



1. Application details

1.1. Permit application details

Permit application No.: 933/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Maurice, Marnie & Samantha Grubisa

1.3. Property details

Property: LOT 67 ON PLAN 6962 (House No. 8 NICHOLAS WANNEROO 6065)
Local Government Area: City Of Wanneroo
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3.16		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 Central and South: predominantly open forest of Eucalyptus gomphocephala, E. marginata, E. calophylla and woodland of E. marginata and Banksia species (Hedde et al 1980).	The area under application consists of a 3.16ha block of native vegetation within a 3.7ha property. The property has been substantially cleared within the last 3 years with some species regenerating.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Information pertaining to vegetation to be cleared description and the vegetation condition were obtained from information provided by the proponent (DoE Trim Ref IN24467)
Beard vegetation association 1949: low woodland; Banksia on low sandhills, swamps in swales with tea tree and paperbark (Shepherd et al 2001, Hopkins et al 2001).	A small section on the southern boundary of the property (approximately 50m x 120m) is to be retained as a condition of a approved application to commence development.		
	The area comprised corridors of vegetation at the northern, eastern and southern perimeters of the site, in good to very good condition (Bowman et al. 2005)		

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**
Parts of the area under application have been previously cleared, particularly in the central part of the property and there is some evidence of old burns. The area also has weeds throughout the property with little native understorey remaining (site visit 06.02.06). The value of the site as a place for vegetation, flora, habitat and fauna conservation has been significantly reduced by previous disturbance (Bowman et al. 2005). Lot 67 used to be part of Bush Forever site 327 but upon advice from the Bush Forever Office, the property, except for a 50 m section on the southern boundary, has now been excluded from the Bush Forever site (DPI, 2006). This 50m section on the southern portion of the property has been left to allow for faunal movement and improved ecological connectivity between the western and south-eastern Bush Forever areas.
Given the above, the clearing of this relatively small area of vegetation with comparatively lower biodiversity than that of the surrounding area is unlikely to be at variance to this Principle.

Methodology Bowman et al. (2005)
Site visit (02.06.06)
DPI (2006)
GIS Databases: - Bushforever - MFP 07/01

(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

Parts of the area under application have been previously cleared with some areas now heavily invested with weed species, interspersed with few regenerating native species. Therefore it is unlikely that the area under application contains habitat that is part of or is necessary for the maintenance of habitat significant for indigenous fauna of conservation significance. There are a number of well vegetated 'bush blocks' within the immediate surrounds including the adjoining blocks to the east and west of the area under application. These will remain connected through the retention of a tract of vegetation across the entire southern section of the property. This 50m x 120m tract will be fenced off and allowed to regenerate that will facilitate fauna movement.

Methodology Information provided by the proponent (DoE Trim Ref IN24467)
Site visit (06.02.06)
GIS Databases:
Swan Coastal Plain North Orthomosaic 40cm - DLI 05

(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

There are no known occurrences of Declared Rare Flora within the local area (5km radius) or within the area under application. Two Priority flora species are known to occur in the local area (5km radius) namely the Priority 3 species *Cyathochaeta teretifolia* and the Priority 4 species *Jacksonia sericea*. It is unlikely that these species would occur within the area under application as both are found on different vegetation types to that proposed to be cleared. Further, the Priority 3 species *C. teretifolia* is associated with swamps and creek edges, which are not found within the area under application.

Methodology FloraBase, CALM On-line Flora Database (accessed 02/02/06)
GIS Databases:
- Declared Rare and Priority Flora List - CALM 01/07/05

(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 of Threatened Ecological Communities (TECs) within the area under application. There are a number of TECs 2.8km to the south and 4.8km to the south east of the area under application, however all of these TECs are located on a different vegetation type to that under application. Therefore, it is unlikely that the clearing as proposed is at variance to this Principle.

Methodology GIS Databases:
- Threatened Ecological Communities - CALM 15/07/03
- Pre-European Vegetation - DA 01/01

(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 includes a target that prevents 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 vegetation proposed to be cleared consists of the Heddle vegetation complex Karrakatta Complex Central and South (Heddle et al 1980) and the Beard vegetation association 1949 (Shepherd et al 2001, Hopkins et al 2001). The Heddle vegetation complex has approximately 14, 729ha or 30% remaining (Heddle et al 1980) and the Beard vegetation association has approximately 34, 012ha (25.6%) remaining (Shepherd et al 2001, Hopkins et al 2001).

Although these two vegetation associations have representations at or below the 30% threshold, it is considered that the vegetation under application may not be accurate representations of the complexes as it has been subjected to some clearing within the last 3 years and some burning. The vegetation under application consists of few large remnant trees with very little native understorey (site visit 06.02.06). The regeneration of some native species was noted amongst heavy infestations of weed and grass species. Therefore given the lack of a representative, structured vegetative community, the clearing as proposed is unlikely to be at variance to this Principle.

Methodology Information provided by the proponent (DoE Trim Ref IN24467)
Site visit (06.02.06)
Department of Natural Resources and Environment (2002)

EPA (2000)
Shepherd et al (2001)
Hopkins et al (2001)

(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 wetlands within the area under application or within the immediate vicinity. The nearest wetland is a Resource Enhancement Wetland (REW) located 450m to the north east. Due to the distance to the nearest wetland, the vegetation under application is not considered to be wetland dependent and as such, the clearing as proposed is not likely to be at variance to this Principle.

Methodology 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

Previous assessment of a Notice of Intent to Clear in 2002 indicated that the risk of on/off site land degradation is low (DAWA 2006). DAWA (2006) have advised that the information from this previous assessment is still considered valid. In addition, the area under application has a Class 3 or No known risk of Acid Sulphate Soils. As such, it is considered that the clearing as proposed is unlikely to cause appreciable on or off site land degradation.

Methodology DAWA (2006) (DoE Trim Ref IN25052)
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

Lot 67 used to be part of Bush Forever site 327. However, the Bush Forever Office has advised that the property has now been excluded from the Bush Forever site except for an area up to 50 metre from the southern boundary (DPI, 2006). Bush Forever has recommended that conditions be added to the clearing permit such that southern boundary area is appropriately fenced and that the owner ensure that the vegetation within this bushland corridor is not damaged in any way.

The remaining areas of Bush Forever site 327 areas to the west and south-east of the property are separated by a 2-3 metre horse access track to the west and Benmuni Road to the east. Further, the value of the site as a place for vegetation, flora, habitat and fauna conservation has been significantly reduced by previous clearing, burning and subsequent weed infestation (Bowman et al. 2005).

Methodology Bowman et al. (2005)
Site visit (02.06.06)
DPI (2006)
GIS Databases: - Bushforever - MFP 07/01

(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 not located within a Public Drinking Water Source Area or an EPP Groundwater Area. There are no flow lines or other hydrographic features within the area under application and the nearest waterbody is a Resource Enhancement Wetland 450m to the north east. In addition, the groundwater within the area under application is fresh (<500mg/L TDS). Given that parts of the area under application have been previously cleared within the last 3 years, it is unlikely that the clearance of the remaining vegetation would have a significant impact on surface or ground water quality.

Methodology GIS Databases:
- Groundwater Salinity, Statewide - 22/02/00
- Hydrography, Linear - DOE 01/02/04
- EPP, Areas - DEP 06/05
- EPP, Lakes - DEP 01/12/92
- Public Drinking Water Source Areas (PDWSA) - DOE 09/08/05

(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 receives moderate to high rainfall (800mm per annum) and has gentle slope (3%) to the east. The neighbouring property to the east, west and south east are all well vegetated. It would be considered that this vegetation would help to reduce any significant run-off. In addition, parts of the area under application have been previously cleared within the last three years and it is considered that the clearance of the remaining vegetation is unlikely to significantly exacerbate the incidence or intensity of flooding.

Methodology GIS Databases:

- Rainfall, Mean Annual - BOM 30/09/01
- Topographic Contours, Statewide - DOLA 12/09/02
- Swan Coastal Plain North Orthomosaic 40cm - DLI 05

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

Comments

The proponents have applied to the DoE for a licence to abstract groundwater to irrigate a vegetable crop which is likely to be determined in the immediate future (DoE TRIM Ref SN17155).

The proponent has also provided a copy of an Application to Commence Development that was approved by the City of Wanneroo dated 17 October 2005. There are a number of conditions placed on the approved application including that:

- a 50m strip of native vegetation on the southern boundary of the property is to be retained and fenced,
- prior to commencement of any on-site works a plan of management is submitted to and approved by the City addressing matters of regeneration and management of the 50 metre bush land corridor to the satisfaction of the Manager Development and Health Services.

Submission from the Bush Forever Office (DoE TRIM Ref EI 4772) indicated that Lot 67 has now been excluded from Bush Forever Site 327. The submission reiterates the conditions set out by the City of Wanneroo (as above) in addition to the following:

- Access for the purpose of clearing shall not be gained through the bushland corridor on lot 67
- The owner shall ensure that the clearing does not result in any damage to the bushland corridor on Lot 67
- That the bushland corridor on Lot 67 is not to be used for the dumping or storing of any of the cleared vegetation, and that
- The owner should consider using the vegetation from the northern portion of the site to revegetate the southern bushland corridor.

The conditions and advice attached to the permit address both these submissions to the satisfaction of the Department.

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

Methodology

- Information provided by the proponent (DoE Trim Ref IN24467)
- Submission from the Bush Forever Office (DoE TRIM Ref EI 4772)
- Confirmation of permit conditions (DoE TRIM Ref EI4910)

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Horticulture	Mechanical Removal	3.16	Grant	<p>The application has been assessed and the clearing as proposed is not likely to be at variance to the Principles.</p> <p>The area under application formed part of Bush Forever site 327. The Bush Forever Office has advised the DoE that the area under application has now been excluded from the Bush Forever site. The property has been subjected to previous clearing and burning and subsequently there are areas that are heavily invested with weed species. The value of the site as a place for vegetation, flora, habitat, and fauna conservation has been significantly reduced by previous disturbance (Bowman et al. 2005).</p> <p>Both the City of Wanneroo and the Bush Forever Office have recommended that an area south of the area to be cleared be fenced and that the vegetation within this area protected and managed.</p> <p>Thus, the assessing officer recommends that a permit to clear be granted with the following conditions:</p> <ol style="list-style-type: none">1. Prior to commencing clearing, the Permit Holder shall construct a fence enclosing

the area cross hatched red on attached Plan 933/1.

2. The Permit Holder shall not clear any native vegetation within the area cross-hatched red on attached Plan 933/1.

3. The Permit Holder shall ensure that vehicles are excluded from the area crossed red on attached Plan 933/1 and shall not cause or permit vehicles to enter or remain within the area.

5. References

- Bowman Bishaw Gorham (2005) Lot 67 Nicholson Road Wanneroo - Memorandum - Botanist Inspection. DoE TRIM ref EI 4827.
- DAWA (2006) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref IN25052.
- 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.
- 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)