



1. Application details

1.1. Permit application details

Permit application No.: 1781/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Augusta Margaret River

1.3. Property details

Property: LOT 5011 ON PLAN 192309 (Lot No. 5011 BUSSELL FOREST GROVE 6286)

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:
0.9		Mechanical Removal	Infrastructure Maintenance

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 3: Medium forest, jarrah (E. marginata)-marri (E. calophylla); Woodland, jarrah-marri-wandoo	The less than 1ha of vegetation to be cleared is for squaring off an existing waste disposal cell on an approx 48ha property. The site is licensed for the disposal of land fill and sewage treatment, and approximately 25% of the property is already cleared.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Description obtained from DAFWA records and GIS databases
Mattiske vegetation: Cowaramup - Open to tall forest of E. marginata, Corymbia calophylla & Banksia grandis on lateritic uplands; Wilyabrup - Tall open forest of E. diversicolour, Corymbia calophylla, Allocasuarina decussata & Agonis flexuosa on incised valleys.	Based on aerial photography it appears that vegetation on the remainder of the property is in good condition with an extensive tree canopy. No understorey is visible.		

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 proposal is to clear 1 ha of native vegetation in a land parcel of approx 48ha for the expansion of an existing landfill waste cell and the development of a leachate drain. The land tenure is crown land under the management of the Shire of Augusta-Margaret River with a land use of waste disposal and communications.

Approx 25% of the property is already cleared for landfill and sewage disposal. These landfill activities are located in the middle of the property and surrounded by native vegetation.

The vegetation to be cleared is bordered by existing waste disposal activities to the west and south and by an access road/firebreak on the north and east.

Most of the native vegetation remaining within the local area (5km radius) is contained within State Forest and Nature Reserves. It is therefore unlikely that the vegetation proposed to be cleared is of good or better condition than that in the local area.

The proposal is not likely to be at variance to this principle

Methodology GIS datasets: Clearing Regulations - Environmentally Sensitive Areas; Interim Biogeographic Regionalisation;

(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

There are no identified threatened fauna within a ten km radius of the property.

There are extensive areas of native vegetation in state forest and reserves within a 5km radius and these are likely to be in similar or better condition than the area under application.

The vegetation to be cleared is likely to have been adversely impacted by existing waste disposal activities on the property.

Methodology GIS datasets: IBRA; Threatened Fauna

(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 populations of Declared Rare, Priority or significant Flora within a 5 km radius of the proposed area to be cleared.

Methodology GIS datasets: DRF; Threatened Flora; Clearing Regulations ESAs.

(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 at variance to this Principle

Four TECs exist within a ten km radius of the vegetation proposed to be cleared but no TEC buffer regions are within a 5km radius.

The nearest TECs are coastal limestone caves to the west and floodplains with tall sedges to the south.

There are no nearby TECs or PECs in vegetation with comparable characteristics to the area to be cleared.

Methodology GIS datasets: TECs, TEC buffers; PECs; ESAs.

(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	Current extent (ha)*	Remaining (ha)*	Conservation (%)*	% In reserves/CALM **status	managed land
IBRA Bioregion - Warren***	851,529	739,273	86.8	Least Concern	86.6
Shire of Augusta-Margaret River	222,718	159,679	71.7	Least Concern	
Vegetation type: Beard: assoc 3 Medium forest Jarrah-marri	3,046,385	2,197,837	72.1	Least Concern	

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

*** Within the Intensive Landuse Zone

The vegetation to be cleared is well represented both in reserves and on other lands. The clearing of the 1ha area under application is not likely to adversely impact on the vegetation type being cleared.

Methodology GIS datasets: NLWRA Current Extent of Native Vegetation; Heddl Vegetation Complexes; Mattiske Vegetation; IBRA; Bush Forever; DAFWA

(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 defined wetlands or watercourses within the proposed area to be cleared.

There is a seasonally inundated wetland approx 390m to the north-east, and one approx 850m to the south. There is also a seasonally inundated floodplain approx 850m to the south-east. There is a significant buffer of intact native vegetation between the area proposed to be cleared and these wetlands.

Given the comparatively small 1ha to be cleared in a largely uncleared property, it is unlikely that the proposal will alter groundwater levels or adversely affect groundwater dependant ecological communities.

Methodology GIS datasets: Hydrography; EPP South West Wetlands; Clearing regulations ESAs

(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 has no known Acid Sulphate Soil Risk and a groundwater salinity of 1,000 to 3,000. The hydrogeology is of low permeability gneiss and migmatite.

The less than 1ha area proposed to be cleared is in a property that is heavily vegetated and is unlikely to cause appreciable land degradation.

Methodology GIS datasets: Acid Sulphate Soil Risk Map, Lower South West; Groundwater Salinity; Hydrogeology; CAWSA

(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, approx 4km to the south of the property, provides similar habitat to the area proposed to be cleared.

The surrounding vegetation on the property provides a linkage between native vegetation on adjacent and nearby properties.

Given the comparatively small 1ha to be cleared, it is unlikely that the proposal will adversely affect conservation land.

Methodology CALM Managed Lands and Waters; Bush Forever; WRC Estate

(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 has a mean rainfall of 1200mm pa and evaporation of 1000mm so there is capacity for surface flow. However the proposal includes installation of leachate drains to prevent runoff.

Given the comparatively small 1ha to be cleared in a largely uncleared area of low permeability gneiss, migmatite hydrogeology, it is unlikely that the proposal will adversely affect the quality of surface or groundwater.

Methodology GIS datasets: Hydrogeology; Isohyets; Evaporation Isopleths; Groundwater Salinity

(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 has a mean rainfall of 1200mm pa and evaporation of 1000mm so there is capacity for surface flow. However the proposal includes installation of leachate drains to prevent runoff and it is therefore unlikely to lead to increased peak flood height.

Methodology GIS datasets: Hydrogeology; Isohyets; Evaporation Isopleths

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

Comments

There is a Native Title Claim over the area under application (South West Bojarah). 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.

Consultations between DEC and local licensing authorities confirm that no works approval is required for the proposal, because the purpose is for ongoing maintenance of an existing activity and not for an increase or alteration in classification of waste disposal.

Methodology GIS Database:
- Native Title Claims - DLI 07/11/05

4. Assessor's comments

Purpose	Method Applied	area (ha)/ trees	Comment
Infrastructure Maintenance	Mechanical Removal	0.9	The proposal is for expansion of a land fill waste cell and construction of leachate drains. The assessable criteria have been addressed and the proposal is not likely to be at variance to any of the principles.

5. References

- ANCA (1996) A Directory of Important Wetlands in Australia. Second Edition. Australian Nature Conservation Agency, Canberra
- DEP (2002) Remnant vegetation of the Swan Coastal Plain Bioregion within the System 6 and System 1. Department of Environmental Protection, Perth.
- 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 (1998) Environmental Protection (South West Wetlands) Policy 1998.
- EPA (2004) Guidance for the Assessment of Environmental Factors - terrestrial fauna for Environmental Impact Assessment in Western Australia. Report by the EPA under the Environmental Protection Act 1986. No 56 WA.
- EPA (2004) Guidance for the Assessment of Environmental Factors - terrestrial flora and vegetation surveys for Environmental Impact Assessment in Western Australia. Report by the EPA under the Environmental Protection Act 1986. No 51 WA.
- EPA (2006) Guidance for the Assessment of Environmental Factors -level of assessment of proposals affecting natural areas within the System 6 region and Swan Coastal Plain portion of the System 1 Region. Report by the EPA under the Environmental Protection Act 1986. No 10 WA.
- Greenwood, E.A.N., Klien, L., Beresford, J.D., Watson, G.D. and Wright, K.D. (1985) Evaporation from the understorey in the jarrah (*Eucalyptus marginata* Don ex Sm) forest, Southwestern Australia. *Journal of Hydrology* 80: 337-349.
- Havel, J.J. and Mattiske Consulting Pty Ltd (2002) Review of management options for poorly represented vegetation complexes, Conservation Commission.
- 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.
- 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
WRC

Threatened Ecological Community
Water and Rivers Commission (now DEC)