



1. Application details

1.1. Permit application details

Permit application No.: 2134/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: City of Albany

1.3. Property details

Property: PART LOT 5990 ON PLAN 208107 (House No. 48341 SOUTH COAST MARBELUP 6330)
Local Government Area: City Of Albany
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
	20	Mechanical Removal	Extractive Industry

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
The vegetation is sporadically located within Lot 5990. Photographs (Albany, 2007) and aerial photography indicate that the vegetation condition ranges from degraded to completely degraded. Consists of vegetation association 978: Low forest; jarrah, Eucalyptus staeri & Allocasuarina fraseriana	The area under application is to clear 20 native trees for the purpose of gravel extraction by the City of Albany. Much of the area under application has been cleared for agricultural purposes. The vegetation is sporadically located within Lot 5990. Photographs (Albany, 2007) and aerial photography indicate that the vegetation condition ranges from degraded to completely degraded.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation condition was assessed through ground level photographs supplied by the City of Albany (2007) and aerial photographs.
As above	As above	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	As above

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 vegetation under application is to be cleared for the extraction of gravel on Lot 5990, South Coast Hwy, within the City of Albany. Aerial photos and photos supplied by the City of Albany (2007), suggest that the 20 trees proposed to be cleared, are of degraded condition (Keighery, 1994) with limited scope for regeneration without intensive management. The local surrounding area appears to have undergone previous clearing possibly in association with agricultural activities.

Given that the vegetation is relatively isolated and degraded with obvious signs of disturbance and limited scope for regeneration, the vegetation within the application area is unlikely to be representative of vegetation comprised of outstanding biodiversity in the Bioregion or local area.

Methodology City of Albany (2007)
Keighery (1994)

(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 have been 21 reported sightings of rare or endangered fauna within a 5km radius of the proposed clearing site. These include the declared vulnerable *Pseudocheirus occidentalis* (Western Ringtail Possum), *Botaurus poiciloptilus* (Australasian Bittern) and *Calyptorhynchus banksii naso* (Forest Red-tailed Black-Cockatoo). Other rare species within the 5km radius include *Isoodon obesulus fusciventer* (Quenda), *Hydromys chrysogaster* (Water-rat), *Galaxiella nigrostriata* (Black-stripe Minnow) and *Ardeotis australis* (Australian Bustard); all with conservation status of priority 3 to 5.

The *Pseudocheirus occidentalis* reported sightings were 3.5km from the proposed clearing. There are no vegetation corridors apparent that link the reported sightings with the proposed clearing area, limiting the likelihood of the *Pseudocheirus occidentalis* habituating within the application area. This can also be deduced for *Isoodon obesulus fusciventer*.

The *Botaurus poiciloptilus*, *Calyptorhynchus banksii naso* and *Ardeotis australis* have been sighted 4 to 5kms from the proposed clearing site. Although the sightings of these birds were some 4-5kms from the proposed clearing area, the native vegetation maybe frequented by these birds. The 20 trees under application are situated on, and partially segregated from, the eastern boundary of the area and range from degraded to completely degraded condition (Keighery, 1994). The condition of these trees signifies that they are unlikely to represent the state of the vegetation within the remaining area. Therefore it is unlikely that these trees will be necessary for the maintenance of a significant habitat for birds.

The *Galaxiella nigrostriata* and *Hydromys chrysogaster* are limited to waterbodies some 4 to 5km from the proposed clearing area. Therefore, given the distance and limitations, the clearing of 20 trees will not negatively influence the habitats of these species.

Given the condition of the 20 trees under application and the small scale of the application, the vegetation proposed to be cleared is not likely to be necessary for the maintenance of, a significant habitat for indigenous fauna.

Methodology GIS Layers:
Albany Mt Barker 140cm Orthomosaic - Landsgate 02
Fauna
Keighery (1994)

(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 12 known records of Declared Rare and Priority Flora within a 5km radius of the proposed clearing site.

The closest known record is a priority four species, *Leucopogon polystachyus*, located approximately 2.5kms from the application, and occurs on different vegetation type as the proposed clearing area. *Synaphea incurva*, is a priority one species and was reported 3.5kms from the application area. It also occurs on different vegetation type as the application site.

Aerial and ground level photos (Albany, 2007) suggests that the trees to be cleared are in a degraded condition (Keighery, 1994) with limited scope for regeneration without intensive management.

Given the disturbed condition and isolated location of the vegetation, and differing vegetation type from DEFL to the area under application, the proposed clearing area is unlikely to be necessary for the continued existence of flora.

Methodology GIS Layer:
Albany Mt Barker 140cm Orthomosaic - Landsgate 02
DEFL
Keighery (1994)

(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

There are no threatened ecological communities within a 5km radius of the proposed clearing area and is therefore not at variance to this principle.

Methodology GIS: Albany Mt Barker 140cm Orthomosaic - Landsgate 02
TEC, PEC

(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			Conservation Status**
	Pre-European (ha)*	Current Extent Remaining (ha)*	(%)*	
IBRA Bioregion: Jarrah Forest	4,506,674	2,426,079	53.8	Least concern
Shire: Albany***	383,843	149,341	38.9	Depleted
Beard Unit: 978	53,433	19,901	37.2	Depleted

*Shepherd et al. 2001

**Department of Natural Resources and Environment 2002

***Within the Intensive Land Use Zone (Inside the Clearing Line)

The 20 trees under application fall with the IBRA Bioregion of Jarrah Forrest; this complex still maintains 53.8% of its pre-European vegetation and therefore, falls within the category of least concern (Shepherd et al., 2001). Both the City of Albany and the beard unit that the proposed clearing area fall in, have a conservation status of Depleted, with the current extent remaining being 38.9% and 37.2% respectively. The State Government is committed to the National Objectives Target for Biodiversity Conservation which includes a target that prevents clearance of ecological communities with an extent below 30% of that present pre-1750 (DNRE, 2002). Beyond this value, species extinction is believed to occur at an exponential rate and any further clearing may have irreversible consequences for the conservation of biodiversity.

As the vegetation complex that the proposed clearing application falls within a conservation category that is above the National Objective Target for Biodiversity Conservation, it is not seen as a significant remnant of native vegetation in an area that has been extensively cleared and is therefore not likely to be at variance to this principle.

Methodology DNRE, (2002)
Shepherd et al. (2001)
Intensive Land Use Zone

(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 proposed clearing is located approximately 180m north of a minor-perennial watercourse and 1km north-west of a marsh area. Also, Seven Mile Creek, which is located 1km north-east, and Powell Lake, situated 3kms south-west of the proposed clearing area, are both conservation class wetlands.

Given the low topography and shallow gradients of the local area (40-50m AHD), and the small nature of the area to be cleared, it is believed that clearing of 20 native trees is unlikely to compromise the values of these water bodies.

Methodology GIS Layer:
Albany Mt Barker 140cm Orthomosaic - Landsgate 02
Topography Contours, Statewide - DOLA 12/09/02

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments Proposal is not at variance to this Principle
The topography of the region is relatively flat with an elevation rising from 40-50 AHD, and has a mean annual rainfall of 900m. Groundwater salinity has been mapped between 500-1000mg/L TDS (Total Dissolved Solids). There is no known Acid Sulphate Soil (ASS) risk within the local area.

Given the small area proposed to be cleared relative to the above information, the proposed clearing is unlikely to cause appreciated land degradation in the form of wind or water erosion, water logging or salinisation.

Methodology GIS Layer:
 Albany Mt Barker 140cm Orthomosaic - Landsgate 02
 Groundwater Salinity, Statewide - DOW
 Acid Sulphate Soils Risk Map - Albany-Torbay - DEC
 Rainfall, Mean Annual - BOM 30/09/01
 Topography Contours, Statewide - DOLA 12/09/02

(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 area proposed to be cleared does not lie within, or adjacent to, areas set aside for conservation. Lake Powell Nature Reserve a Register of National Estate lays 2.6kms south-west of the clearing.

Given that the vegetation under application appears to be degraded, consists of 20 native trees and not linked to nearby conservation areas, it is highly unlikely that the clearing of native vegetation as proposed will impact on the values of the nearby conservation area.

Methodology GIS Layer:
 Albany Mt Barker 140cm Orthomosaic - Landsgate 02
 CALM Managed Lands and Water - CALM 1/7/05 (category)

(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 proposed clearing site lies within the Torbay-Inlet catchment and the Seven Mile Creek catchment division. The region is of low relief (40-50m AHD) and has an annual rainfall of 900m.

Due to the small area proposed to be cleared in relation to the topography, it is unlikely that the clearing of native vegetation will cause deterioration in the quality of surface water or groundwater within the local area.

Methodology GIS Layer:
 Albany Mt Barker 140cm Orthomosaic - Landsgate 02
 Hydrography catchments - catchment DOE 23/03/05
 Rainfall, Mean Annual - BOM 30/09/01
 Topography contours, statewide - DOLA 12/09/02

(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 hydrology of the area is predominately rock of low permeability such as Gneiss and migmatite, which can assist in intensifying flooding if an abundance of vegetation is cleared. Given though, the small scale of clearing, it is unlikely it will cause or exacerbate flooding within the local area.

Methodology GIS Layers:
 Albany Mt Barker 140cm Orthomosaic - Landsgate 02
 Hydrology, statewide - DOW

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

Comments
 There are two Native Title Claims over the area under application. 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.

The Esperance Groundwater Area is a proclaimed Area under the RIWI Act, the proposed clearing of 20 native trees falls within this area.

Methodology GIS Layers:
 RIWI Act, Groundwater Areas - DOW (P_Status)

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Extractive	Mechanical	20	The assessment has shown the proposed	

5. References

- City of Albany. 2007. Photographs. Supplied by City of Albany 2007
- 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.
- 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)