



1. Application details

1.1. Permit application details

Permit application No.: 482/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Kevin Roy Stacey

1.3. Property details

Property: LOT 17 ON DIAGRAM 63372

Local Government Area: Shire Of Gingin

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
10		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 Complex: Bassendean Complex North - vegetation ranges from a low open forest and low open woodland of Banksia species Eucalyptus tottiana to low woodland of Melaleuca species and sedgelands which occupy moister sites (Hedde et al 1980). Beard vegetation association: 1949 - low woodland, Banksia on low sandhills, swamps in swales with tea tree and paperbark (Shepherd et al 2001 and Hopkins et al 2001).	The area under application comprises 10ha of a 34ha property and is located in the south-east corner of the property. The northern border of the property abuts the Moore River. The vegetation and landscape on the surrounding properties are similar to that under application in that they are severely degraded and significantly altered from their original state. DAWA (2005) indicates that the vegetation within the area under application consists of a mix of grass trees (Xanthorrhoea species), Banksia species, Blackbutt (Eucalyptus tottiana), Christmas trees (Nuytsia floribunda) and lower scrub heath. The proponent has indicated that only the grass trees would be cleared and the large trees are to remain, i.e. he only intends parkland clearing the vegetation.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The description of the vegetation to be cleared was obtained from the Land Degradation and Assessment Report conducted by a Department of Agriculture officer (DoE Trim No. NI1062).

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 consists of a significantly altered area within an altered local landscape (DAWA 2005). The property containing the area under application and surrounding properties have been previously

cleared and have a history of disturbance. Therefore it is unlikely that the area under application contains a high level of biodiversity or is likely to have a tangible impact on local biodiversity (CALM 2005).

Methodology DAWA (2005) Land Clearing Proposal Advice (DoE Trim No. NI 1063)
CALM (2005) Land Clearing Proposal Advice (DoE Trim No. EI1532)

(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 Hooded Plover (*Charadrius rubricollis*, Priority 4) is known to occur in the local area (10km radius) (CALM 2005). However the vegetation under application has been significantly thinned in the past. Due to the degraded nature of the area under application and the lack of intact habitat, it is unlikely that the clearing as proposed would have a significant impact on habitat values of this protected fauna species or any other endemic fauna species (CALM 2005).

Methodology CALM (2005) Land Clearing Proposal Advice (DoE Trim No. EI1532)

(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**

No Declared Rare Flora are known to occur in the local area (10km radius) (CALM 2005). The following Priority species are known to occur in the local area (10km radius):

Dodonaea hackettiana (Priority 4);
Dryandra lindleyana subsp. *pollostata* (Priority 3); and
Stachystemon axillaris (Priority 4) (CALM 2005).

These Priority flora are found on similar soil types as that of the area under application. Given the degraded condition of the area under application, it is unlikely that viable populations of flora of conservation significance are present (CALM 2005).

Methodology CALM (2005) Land Clearing Proposal Advice (DoE Trim No. EI1532)
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**

No Threatened Ecological Communities are known to occur in the local area (10km radius) (CALM 2005).

Methodology CALM (2005) Land Clearing Proposal Advice (DoE Trim No. EI1532)
GIS Databases:
- Threatened Ecological Communities - CALM 15/07/03

(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 at variance to this Principle**

The vegetation under application consists of Heddle vegetation complex Bassendean Complex North (Heddle et al 1980) and the Beard vegetation association 1949 (Shepherd et al 2001, Hopkins et al 2001). The Heddle vegetation complex has approximately 72% of its pre-European extent remaining (Heddle et al 1980), where only 25.6% of the Beard vegetation association remains (Shepherd et al 2001, Hopkins et al 2001).

The State Government is committed to the Nation Objectives Targets for Biodiversity Conservation which sets a target that prevents the clearance of ecological communities with an extent below 30% of that present pre-European settlement (Department of Natural Resources and Environment 2002, EPA 2000). In relation to this application, the Beard vegetation association is below this 30% minimum, with the Heddle vegetation complex above this minimum (72%). Beard's study (Hopkins et al 2001) is significantly broader and more dated than Heddle et al's (1980). In this instance, if the more comprehensive Heddle vegetation complexes were used to the exclusion of Beard's vegetation associations, the clearing would not be at variance to this Principle.

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation Status**	% in reserves/CALM-managed land
IBRA Bioregion –					
Swan Coastal Plain	1,529,235	657,450	43	Depleted	
Shire - Gingin	315,560	177,688	56.3	Least concern	
Heddle vegetation complex:					
Bassendean Complex North	74,147	53,384	72.0	Least concern	

Beard vegetation association:					
1949	132,958	34,012	25.6	Depleted	24.4

* Shepherd et al. (2001)

** Department of Natural Resources and Environment (2002)

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

A Conservation Category Wetland (CCW) is located within the north-east corner of the property, approximately 300m from the vegetation under application. This wetland forms part of the Moore River system. A number of CCWs and EPP lakes are located on surrounding properties (nearest being 700m from the area under application). However it is considered unlikely that the clearing as proposed would have an impact on these waterbodies as they do not form part of the area under application and the proponent has proposed that only parkland clearing would be conducted.

Methodology GIS Databases:
- Geomorphic Wetlands (Mgmt Categories), SCP - DOE 15/09/04
- EPP, Lakes - DEP 21/07/04

(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

DAWA (2005) advise that the proposed clearing of 10 hectares of land on Lot 17 on Diagram 63372 for grazing and pasture purposes is not likely to cause appreciable on site and off site land degradation if pastures are carefully managed so that good vegetation cover is maintained.

Methodology DAWA (2005) Land Clearing Proposal Advice (NI 1063)

(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 Moore River National Park, Gngangara-Moore River State Forest and Nabaroo Nature Reserve are all located in the local area (10km radius) (CALM 2005). However, due to the degraded, altered state of the vegetation and that parkland clearing is proposed, it is unlikely that the clearing as proposed would have a significant effect on these conservation estates (CALM 2005).

Methodology CALM (2005) Land Clearing Proposal Advice (DoE Trim No. EI1532)
GIS Databases:
- CALM Managed Lands and Waters - 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 landscape within and surrounding the area under application is undulating to flat, which rises and flattens out towards the Moore River at the northern end of the property (DAWA 2005). The area under application is not located within a Public Drinking Water Source Area (PDWSA) or groundwater protection area. As the clearing is proposed to be the removal of sparse grasstrees only, it is unlikely that it is to have a significant impact on groundwater or surface water quality.

Methodology DAWA (2005) Land Clearing Proposal Advice (DoE Trim No. NI1063)
GIS Databases:
- Public Drinking Water Source Areas (PDWSAs) - DOE 29/11/04
- EPP, Areas - DEP 01/12/92

(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

Although the Moore River is located at the northern end of the property, the clearing under application is 500m

from the River and the landscape rises and then flattens towards the River (DAWA 2005). There are also no drainage lines flowing through the area under application or other areas of the property. It is considered unlikely that the clearing as proposed would increase the run-off into the Moore River thereby impacting on peak flood height or duration.

Methodology DAWA (2005) Land Clearing Proposal Advice (DoE Trim No. NI1063)
GIS Databases:
- Hydrography, linear - DOE 01/02/04
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The Shire of Gingin has no objection to the clearing as proposed.

The Gingin Land Conservation District Committee opposes any clearing of mature vegetation over 10 years of age. The Committee also suggested that the clearing may be exempt if the land had been lawfully cleared in the last 10 years.

The applicant has advised that they believe the original clearing was conducted beyond this 10 year period and therefore the clearing is not exempt. In addition, the applicant only intends to parkland clear grass trees.

Methodology Direct Interest Submissions:
- Shire of Gingin (DoE Trim No. EI898)
- Gingin Land Conservation District Committee (EI945)

4. Assessor's recommendations

Purpose	Method Applied	Decision	Comment / recommendation
Grazing & Pasture	Mechanical Removal 10 area (ha)/ trees	Grant	The assessable criteria have been addressed and the proposed clearing is at variance with Principle e. For Principle e, the Beard vegetation association 1949 has a representation below 30% (Shepherd et al 2001, Hopkins et al 2001). However when the more comprehensive Heddle vegetation complexes is used in the assessment, the representation of Bassendean Complex North is above the 30% minimum (Heddle et al 1980). In addition, the vegetation under application has been described as being degraded and significantly altered from its natural state and therefore may not be an accurate representation of the Beard or Heddle vegetation complexes. Thus the assessing officer recommends that the permit should be granted.

5. References

CALM (2005) Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref EI1532.

DAWA (2005) Land Degradation Assessment Advice. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref NI 1063.

DAWA (2005) Land Degradation Assessment Report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref NI1062.

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.

Heddle, 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.