

thalassica-Corymbia calophylla
on lateritic uplands and
breakaway landscapes in arid
and perarid zones (Mattiske
Consulting 1998).

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 southern area of the property that has not been subject to grazing remains in very good condition and may comprise a high level of biodiversity. The northern part of the property which has been subject to grazing remains in a good to degraded condition (Site Visit, 2005). A local real estate agent has indicated that prior to the land being purchased by the proponent, the vegetation throughout the property was in good condition (Neil Hearne pers comm. 21/6/05).

In addition, the property forms part of a large corridor of remnant vegetation that creates a vital link from the Swan Coastal Plain over the Dandaragan Plateau and further to the Darling Plateau. There is a strong local, state and federal commitment to identify and protect corridors across the landscape (Chittering Valley Land Conservation District Committee, 2006) and it is considered that the majority of the area under application is a good example of vegetation that should be retained for corridor purposes.

Methodology Chittering Land Conservation District Committee (2006) (DoE TRIM ref: HD 28419).
Site Visit (31/10/2005)
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 may be at variance to this Principle**

The area under application comprises a Banksia community that is in very good condition and is highly likely to be suitable feeding habitat for the Critically Endangered Carnaby's Black Cockatoo. A number of large kangaroos have been sited within the subject area. There is an electric fence surrounding the entire margin of the property, which may restrict movement of smaller mammals and reptiles into and out of the area under application (Site Visit, 2005). Given the large area under application, the existing Banksia and Marri vegetative community, which is in 'very good condition', is likely to provide significant habitat for fauna indigenous to Western Australia. The clearing of this vegetation may, therefore, be at variance to this principle.

Methodology Site Visit (31/10/2005)
Keighery (1994)

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments **Proposal may be at variance to this Principle**

There are no known occurrences of Declared Rare Flora species (DRF) within the area under application.

One DRF species, *Thelymitra stellata*, is located 80m north west of the subject area, within the road reserve on the opposite side of Blue Plains Road which borders the property. A Priority Four species, *Calytrix silvana*, is located 740m north west of the area. Both species are found on the same Heddle and Beard Vegetation complexes as the area under application. No formal survey has been undertaken of the area under application. However, as the vegetation under application is in very good condition, these species and other rare flora may well occur within the area under application.

Methodology Site Visit (31/10/2005)
Keighery (1994)
GIS Databases:
- Declared Rare and Priority Flora List - CALM 13/08/03
- Pre-European Vegetation - DA 01/01
- Heddle Vegetation Complexes - DEP 21/06/95

(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 (TECs) within the area under application. One TEC is located 7km west north west of the area on the same type of vegetation as the proposed area, however this TEC is sufficiently distant that the clearing is not likely to affect it.

Methodology GIS Databases:

(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 may be at variance to this Principle

The State Government is committed to the National Objectives and Targets for Biodiversity Conservation which includes a target that prevents a clearance of ecological communities with an extent below 30% of that present pre-European settlement (Department of Natural Resources and Environment 2002, EPA 2000).

The vegetation under application has been mapped as components of Beard Vegetation Associations 3 and 1027 (Hopkins et al. 2001, Shepherd et al. 2001), Heddle's Mogumber Complex South (Heddle et al. 1980), and Mattiske's Mogumber (Mb) and Yalanbee (Y6) complexes (Mattiske Consulting 1998). All of these vegetation complexes are at or above the 30% target (56.5%, 72.1%, 39.9%, 30%, 51.4% respectively).

Notwithstanding, the area under application remains in very good condition and is well vegetated compared to extensive areas to the west and north west that have been cleared for agricultural pursuits. The area under application therefore represents a significant remnant of native vegetation within the local area.

Methodology Mattiske Consulting (1998)

Shepherd et al. (2001)

Heddle et al. (1980)

Hopkins et al. (2001)

Keighery (1994)

Department of Natural Resources and Environment (2002)

GIS Databases:

- Pre-European Vegetation - DA 01/01

- Heddle Vegetation Complexes - DEP 21/06/95

- Mattiske Vegetation - CALM 24/03/98

- Swan Coastal Floristic Survey - CALM 98

- Interim Biogeographic Regionalisation of Australia - EA 18/10/00

- EPA Position Paper No 2 Agriculture Region - DEP 12/00

(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 not likely to be at variance to this Principle

There are no watercourses, wetlands or wetland dependent vegetation within the area under application. The vegetation under application is predominantly Banksia and Marri (Site Visit, 2005), which is not considered to be wetland dependent.

Methodology Site Visit (31/10/2005)

GIS Databases:

- Hydrography, linear - DOE 01/02/04

- Geomorphic Wetlands - Swan Coastal Plain - DOE 15/09/04

- EPP, Areas - DEP 06/95

- EPP, Lakes - DEP 28/07/03

- EPP, Wetlands (draft) - DEP 21/07/04

- ANCA Wetlands - CALM 08/01

- Hydrographic Catchments - Catchments DOE 3/4/03

- RAMSAR Wetlands - CALM 21/10/02

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments Proposal is at variance to this Principle

DAWA (2006) assessment of the area under application identified the potential for land degradation to occur in the form of eutrophication, salinity and wind erosion. The siliceous sands on the property have low nutrient retention potential and leaching of nutrients is likely to occur. Further, there is a risk that the proposed clearing will contribute to increased salinity in the Ellen Brook catchment (DAWA 2006). DAWA (2006) also advise that the soil landscape units representative of the area have a low capacity for grazing. Therefore, DAWA (2006) concluded that the proposed clearing is likely to be "seriously at variance" with principle (g).

Methodology DAWA Advice (2006) (DoE TRIM ref: CRN 218152)

(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

There are no CALM managed lands or areas of conservation value within 5km of the subject area.

However, the property forms part of a large corridor of remnant vegetation that creates a vital link from the Swan Coastal Plain over the Dandaragan Plateau and further to the Darling Plateau. There is a strong local, state and federal commitment to identify and protect corridors across the landscape (Chittering Valley Land Conservation District Committee, 2006) and it is considered that the majority of the area under application is a good example of vegetation that should be retained for corridor purposes.

Methodology Chittering Land Conservation District Committee (2006) (DoE TRIM ref: HD 28419).

GIS Databases:

- CALM Managed Lands and Waters - CALM 01/08/04
- Register of National Estate - EA 28/01/03

(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

The hydrology of the area is such that surface water run-off in the area is highly unlikely and groundwater recharge may in fact be beneficial to wetlands in the surrounding area. This is because the large sand particle size and high infiltration rate results in reasonable resistance to transportation and low potential for generating runoff (DAWA 2006). Notwithstanding, DAWA (2006) indicated that eutrophication could potentially result from the clearing activity, from transport of nutrients through groundwater.

Methodology DAWA Advice (2006) (DoE TRIM ref: CRN 218152)

(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 high infiltration rates and the absence of watercourses within the local area, clearing of native vegetation within the area under application is unlikely to have a significant impact on the level or intensity of flooding within the local area.

Methodology GIS Databases:

- Evaporation Isopleths - BOM 09/98
- Isohyets - BOM 09/98
- Hydrography, linear - DOE 01/02/04
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

This application was presented to the Shire of Chittering Council at its 15 March 2006 meeting for consideration, whereby Council resolved as follows:

-That Council recommend to the Department of Environment that it should refuse the application to clear native vegetation at Lot 105 (RN 24) Blue Plains Road, Chittering for the following reasons:

1. It is identified as a 'conservation' area in the Local Planning Strategy and therefore needs to be protected from any native vegetation clearance;
2. It is contrary to the intent of the Shire of Chittering Local Planning Strategy;
3. It is contrary to the following aims of the Shire of Chittering Land Capability Study:
 - a. To retain existing natural vegetation and connecting areas to provide for biodiversity corridors;
 - b. To protect the landscape values of the valley landforms from visually intrusive development or inappropriate land uses;
 - c. To create biodiversity corridors contiguous to Ellen Brook, Yal Yal Brook and Rocky Creek and from the Brockman River through to Julimar State Forest;
4. The high risk of degradation associated with potential clearing of this land and its poor capability to establish pastures for grazing.
5. The high risk of nutrient export on the sandy soils within this site would add to eutrophication of Rocky Creek, the Ellen Brook and ultimately the Swan River.
6. The significantly high risk of wind erosion of these sandy soils particularly of this highly elevated site would be enormous. This property is situated high in the landscape and would be highly susceptible to wind erosion if large tracks of exposed unprotected land with no vegetation cover was created as a result of this application.
7. The need for a buffer to the DRF species on the nearby Blue Plains Rd to ensure there is sufficient plant numbers within the ecosystem to provide genetic variation for the long term survival of this species.
8. The need to retain vegetation linkages across the landscape are vital objectives for the Swan Region

Strategy endorsed by the State and Federal Governments, and the Shire of Chittering commitments to similar objectives. This property forms part of a large corridor of remnant vegetation that creates a vital link from the Swan Coastal Plain over the Dandaragan Plateau and further to the Darling Plateau.

9. The removal of Banksia Woodland on sandy soils will be extremely difficult to regenerate as experienced by the Ellen Brook Integrated Catchment Group due to the sandy soils with issues such as low nutrient retention, low water retention and high wind erosion would be significant factors affecting success of regrowth of native vegetation.

The Council also advises that the Department of Environment (DoE) direct the applicant to restore the native vegetation, and that the DoE direct the applicant to remove the keeping of goats and associated infrastructures from the site (water troughs, gates, holding yards, and fences).

The Chittering Valley Land Conservation District Committee (CVLCDC) does not support the clearing application by the applicants, due to the high risk of degradation associated with potential clearing of the land and its poor capability to establish pastures for grazing. In addition, The CVLCDC has made a number of recommendations including:

1. That no approval be given
2. That the owners be made to restore native vegetation
3. That the goats be removed from the property immediately, including all infrastructure that is there for the keeping of goats - water troughs, gates, holding yards, fences
4. That the owners lease or buy a property that is already cleared and able to sustainably support grazing by goats

Methodology Shire of Chittering (2006). Submission (DoE TRIM Ref NI 1309).
Chittering Valley Land Conservation District Committee (3 March 2006). Submission (DoE TRIM ref: HD 28419)

4. Assessor's recommendations

Purpose	Method Applied	area (ha)/ trees	Decision	Comment / recommendation
Grazing & Pasture	Grazing	40.58	Refuse	The area proposed to be cleared has been assessed against the clearing principles and is at variance to Principle (g) and may be at variance to Principles (a), (b), (c), (e), (h) and (i). Furthermore, the Shire of Chittering has recommended that the permit be refused as it is contrary to the Shire of Chittering's Local Planning Strategy and the Local Sustainability Strategy. Given the above, the assessing officer recommends that the CEO refuse to grant a clearing permit.

5. References

- Chittering Land Conservation District Committee (2006) (DoE TRIM ref: HD 28419).
- DAWA (2006) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref CRN 218152.
- 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.
- EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority.
- 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, 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.

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)