



1. Application details

1.1. Permit application details

Permit application No.: 1734/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Augusta Margaret River

1.3. Property details

Property: LOT 53 ON PLAN 240333 (House No. 76 BUSSELL MARGARET RIVER 6285)
 LOT 281 ON PLAN 195485 (Lot No. 96 FEARN MARGARET RIVER 6285)
 Local Government Area: Shire Of Augusta-Margaret River
 Colloquial name:

1.4. Application

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

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 Association: Medium forest of Jarrah Marri.	The proposed area to be cleared comprises 0.35ha of substantially altered native vegetation on the north west outskirts of Margaret River township. Reserves under Management Orders exist between the site and the Margaret River.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	GIS databases: Busselton 50cm Orthomosaic (DOLA 2000); Mattiske Vegetation (CALM 1998); Interim Biogeographic Regionalisation (EA 2000); Shepherd at al (2001)
Mattiske Vegetation Complexes: Wilyabrup W1 of tall open forest with Eucalyptus diversicolor, Corymbia calophylla, Allocasuarina decussata and Agonis flexuosa on deep incised valleys in the hyperhumid zone.			
Wilyabrup Ww1 of tall open forest with E. diversicolor, Agonis flexuosa and Callistachys lanceolata with some Corymbia calophylla on flats and valleys in the hyperhumid zone	Aerial photography shows the vegetation has been significantly altered, with some parts devoid of vegetation and others lacking overstorey and/or being weed infested.		

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments	<p>Proposal is not likely to be at variance to this Principle</p> <p>Much of the native vegetation remaining within the local area (5km radius) is contained within State Forest, National Parks and Crown Reserves. Bramley National Park is located approx 500m to the north and Keenan State Forest is a further 500m to the north. Conservation Management Orders exist on Crown Reserve Lands located immediately to the north and west of the area proposed to be cleared</p> <p>It is therefore unlikely that the 0.35ha of mostly degraded vegetation proposed to be cleared holds a high level of Biological Diversity, or is of good or better condition than other native vegetation in the local area.</p>
Methodology	SAC Biodatasets (2007); GIS databases: Clearing Regulations - Environmentally Sensitive Areas (DOE 2005); Interim Biogeographic Regionalisation (EA 2000); Mattiske Vegetation (DEC 1998); DEC Managed Lands & Waters (DEC 2005); Cadastre (DLI 2006)

(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 may be at variance to this Principle

Three populations of threatened fauna occur between 700m and 4km from the area proposed to be cleared. There are also a further six reportings of Priority fauna between 1km and 5km from the area proposed to be cleared.

No fauna survey has been undertaken to establish whether the site may provide habitat for specially protected fauna. However, given the mosaic of small areas of degraded vegetation to be cleared in an area with substantial nearby areas of healthy vegetation, it appears unlikely that the site would provide significant habitat for native fauna.

Methodology SAC Biodatasets 10/06/07; GIS databases: Threatened Fauna (CALM 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

Two specimens of Priority 1 (poorly known taxa) *Jansonia formosa* have been recorded as occurring approx 1km to the north of the area and in a different hydrogeology to the area proposed to be cleared. No DRF are known to occur within a 5km radius.

No flora survey has been undertaken to establish whether any Rare or Priority Flora may exist on the site. However, given the extensive invasion of herbaceous weed species, it is unlikely that the site is necessary for the continued existence of rare flora.

Methodology SAC Bio datasets 12/06/07; GIS Databases: Interim Biogeographic Regionalisation (DA 2000); Declared Rare and Priority Flora (CALM 2005); Hydrogeology, Statewide (2002); Clearing Regulations - Environmentally Sensitive Areas (DoE 2005)

(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

No listed Threatened Ecological Communities occur within a 12km radius of the area proposed to be cleared. No other significant ecological communities are known to occur within a ten km radius of the area proposed to be cleared.

It is therefore unlikely that 0.35ha area proposed to be cleared comprises, or is necessary for the continued existence of, a Threatened Ecological Community.

Methodology SAC Bio datasets: GIS Databases: Threatened Ecological Communities (CALM 2005); Clearing regulations - Environmentally Sensitive Areas (DoE 2005)

(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

	Pre-European (ha)*	Current extent (ha)*	Remaining (%)*	Conservation **status	% In reserves/DEC managed land
IBRA Bioregions - Warren***	851 529	739 273	86.8	Least Concern	
Shire of Augusta Margaret River	222 718	159 679	71.7	Least Concern	
Vegetation type: Beard: Unit 3	251 585	200587	79.7	Least Concern	82.5
Mattiske: Wilyabrup W1 Complex	73 009	45 191	61.9	Least Concern	
Wilyabrup Ww1 Complex	22 634	19 931	61.5	Least Concern	

* (Shepherd et al. 2006)

** (Department of Natural Resources and Environment 2002)

*** Within the Intensive Landuse Zone

With a conservation status of Least Concern, the native vegetation is well represented in the bioregion and in the Shire. It is also well represented in the local area in nearby reserves and crown land. The clearing of the 0.35ha area under application is therefore not likely to adversely impact on the vegetation type proposed to be cleared.

Methodology GIS Databases: NLWRA Current Extent of Native Vegetation (DA 2001); Mattiske Vegetation (CALM 1998); Interim Biogeographic Regionalisation of Australia (EA 2000); Pre-European Vegetation (DA 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 at variance to this Principle

There are no defined watercourses or wetlands within the 0.35ha area proposed to be cleared.

However, the proposed clearing is located approx 30m south of the major perennial Margaret River, and 60m east of a minor perennial watercourse that also drains into the Margaret River. The area proposed to be cleared is therefore within the buffer region of this significant watercourse.

However, the reason for the proposed clearing is to develop stormwater capture and bioremediation basins between the township and these watercourses i.e. to improve the buffering effect and thereby protecting watercourses and associated ecological communities.

Methodology GIS Databases: Hydrography, Linear (DoE 2004); Hydrographic Catchments (DoE 2003); Clearing Regulations - ESAs (DoE 2005); Topographic Contours, Statewide (DOLA 2002)

(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 area proposed to be cleared is in a high rainfall 1100mm zone with evaporation of 1000mm and a hydrogeology described as low permeability rocks of gneiss and migmatite under soils of ironstone gravels in flat bottomed valleys and colluvial sites. Therefore there is some capacity for stormwater channelling.

With a low groundwater salinity of 500 to 1000ppm in this high rainfall area, it is unlikely that the proposed clearing will increase salinisation.

Given the heavily weed infested nature of the native vegetation proposed to be cleared, and subsequently rehabilitated, it is unlikely that the clearing will cause appreciable land degradation.

Methodology GIS Databases: Evaporation Isopleths (BOM 1998); Mean Annual Rainfall Isohyet (DoE 2005); Hydrographic Catchments (DoE 2003); Groundwater Salinity Statewide (DOW 2000); Hydrogeology, Statewide (2002)

(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

DEC Management Orders exist on the Crown Reserve Lands immediately to the north and west of the area proposed to be cleared. Significant areas of DEC Managed Lands also occur in Bramley National Park (approx 500m to the north) and Keenan State Forest (approx 1km to the north).

Given the heavily weed infested nature of the native vegetation proposed to be cleared, and subsequently rehabilitated, it is unlikely that the clearing is will have and impact on the environmental values of adjacent conservation areas.

Methodology GIS databases: CALM Managed Lands and Waters (CALM 2005); WRC Estate (DoE 2004); Register of National Estate (EA 2003); Cadastre (DLI 2006)

(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 proposed to be cleared is in the Margaret River Catchment and the Busselton-Capel Groundwater area. It has a groundwater salinity of 500-1000ppm and a mean annual rainfall of 1050-1100mm with evaporation of 1000mm. It has a hydrogeology of low permeability gneiss, migmatite overlain by soils of ironstone gravels in colluvial sites, and slopes from the area proposed to be cleared toward the watercourses, so there is some capacity for surface flow.

Given the comparatively small area of degraded vegetation to be cleared, it is unlikely that the clearing will alter water tables or cause deterioration in the quality of surface or underground water.

Methodology GIS databases: Evaporation Isopleths (BOM 1998); Mean Annual Rainfall Isohyet (DoE 2005); Hydrographic Catchments (DoE 2003); RIWI Act Groundwater Areas (DOW 2000)

(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 proposed to be cleared has a hydrogeology of low permeability gneiss rocks and is in the Margaret River Catchment with a mean annual rainfall of 1100mm and evaporation of 1000mm, so there is potential for stormwater channelling and ponding.

Given the 0.35ha mosaic of small areas of degraded vegetation proposed to be cleared, it is unlikely that the clearing will cause or exacerbate the incidence or intensity of flooding.

Methodology GIS databases: Evaporation Isopleths (BOM 1998); Mean Annual Rainfall Isohyet (DoE 2005); Hydrographic Catchments (DoE 2003); Topographic Contours, Statewide (DOLA 2002)

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

Comments

The area is zoned under the Town Planning Scheme as Park and Recreation. The vegetation proposed to be cleared is substantially degraded and the proposal includes removal and rehabilitation of weed infested areas on the site.

There are Native Title Claims over the area under application (Harris Family & South West Boojarah). The Department of Environment and Conservation's advertising of the application in the West Australian newspaper constitutes legal notification of the native title representative body for the purpose of the future act procedures under the Native Title Act 1993. No response was received from the representative body.

An Aboriginal Site of Significance (Margaret River) is located 90m to the north of the area proposed to be cleared.

Methodology GIS Databases: Town Planning Scheme Zones (MFP 1998); Native Title Claims (DLI 2007); Aboriginal Sites of Significance (DIA 2007)

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Drainage	Mechanical Removal	0.35	The proposal is to clear 0.35ha of native vegetation for the construction of stormwater bioremediation ponds to ameliorate the weed infestation and erosive effects of stormwater channelling through an A Class Reserve. The assessable criteria have been addressed and the proposal is at variance to principle (f), may be at variance to principle (b) and is not likely to be at variance to principles (a), (c), (d), (e), (g), (h), (i) and (j).

5. References

ANCA (1996) A Directory of Important Wetlands in Australia. Second Edition. Australian Nature Conservation Agency, Canberra

Department of Conservation and Land Management (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions.

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.

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.

Mattiske Consulting (1998) Mapping of vegetation complexes in the South West forest region of Western Australia, CALM.

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
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
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 DEC)