



1. Application details

1.1. Permit application details

Permit application No.: 156/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Peter & Marlene Green

1.3. Property details

Property: LOT 284 ON PLAN 4866 (Lot No. 284 CAMPBELL CANNING VALE 6155)
Local Government Area: City Of Gosnells
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.44		Mechanical Removal	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
Hedde vegetation complex: Southern River Complex open woodland of Eucalyptus calophylla, E. marginata and Banksia species with fringing woodland of E. rudis and Melaleuca rhipiophylla along creek beds (Hedde et al 1980, Government of Western Australia 2000). Beard vegetation complex 1001: Medium, very sparse woodland; jarrah with low woodland; banksia and casuarina (Hopkins et. al. 2001, Shepherd et. al. 2001).	The area under application comprises the majority of a half-hectare block. The area under application is described as Banksia attenuata low open forest to low woodland with occasional Melaleuca preissiana and Banksia ilicifolia (Halse and Lyons 2005, Weston 2004). Halse and Lyons (2005) suggest that the vegetation reflects a shallow water table, rather than that the area is a dampland.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The reported condition of the vegetation varies from very good (C.Jaques, site visit), to good (Halse and Lyons 2005) to degraded (Weston 2004). Therefore, the vegetation condition of good is being used in this assessment.

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 area under application is bounded by Ranford Road to the east and beyond this road is high density housing. Due to this road and the long, thin nature of the block, the eastern section of the area under application has been disturbed resulting in the infestation of weeds through edge effects. The vegetation towards the centre of the property is in good condition, however there are numerous tracks throughout adding to the spread of weeds. Balannup Lake Nature Reserve, Piara Nature Reserve and Forrestdale Lake Nature Reserve are all located in the local area (5km radius) in relation to the proposed clearing (CALM 2004). Given the above, it is considered unlikely that the area under application is of higher biodiversity value than the local reserves and other 'bush blocks' in the area.
Methodology	EPA Bulletin 1126 (2005) CALM (2004) Land Clearing Proposal Advice (DoE Trim Ref EI326) GIS Databases: - Swan Coastal Plain North 40cm Orthomosaic - DLI 05

(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 specially protected species of Numbat (*Myrmecobius fasciatus*) and Western Brush Wallaby (*Macropus irma*) have been recorded in the local area (CALM 2004). However, considerable development has occurred since the last recorded sightings, so their continued presence in the area would be questionable (CALM 2004). Anecdotal sightings of quenda or Southern Brown Bandicoot have also been noted (EPA 2005). However given the small size of the area under application, it is unlikely that the clearing as proposed would have a significant impact on the endemic fauna of the local area.

Methodology CALM 2004 Land Clearing Proposal Advice (DoE TRIM No. EI326)
EPA Bulletin 1162 (2005)

(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

Initial advice from CALM (2004) indicated that a number of Declared Rare Flora (DRF) species were known to occur in the local area (5km radius) and that there was the potential for the DRF species *Drakaea micrantha* and *Caladenia huegellii* to occur within the area under application. Subsequently additional information was provided to CALM in the form of a flora survey conducted by Weston (2004). This study indicated that no further DRF or Priority species had been identified within the Campbell Road Estate (which includes the area under application). Based on this subsequent information, CALM reviewed their advice and indicated that the proposed clearing is unlikely to be at variance to Principle C.

Methodology CALM (2004) Land Clearing Proposal Advice (DoE TRIM No. EI326)
Weston (2004)
CALM (2006) Revised Land Clearing Proposal Advice (DoE TRIM No EI4828)

(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

Two Threatened Ecological Communities (TECs) have been identified in the local area (5km radius), TEC SCP10a - shrublands on dry clay flats; and TEC SCP08 - herb rich shrublands in claypans (CALM 2004). As the property is elevated and the TECs identified are associated with low-lying clay flats, the TECs are unlikely to occur within the area under application and therefore it would be unlikely that the clearing as proposed would be at variance to this Principle (CALM 2004).

Methodology CALM 2004 Land Clearing Proposal Advice (DoE TRIM No. EI326)

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

The area under application consists of Heddle vegetation Southern River complex and Beard vegetation association 1001 (Heddle et al 1980, Shepherd et al 2001, Hopkins et al 2001). Both of these vegetation complexes have less than 30% of the pre-European extent remaining with 5,370ha remaining of the Southern River Complex (Heddle et al 1980) and 18,907ha of the Beard Vegetation association 1001 remaining (Shepherd et al 2001, Hopkins et al 2001). However the clearing as proposed is 0.44ha which equates to less than 0.008% of the remaining vegetation. Further, portions of the 0.44 ha are somewhat degraded and therefore not essentially good representations of these vegetation associations.

Methodology Department of Natural Resources and Environment (2002)
EPA (2000)
Hopkins et al. (2001)
Shepherd et al. (2001)
Heddle et al (1980)

(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

The area under application was originally classified as a Conservation Category Wetland (CCW). However, during an appeal regarding a separate assessment process, a study was conducted that encompassed a

triangle of land bounded by Ranford, Campbell and Fairlie Roads known colloquially as the Campbell Road Estate. This study aimed to determine the presence or absence of wetlands within this Campbell Road Estate. The study identified Lot 284, which contains the area under application, as not a wetland, rather the vegetation present reflects a shallow watertable (Halse and Lyons 2005). This finding is supported by Weston (2004) which, during a revision of mapping for the Campbell Road Estate area, identified the area under application as *Banksia attenuata* Low Open forest to Low Woodland.

On the Minister's determination of the appeal, the findings of the study are to be used to update the Department's wetland mapping. As such, the area under application is now no longer considered to be a Conservation Category Wetland, but rather a dryland area. As such, the clearing as proposed is not at variance to this Principle.

Methodology Halse and Lyons (2005)
Weston (2004)
Minister's Letter to A/Director General of DoE
GIS Databases:
- Geomorphic wetlands (Mgmt Categories) Swan Coastal Plain - DOE 15/09/04

(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**
Advice from DAWA (2004) indicates there is a potential for eutrophication and wind erosion to occur following the proposed clearing. However, it is considered that these risks could be lessened with the implementation of appropriate management strategies such as good pasture management, adequate fencing and vegetated wind breaks (DAWA 2004).

Methodology DAWA Land Degradation Assessment Report (2004) (DoE TRIM No. EI328)

(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**
Balannup Lake Nature Reserve, Piara Nature Reserve and Forrestdale Lake Nature Reserve are all located in the local area (5km radius) in relation to the proposed clearing (CALM 2004). However due to the small size of the area under application and the distance to these reserves, it is unlikely that the clearing as proposed is at variance to this Principle (CALM 2004).

Methodology CALM (2004) Land Clearing Proposal Advice (DoE TRIM No. EI236)

(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**
There are no drainage lines or any other surface watercourses within the area under application or the surrounding area. In addition, the area under application is not located in a gazetted groundwater protection area and the groundwater in the surrounding area is relatively fresh (<500mg/L). Therefore, given the small size of the area under application, it is unlikely that the clearing as proposed would have an impact on surface or underground water quality.

Methodology GIS Databases:
- Hydrography, linear - DOE 01/02/04
- Groundwater Salinity, Statewide - 22/02/00
- Public Drinking Water Source Areas (PDWSA) - DOE 29/11/04

(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 area under application is small, occurs on a relatively flat location and is surrounded by well vegetated properties. Therefore it is considered unlikely that the clearing as proposed would cause an incremental increase in peak flood height or duration.

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

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

Comments
Original advice from the City of Gosnells did not object to the clearing as proposed as under the West Canning Vale Outline Development Plan the area under application was not considered to be required for wetland

conservation purposes.

A second direct interest letter was sent from the DoE to the City of Gosnells enquiring as to whether the Green's were able to keep a horse on their property. In the City of Gosnells response, the City advised that the Green's property is currently zone Residential Development. The keeping of a horse is considered a rural pursuit and this is not permitted on properties zoned Residential Development. The Department has decided that whether the proponent is entitled to keep a horse on the property is a Local Government matter that needs to be resolved by the proponent.

There is no other RIWI Act Licence, Works Approval or EP Act Licence that will affect the area that has been applied to clear.

Methodology Direct Interest Submission from City of Gosnells (DoE TRIM No. NI837)
Request for addition information from the DoE to the City of Gosnells (ED550)
Response to request for additional information from City of Gosnells (EI3359)

4. Assessor's recommendations

Purpose	Method Applied	Applied area (ha)/ trees	Decision	Comment / recommendation
Grazing & Pasture	Mechanical Removal	0.44	Grant	<p>The proposal has been assessed and the clearing as proposed may be at variance to Principle g in the form of wind erosion.</p> <p>In relation to Principle g, advice from DAWA (2004) indicates that the proposed clearing may be susceptible to soil erosion due to the sandy nature of the soil present. By maintaining adequate pasture and wind breaks, this risk can be reduced.</p> <p>Given the above as well as the resolution of the wetland issue, the assessing officer recommends that this permit be granted.</p> <p>The Department also advises that the proponent should contact the local government authority to resolve the issue as to whether a horse can be kept on the property.</p>

5. References

- CALM (2004) Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM No. EI326.
- CALM (2006) Revised Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM No. EI4828.
- DAWA (2004) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM No. EI327.
- 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.
- EPA (2005) EPA Bulletin 1126 Campbell Road Estate Super-lot Sub-division. Released 24th January 2005.
- Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth WA.
- Halse and Lyons (2005) Campbell Road Estate Wetland Review. Conducted at the request of the Minister for the Environment.
- 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.
- 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.
- Weston (2004) Vegetation and Flora Survey Campbell Estate, Canning Vale. Update of the 1999 Report. Prepared by Author Weston for RPS Bowman Bishaw Gorham

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)