



1. Application details

1.1. Permit application details

Permit application No.: 445/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: MR Duy Duc Do

1.3. Property details

Property: LOT 4 ON PLAN 12160

Local Government Area: Shire Of Gingin

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
	30	Mechanical Removal	Horticulture

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 Associations 1014 - Mosaic: Low woodland; banksia / Shrublands; tea-tree thicket 37 - Shrublands; tea-tree thicket. (Shepherd et al 2001, Hopkins et al 2001).	The area comprises scattered trees with little or no understorey.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The condition of the vegetation was determined by interpretation of aerial orthomosaic(Gingin 1m Orthomosaic - DLI 03).

Karrakatta Complex North-
Predominantly low open forest and
low woodland of Banksia spp.
Eucalyptus todtiana, less
consistently open forest of E.
gomphocephala - E. todtiana -
Banksia species (Government of
Western Australia 2000).

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 areas under application have been previously parkland cleared and the remaining vegetation is very sparse and degraded. Due to the degraded nature of the vegetation in the areas under application, it is unlikely that the proposed clearing is at variance to this Principle.

Methodology GIS Database:
Air photo: Gingin 1m Orthomosaic - DLI 03

(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**
Due to the degraded nature of the vegetation under application, it is unlikely that the proposed clearing will have a significant impact on habitat for indigenous fauna.

Methodology GIS Database:
Air photo: Gingin 1m Orthomosaic - DLI 03

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

Comments Proposal is not likely to be at variance to this Principle

The nearest recorded Declared Rare Flora is 7km to the south of the area proposed to be cleared. Due to the degraded nature of the area under application, particularly the lack of understorey, it is unlikely that the clearing as proposed is at variance to this Principle.

Methodology 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 significant ecological community.

Comments Proposal is not likely to be at variance to this Principle

The closest recorded Threatened Ecological Community (TEC) to this site is 6km to the south west (MYWABL13). The area under application has previously been parkland cleared and is degraded. Thus, it is unlikely that the clearing as proposed is at variance to this Principle.

Methodology GIS Databases: Threatened Ecological Communities - CALM 15/7/03

(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 at variance to this Principle

The State Government is committed to the National Objectives Targets for Biodiversity Conservation which includes a target that prevents clearance of ecological communities with an extent below 30% of that present pre-1750 (Department of Natural Resources and Environment, 2002; EPA, 2000). The vegetation under application is part of Beard vegetation associations 1014 and 37 with 53.5% and 55.9% remaining respectively (Hopkins et al. 2000, Shepherd et al. 2001). The vegetation under application is also of Hedde Karrakatta Complex North that has 36.9% remaining (Hopkins et al. 2001, Government of Western Australia 2000). Therefore all vegetation associations in the area under application are >30% threshold.

Furthermore, the area under application has been parkland cleared and has limited value in terms of being representative of an intact area of this vegetation complex. Therefore, the clearing proposed is not at variance to this Clearing Principle.

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	% in reserves/CALM-managed land
IBRA Bioregion-					
Swan Coastal	1,529,235	657,450	43.0	Depleted	
Shire of Gingin	315,560	177,688	56.3	Least concern	
Hedde veg complex 112	25,579	9,444	36.9	Depleted	
Beard veg type- 1014	48,359	25,871	53.5	Least concern	0.0***
Beard veg type-37	44,215	24,725	55.9	Least concern	0.0***

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

*** The benchmark of 15% representation in conservation reserves (JANIS, 1997) has not been met for vegetation associations 1014 and 37

Methodology Shepherd et al. (2001)
Department of Natural Resources and Environment (2002)
JANIS, (1997)
Hopkins et al (2001)
Government of Western Australia (2002)
EPA (2000)

(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 numerous wetlands and water courses near the area proposed to be cleared (Figure TRIM ref AD184). The southern part of the area proposed to be cleared is a 'resource enhancement' dampland. There is a perennial swamp within the dampland, 72m south of the area proposed to be cleared. On the property immediately to the east (460m) there is an Environmental Protection Policy (Draft) Wetland (non perennial swamp, resource enhancement). The Department of Environment's Position Statement on Wetlands (WRC 2001) recommends that 'resource enhancement' wetlands are restored to 'conservation' category. This part of the dampland is very degraded in terms of the vegetation cover and, therefore, may only have some limited function in terms of maintenance of the larger dampland system.

Methodology GIS Databases:
 - ANCA Wetlands - CALM 08/01
 - EPP Wetlands (draft) - DEP 21/07/04
 - 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 is not likely to be at variance to this Principle**
 The proposed clearing has the potential for eutrophication and wind erosion due to the clearing being in a dampland and sandy plain. Risks from other forms of land degradation directly related to the clearing are considered to be low. The southern portion of the area under application has moderate to high risk of shallow or deeper Acid Sulphate Soils (ASS) or Potential Acid Sulphate Soils (PASS) (Figure TRIM ref AD183). There is a low risk of shallow but moderate to high risk of ASS or PASS at depth associated with the northern portion proposed to be cleared. Nevertheless, given that the area under application is substantially cleared, the clearing of 30 trees is not likely to cause appreciable land degradation.

Methodology GIS Databases:
 - Acid Sulphate Soil risk map, SCP - DOE 01/02/04

(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 nearest conservation area is 6.2km to the south east. The Gngangara Moore River State Forest is 570m to the south east. Based on the small amount of vegetation proposed to be cleared, it is considered that there would be a negligible impact on adjacent CALM managed lands.

Methodology GIS Database:
 - CALM managed Lands and Water - CALM 01/08/04

(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 under application is 300m north of the Gngangara Underground Ground Water Pollution Control Area. Given the degraded nature of the vegetation under application and that the clearing is for 30 trees, it is unlikely that the clearing as proposed will have a significant effect on surface or ground water quality. Subsequent land uses (eg horticulture) may need controls to address this issue.

Methodology GIS Databases:
 - Public Drinking Water Source Areas (PDWSA) - 04/11/04

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.

Comments **Proposal is not likely to be at variance to this Principle**
 The areas under application have a low elevation of 35m and a gentle slope to the south. It is unlikely that the proposed clearing will have an impact on 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
 The Shire of Gingin has objected to this clearing proposal because the proponent has not sought a Planning Consent for the area under application. Planning Consent has been approved for another area of the property. If this permit is granted, the applicant must be advised that planning approval will be required.

Methodology Submission from Shire of Gingin (DoE Trim Ref E1900)

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Horticulture	Mechanical Removal	30	Grant	The proposal for clearing 30 trees for the purpose of horticulture is either not at variance or not likely to be at variance with any of the Clearing Principles. The vegetation has been degraded through previous land use. The assessing officer recommends that the clearing permit be granted. However the proponent is advised to obtain Planning Consent for Irrigated Horticulture from the

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.
- 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.
- Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth WA.
- 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.
- 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)