



1. Application details

1.1. Permit application details

Permit application No.: 212/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Victor Bryon & Helen Ruth Sampson Wildlife Growing Traders

1.3. Property details

Property: LOT 53 ON PLAN 22443
Local Government Area: Shire Of Gingin
Colloquial name: Lot 53, Gingin Brook Road, Gingin West-Neergabby

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
34		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
Hedde vegetation complex: Karrakatta Complex-North - predominantly low open forest and low woodland of Banksia species Eucalyptus todtiana, less consistently open forest of E. gomphocephala, E. todtiana and Banksia species (Hedde et al 1980). Beard vegetation complex: 1008 - medium open woodland; marri. 1012 - mosaic, medium open woodland; tuart low woodland; Banksia. 1949 - low woodland; Banksia on low sandhills; swamps in swales with tea-tree and paperbark. (Shepherd et al 2001, Hopkins et al 2001).	The area under application is located within a 200ha property, of which half has been previously parkland cleared. The original area under application consisted of 2 blocks of 24ha each along the eastern side of the property. The area has since been amended to consist of a long shape of 34ha located in the middle of the property, avoiding the wetlands on the property. The majority of the remaining vegetation on the property can be described as scrub-heath dominated by Banksia species and has many allied species present forming a complete understorey including ground covers. The Banksia woodland is in very good to excellent condition with little signs of disturbance (e.g. fire) or weed incursion. There are three wetlands within the area under application and these are also in very good to excellent condition. Predominant species include paperbarks and native sedges (Site visit 12/04/05).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The description of the area under application and the remaining property has been obtained from the DAWA report (2005) (Trim reference EI662) and a site visit to the property (12/04/05, Site inspection report ED528).

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 original area under application consisted of 2 blocks of 24ha, which would have fragmented the remaining vegetation on the property. These areas were subsequently amended to form one area of 34ha on the edge of the already cleared portion of the property, reducing the level of fragmentation of the remaining vegetation. This amended area allows for the remaining vegetation on the property to maintain a corridor with the neighbouring vegetated property on the eastern boundary. The amended area also leaves a band of vegetation in the southern area of the property linking it to neighbouring properties on the eastern and southern boundaries. A 100m buffer subsequent to the amendment would protect the Conservation Category Wetlands on the property.

The assessing officer acknowledges that the vegetation under application is in very good condition. However, it is considered that the amended area would have far less deleterious impacts on the ecological and biodiversity values of the local area by maintaining ecological linkages with other vegetated areas and acting as buffers to the wetlands located on the property.

The assessing officer deems that the assessment of the amended area is sufficient and no further information, in the form of a survey, is required to address this Principle.

Methodology Site visit (08/04/05)
GIS Databases:
- Geomorphic Wetlands (Mgmt Categories) - Swan Coastal Plain - DOE 15/09/04
- 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

CALM (2005) indicated that Carnaby's Black Cockatoo and the South West Carpet Python are two Specially Protected species that are likely to occur in the local area. The Western Brush Wallaby (Priority fauna species) is also likely to inhabit the area (CALM 2005).

The original area under application consisted of 2 blocks of 24ha, which would have fragmented the remaining vegetation on the property. These areas were subsequently amended to form one area of 34ha on the edge of the already cleared portion of the property, reducing the level of fragmentation of the remaining vegetation. This amended area allows for the remaining vegetation on the property to maintain a corridor with the neighbouring vegetated property on the eastern boundary. The amended area also leaves a band of vegetation in the southern area of the property linking it to neighbouring properties on the eastern and southern boundaries, facilitating the movement of fauna.

The proponent intends to plant banksias for commercial purposes in the area proposed to be cleared. It is likely that the two Specially Protected Species (Carnaby's Black Cockatoo and South West Carpet Python) would use the revegetated area and will, therefore, not be impacted by the proposed clearing.

Based on the advice received from CALM (2005) and that the amended area will result in a large remnant remaining of the property, the assessing officer considers that a fauna survey is not required.

Methodology CALM report (2005) (Trim reference EI663)
Site Visit (12 April 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

No Declared Rare Flora have been identified within a 10km radius of the area under application (CALM 2005). Two Priority species are known to occur in the local area, Eucalyptus mundijongensis (Priority 1 species) and Dillwynia dillwynioides (Priority 3 species) (CALM 2005). However, as these species occur within a different vegetation type as the area under application, it is unlikely that the clearing as proposed would be at variance to this Principle.

If the DRF species were on the same vegetation type, the assessing officer would recommend that a flora survey be conducted. However, as these species are not found on the same vegetation type, the assessing officers considers that a flora survey is not required.

Methodology CALM report (2005) (Trim reference EI 663)

(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

One Threatened Ecological Community (TEC) is found within 10km of the area under application - limestone ridges (SCP26a) Melaleuca heugelii, M. acerosa shrublands on limestone ridges. This TEC is associated with different soil and vegetation types than the area under application, therefore it is unlikely that this TEC would be present.

If the TEC were on the same vegetation type, the assessing officer would recommend that a community survey be conducted. However, as this TEC is not found on the same vegetation type, the assessing officers considers that a community survey is not required.

Methodology CALM report (2005) (Trim reference EI663)

(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 vegetation under application consists of Hedde Karrakatta Complex North (Hedde et al 1980) and Beard

vegetation complexes 1008, 1012 and 1949 (Hopkins et al 2001, Shepherd et al 2001). 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-European (Department of Natural Resources and Environment 2002, EPA 2000). The Heddle vegetation complex is just above this 30% minimum (37%) (Heddle et al 1980), with all three Beard vegetation complexes slightly below this minimum (18%, 25.6% and 28%) (Shepherd et al 2001).

It is important to note that there is disparity in pre-European representations for both Heddle and Beard vegetation complexes for the area under application. Beard's study is significantly broader and dated than Heddle's which is more detailed and primarily confined to the Swan Coastal Plain. If the more comprehensive Heddle Vegetation Complexes were used to the exclusion of Beard's Vegetation Associations in this instance, the proposal would not be at variance to this Principle.

In addition, the area under application is not located within the boundaries of the EPA Position Statement 2: Clearing of Native Vegetation, with Particular Reference to the Agricultural Area. Furthermore, under the Bush Forever program, 20% of this vegetation complex was proposed to be protected (Government of Western Australia 2000).

Methodology Heddle et al (1980)
Hopkins et al (2001)
Shepherd et al (2001)
Department of Natural Resources and Environment (2002)
EPA (2000)
Government of Western Australia (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**
The original area under application (48ha) contained 2 Conservation Category Wetlands (CCWs). Conservation Category Wetlands are afforded the highest level of protection as they are considered to have high ecological values (Water and Rivers Commission 2001). During a site visit, discussions were entered into with the proponent about amending the area under application to exclude these wetlands. The amended area that was agreed to (34ha) excludes these wetlands and provides a buffer of 100m between the areas applied to be cleared and the wetlands.

Methodology Water and Rivers Commission (2001)
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 is not likely to be at variance to this Principle**
DAWA (2004) has identified that the proposed clearing could be a potential wind erosion risk, with a low probability of other forms of land degradation occurring. With the implementation of appropriate management strategies such as maintaining adequate ground cover, it is unlikely that the clearing as proposed would cause appreciable on or off site land degradation (DAWA 2004).

The proponent intends to plant banksia for commercial purposes in the area under application. This would mitigate the likelihood of wind erosion in the area.

Methodology DAWA (2004) Land Degradation Assessment Advice (Trim reference EI662)
Site visit (18/04/05)

(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 vegetation contained on the property subject of this application forms an important corridor with the Moore River Nature Reserve, the Gnarara-Moore River State Forest and surrounding vegetation on free-hold land and therefore exhibits important ecological linkage values for a number of conservation reserves in the area (CALM 2005). The original area under application consisted of 2 blocks of 24ha which would have severely compromised the current connectivity and resulted in further fragmentation of remaining vegetation and habitat. These areas were subsequently amended to form one area of 34ha on the edge of the already cleared portion of the property, reducing the level of fragmentation of the remaining vegetation.

This provides a large tract of vegetation (approximately 20ha in size) along the eastern boundary of the property which remains connected to other remnants on adjoining properties.

Methodology CALM (2005) Land Clearing Proposal Advice (DoE Trim Ref EI663)
 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 amended area under application is not located in a Public Drinking Water Source Area or water catchment area. The groundwater within the local area is relatively fresh (500-1000 mg/L) and there is no evidence of salinity on the property (DAWA 2004) The proposed clearing, therefore, is unlikely to result in increased salinity problems. DAWA (2005) indicate that the risk of eutrophication of surface and groundwater bodies is low. Therefore the clearing as proposed is not likely to degrade ground water or surface water quality.

Methodology DAWA (2004) Land Degradation Assessment Report (DoE Trim No EI662)
 GIS Databases:
 - Public Drinking Water Source Areas (PDWSA) - 04/11/04
 - EPP, Areas - DEP 06/95
 - Groundwater Salinity, Statewide - 22/02/00

(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 has a low elevation of 25m and a gentle slope to the south. DAWA (2004) advise that the clearing as proposed is unlikely to increase surface run off. As there are no waterbodies to the south of the area under application, it is unlikely that the proposed clearing will have an impact on peak flood height or duration.

Methodology DAWA (2004) Land Degradation Assessment Report (DoE Trim No EI662)
 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 no objection to the proposed clearing on the understanding that the land clearing activity is not undertaken until Planning Consent for Irrigated Horticulture has been obtained.

The proponents have informed the Department that they do not intend to irrigate the horticultural development as being a native plant crop they intend to plant in April and let the crop be watered via the winter rains.

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

A public submission was received on the original area and the amended area urging that comprehensive and appropriately timed flora and fauna surveys of the site be conducted before a decision is made. The surveys should also consider the EPA's Position Statement No. 2 and the biodiversity of the site. Consideration should also be given to original extent of the Karrakatta Complex North and the little amount of vegetation represented in secured conservation reserves. These issues have been addressed in comments in relation to Principles a, b, c and e.

Methodology Submission from Shire of Gingin (2004) (Trim referene NI889)
 Public submission (2004, 2005) (Trim reference ND482, EI2183)

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Horticulture	Mechanical Removal	34	Grant	<p>An original application was submitted for 2 blocks of 24ha each (48ha total). An amended area of 34ha was submitted after discussions with the proponent. The amended area has been assessed and the clearing as proposed in not likely to be at variance to the Clearing Principles.</p> <p>The amended area has reduced the area proposed to be cleared, reduced fragmentation thereby maintaining vegetated corridors and ensured a 100m buffer from the Conservation Category Wetlands.</p> <p>While not considered in the assessment, the Department recognises that the proponent intends to plant Banksia for commercial purposes in the area under application. This will further enhance connectivity and fauna habitat use in the local area.</p>

The assessing officer therefore recommends that this permit 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 EI663.
- DAWA (2004) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref EI662.
- 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.
- Water and Rivers Commission (2001) Water and Rivers Commission Position Statement: Wetlands. Water and Rivers Commission, 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)