



1. Application details

1.1. Permit application details

Permit application No.: 1495/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: Thompson McRobert Edgeloe on behalf of Churches of Christ Homes & Community Services Inc.

1.3. Property details

Property: LOT 1004 ON PLAN 21399 (EATON 6232)
 Local Government Area: Shire Of Dardanup
 Colloquial name:

1.4. Application

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

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 1000: Mosaic: Medium forest; jarrah-marri / Low woodland; banksia / Low forest; tea-tree (Melaleuca spp.) (Hopkins et al. 2001; Shepherd et al. 2001).	The proposal includes clearing of approximately 120 trees within a 9.9ha area of sparsely vegetated parkland.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	From aerial mapping, the entire area under application is a parkland cleared paddock, with sparsely scattered trees and several tracks throughout. The area abuts an existing residential estate and the local secondary school
Hedde Vegetation Complex - Southern River Complex (Hedde et al. 1980).	The vegetation under application comprises scattered Melaleuca sp. (paperbark) and Eucalyptus gomphocephala (tuart), with low dense grasses and few Xanthorrhoea preissii (TME 2006).		

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 area under application is currently zoned Residential and surrounding land is being progressively developed for residential purposes, community facilities and retirement village. A major highway abuts the western boundary.

The vegetation under application is in a degraded and fragmented state consisting predominantly of scattered paddock trees within a mostly parkland-cleared block. The consultants report (TME 2006) recorded scattered Melaleuca raphiophylla and Eucalyptus gomphocephala, with sparse Xanthorrhoea preissii. Little understorey exists and comprises a mixture mainly of pasture grasses.

41 records of Priority Flora species are also known to occur in the area, including Verticordia attenuata (Priority 3 species), which is generally found within the same soil and vegetation types as the area under application and samples have been recorded in other highly disturbed areas. Several other priority species found in the local area are known to prefer winter wet/ moist environments; given the multiple use wetland that extends over part of the proposed clearing area it is not unlikely that some of these species may exist in this area.

However, given the apparent lack of species variety, degraded condition of the vegetation and considering that there is other land within the local area (10km) of comparable or better condition, it is unlikely that the proposed clearing is at variance to this principle.

Methodology TME (2006);
GIS databases:
- Bunbury 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

The vegetation under application consists of approximately 100 large scattered tuart trees that may provide some habitat value for local fauna in the area.

There is a high level of disturbance at this site; due to the close proximity to a major urban transport route and urban/residential development, extensive weed invasion and lack of vegetation suggests the original biodiversity and habitat value has been significantly compromised. This vegetation is therefore unlikely to provide a significant habitat for indigenous fauna; and therefore unlikely to be at variance to this Principle.

Methodology GIS database:
- Bunbury 1m Orthomosaic - DLI 03

(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

Within the local area (10km) there are two records of the Declared Rare Flora (DRF) species, *Diuris drummondii*. This species is often found in swampier areas that are wet throughout the year with some drying off in summer. The area proposed to be cleared would appear to dry to provide suitable habitat for this species. In addition mapped soil and vegetation types differ in the proposed area to be cleared from where the species has been recorded.

Methodology GIS databases:
- Declared Rare and Priority Flora List - CALM 13/08/03
- Bunbury 1m Orthomosaic - DLI 03

(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 nine occurrences of Threatened Ecological Community (TEC), SCP 08 within the local area (10km radius). The nearest is located approximately 3.3km south-east from the notified area and does not share the same soil or vegetation type as the area under application; therefore, it is not expected that this proposal will impact upon or be necessary for the continued existence of these known occurrences.

Methodology GIS databases:
- Threatened Ecological Communities - CALM 15/7/03
- Threatened Plant Communities - DEP 06/95
- Bunbury 1m Orthomosaic - DLI 03

(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 may be at variance to this Principle

The vegetation proposed to be cleared is a component of Beard Vegetation Association 1000 (Hopkins et al. 2001) of which there is 24.6% (Shepherd et al. 2001) of the pre-European extent remaining and therefore of 'Vulnerable' status for Biodiversity conservation (Department of Natural Resources and Environment 2002). The vegetation under application is also within the Swan Coastal Plain Bioregion in the Shire of Dardanup of which there is 41.8% and 52.2% of pre-European extent remaining, respectively.

The vegetation at the site is a component of Heddle Southern River Vegetation Complex (Heddle et al. 1980) of which there is 19.8% of the pre-European extent remaining and therefore of a 'Vulnerable' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

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 (Department of Natural Resources and Environment 2002; EPA 2000). As both the Beard and Heddle vegetation complexes are below this threshold, the proposal may be at variance to this Principle.

The proponent is willing to revegetate an area of approximately 0.5 ha as part of the landscape bund between the development and the Australind Bypass along the western boundary, as conditions of a granted clearing permit.

Methodology Keighery (1994)

Department of Natural Resources and Environment (2002)

EPA (2000);

Heddle et al. (1980)

Hopkins et al. (2001)

Shepherd et al. (2001)

GIS databases:

- Heddle Vegetation Complexes - DEP 21/06/95
- Interim Biogeographic Regionalisation of Australia - EM 18/10/00
- Local Government Authorities - DLI 8/07/04
- Pre European Vegetation - DA 01/01

(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 EPP areas, RAMSAR wetlands or ANCA wetlands within the local area (10km radius) of the proposed clearing.

An EPP Lake and the Collie River are located 1km from area under application, with no direct vegetation link.

The area proposed to be cleared is within a Multiple Use wetland. The Water and Rivers Commission defines Multiple Use wetlands as "wetlands with few important ecological attributes and functions remaining".

The area under application is Completely Degraded (Keighery 1994) consisting predominantly of isolated scattered trees.

Developed land for housing, sports centre and schools surround the area under this application to the north. These developments have already degraded local watercourses and wetlands in quality and size.

Due to the degraded condition of the vegetation and the surrounding land uses, the proposed clearing is unlikely to further degrade local watercourses and wetlands.

Methodology Water and Rivers Commission Position Statement: Wetlands (06/06/01)

Keighery (1994)

GIS databases:

- ANCA, Wetlands - CALM 08/01
- EPP Areas - DEP 06/95
- EPP Lakes - DEP 28/07/03
- Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain - DoE 15/9/04
- Hydrography Linear - DoE 1/2/04
- RAMSAR, Wetlands - CALM 21/10/02
- Bunbury 1m Orthomosaic - DLI 03

(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 a low salinity risk and a ground water salinity level of 500-1000 mg/L. There is a moderate risk of Acid Sulphate Soils occurring within 3m of the surface of the proposed clearing.

It is not likely that the proposed clearing is a variance to this principle.

Methodology GIS databases:

- Acid Sulphate Soil Risk Map, SCP - DoE 01/02/04
- Salinity Risk LM 25m - DOLA 00
- Groundwater Salinity, Statewide y 22/02/00

(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 Managed Lands/Water located near the area under application include the Morangarel Nature Reserve 2.5 km NW of the area and an unnamed Nature Reserve located 3 km SE of the area. A System 6 Conservation area is also located 1km north west of the proposed clearing.

All areas are not linked vegetatively to the area under application.

Due to the scale and nature of the proposal and the distance and lack of vegetation links it is unlikely that the

area under application is at variance to this Principle.

- Methodology** GIS database:
- CALM Managed Lands and Waters - CALM 1/06/04
 - Register of National Estate - EA 28/01/03
 - System 6 Conservation Reserves - DEP 06/95
 - System 1-5 and 7-12 Areas DEP 06/95
 - Bunbury 1m Orthomosaic - DLI 03

(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 within the Leschenault Estuary Lower Collie Hydrographic Catchment area and the Bunbury RIWI groundwater area.

The area under application consists of scattered paddock trees, with no distinct middle storey or ground cover layer.

The proposed clearing is not likely to be at variance to this Principle due to the degraded condition and nature of clearing.

- Methodology** GIS database:
- Hydrographic Catchments, Catchments - DoE 3/4/03
 - RIWI Act, Groundwater Areas - WRC 13/06/00
 - Bunbury 1m Orthomosaic - DLI 03

(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

Flooding impacts are unlikely to occur as a result of the proposed clearing due to the scale and proposed development on site.

- Methodology** GIS databases:
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

No planning issues or other issues have been raised by the Shire of Dardanup.

The property is zoned Residential under the Town Planning Scheme.

Development approval for Earthworks for the proposed development was issued on 12 February 2007.

- Methodology** Development approval TRIM ref DOC15722;
GIS database:
- Town Planning Scheme Zones - MFP 8/98

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Miscellaneous	Mechanical Removal	9.89	Assessable criteria have been addressed and no objections were raised. The assessing officer therefore recommends that the permit should be granted, subject to revegetation conditions.

5. References

- 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. CALM Science 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.

TME (2006). Additional information provided with application on behalf of Churches of Christ Homes and Community Services. TRIM Ref: DOC1998

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)

