



1. Application details

1.1. Permit application details

Permit application No.: 972/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Jake Clifford Armstrong

1.3. Property details

Property: LOT 235 ON PLAN 302502
Local Government Area: Shire Of Waroona
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
	120	Cutting	Firewood Collection

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: - 998: Medium woodland; tuart - 6: Medium woodland; tuart & jarrah (Shepherd et al, 2001)	Vegetation under application within Lot 235 Old Coast Road range from completely degraded to good condition, and consists of an open woodland of <i>Eucalyptus gomphocephala</i> (Tuart), <i>Eucalyptus marginata</i> (Jarrah), and <i>Agonis flexuosa</i> (Peppermint) over a relatively sparse understorey of <i>Hibbertia</i> species and introduced grasses and weeds.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation clearing description based on information obtained from the site inspection on 8/3/2006.
Heddlle Vegetation Complex: - Cottesloe Complex - Central & South: Mosaic of woodland of <i>Eucalyptus gomphocephala</i> and open forest of <i>E. gomphocephala</i> - <i>E. marginata</i> - <i>E. calophylla</i> ; closed heath on the Limestone outcrops.	Areas of vegetation upon limestone ridges are known to be representative of Floristic Community Type (FCT) 26a: <i>Melaleuca huegelii</i> - <i>Melaleuca systema</i> shrublands on limestone ridges, also classified as a Threatened Ecological Community.		
- Yoongarillup Complex: Woodland to tall woodland of <i>E. gomphocephala</i> with <i>Agonis flexuosa</i> in the second storey. Less consistently an open forest of <i>E. gomphocephala</i> - <i>E. marginata</i> - <i>E. calophylla</i> .	Vegetation proposed for removal from site includes dead Tuart and Jarrah, predominantly fallen limbs and previously felled trees. No collection of firewood would occur from the areas identified as TEC, as they do not contain Tuart or Jarrah trees.		

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

Lot 235 Old Coast Road contains vegetation ranging from completely degraded to excellent condition over a range of landform types. Vegetation within the limestone ridge running north-south through the centre of the property has been identified as Threatened Ecological Community 26a. The remaining vegetated areas are consistent with an woodland of Cottesloe and Yoongarillup Complex species.

Vegetation proposed for removal consists primarily of previously felled logs and selected dead *Eucalyptus marginata* and *E. gomphocephala*, within areas ranging from completely degraded to good condition. Given that the proposed clearing will not occur within the areas identified as TEC, and the vegetation is located within relatively close proximity to other vegetated properties, the proposed clearing is considered unlikely to be at variance to this Principle.

Methodology Site inspection
GIS Databases:
- Swan Coastal Plain South 40cm Orthomosaic - DLI 05
- Threatened Ecological Communities - CALM 12/4/05

(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 includes dead *Eucalyptus marginata* and *Eucalyptus gomphocephala*, primarily consisting of previously felled trees and limbs. The vegetation observed during the site inspection on 8 March 2006 did not identify hollows or habitat within the vegetation which could readily be utilised by native fauna.

A public submission received by the Department of Environment advised that the collection of firewood from such a significant area of vegetation (112 Ha) should include an assessment of habitat value of the woody debris. It is also advised that a permit should contain conditions requiring retention of timber with which could provide habitat for native fauna.

Bushland within the property was identified during the site inspection as being within a degraded to good condition. The selective removal of previously felled trees, relatively low density (approximately 2 trees per hectare) of standing dead trees proposed for removal, and the proximity to other adjacent vegetated properties mean that this proposed clearing is unlikely to be significant or at variance with the Principle.

Methodology Site inspection (8/3/2006)

(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 examples of Declared Rare or Priority Flora within Lot 235 Old Coast Road, Lake Clifton. A search of CALM's Flora List has identified eight known populations of Declared Rare or Priority Flora, including *Lasiopetalum membranaceum*, *Haloragis aculeolata*, *Hibbertia spicata* subsp. *leptothea*, *Hakea* sp. *Yalgorup*, *Grevillea thelemanniana*, and *Schenus natans*.

Of these species, *Lasiopetalum membranaceum* and *Hibbertia spicata* subsp. *leptothea* are present within the Yoongarillup Complex, of which a small portion is present within the applied area.

The proposed vegetation removal consists of dead *Eucalyptus marginata* and *Eucalyptus gomphocephala*, the majority of which consists of fallen limbs or trees. The selective removal of these *Eucalyptus* species. is not considered likely to be at variance to this Principle.

Methodology GIS Databases:
- Heddle Vegetation Complexes - DEP 21/06/95
- 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**

Lot 235 Old Coast Road contains 7 Floristic Community plots identified as Threatened Ecological Communities (TEC). A site inspection of the area on 8/3/2006 confirmed the TEC as 26a: *Melaleuca huegelii* - *Melaleuca acerosa* shrublands on limestone ridges.

The proposed vegetation removal consists of dead *Eucalyptus marginata* and *Eucalyptus gomphocephala*, the majority of which consists of fallen limbs or previously felled trees. The Limestone ridges associated with the TEC do not contain *Eucalyptus marginata* and *Eucalyptus gomphocephala*, and thus removal of these species is not considered likely to impact on the TEC.

Methodology Site inspection (8/3/2006)
GIS Databases:
Threatened Ecological Communities - CALM 12/4/05

(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**

Heddle et al (1980) defines the vegetation under application as 'Cottesloe Complex - Central and South' and 'Yoongarillup Complex'. Cottesloe Complex is recognised as having a representation of 41.1% and is classified as a mosaic of woodland of *E. gomphocephala* and open forest of *E. gomphocephala* - *E. marginata*

- *E. calophylla*; closed heath on the Limestone Outcrops. Yoongarillup Complex is recognised as having a representation of 45%, and generally consists of woodland to tall woodland of *E. gomphocephala* with *Agonis flexuosa* in the second storey.

Vegetation under application is also classified as vegetation associations 998 and 6 (Shepherd et al. 2001). These associations have representations of 35.9% and 23.6% respectively, of the pre- European extent. Based on the scale of vegetation mapping, Heddle vegetation representations are generally accepted as being the preferential figures for the Swan Coastal Plain Bioregion.

These vegetation types have representations above the recommended minimum level of 30%, as recognised by both the EPA and the State Government (EPA, 2003; Department of Natural Resources and Environment, 2002). With the proposed clearing consisting of the removal of dead *Eucalyptus gomphocephala* and *E. marginata*, it is not expected that approval of this application will impact on the representation of these vegetation communities.

Methodology Heddle et al. (1980)
Shepherd et al. (2001)
Department of Natural Resource and Environment (2002)
EPA (2003)

(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

Lot 235 Old Coast Road is located approximately 500 metres from the Lake Clifton, which is defined as a Conservation Category Wetland, an EPP (Lake), and is also part of the Peel - Yalgorup RAMSAR system.

With the proposed clearing consisting of the removal of dead *Eucalyptus gomphocephala* and *E. marginata*, and the distance from wetlands within the local area, it is not expected that approval of this application will impact on an environment associated with a watercourse or wetland.

Methodology GIS Databases:
Geomorphic wetlands - Swan Coastal Plain - DOE 15/09/04
EPP, Lakes - DEP 28/07/03
RAMSAR, wetlands - CALM 14/02/03

(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 under application consists of a soil landscape classified as siliceous sands with leached sands in wetter areas. There is no known risk of acid sulphate soils or salinity within the area under application.

Given the selective nature of the proposed clearing for a limited number of dead *Eucalyptus gomphocephala* and *Eucalyptus marginata* over approximately 80 hectares, it is not considered likely to cause an increase in water or wind erosion. It is therefore not expected that the proposed clearing would appreciably impact on on-site or off-site land degradation.

Methodology Site visit (8/3/06)
GIS Databases:
- Acid Sulfate Soil Risk Map, SCP - DOE 04/11/04
- Salinity Risk LM 25m - DOLA 00
- Soils, Statewide - DA 11/99

(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 235 Old Coast Road is located between two areas of CALM managed reserve; Myalup State Forest directly to the east, and the Yalgorup National Park approximately 500 metres to the west, which is also listed on the Register of the National Estate. While vegetation within the property is likely to contribute to ecological linkages between these areas of reservation, the proposed clearing of dead vegetation is considered unlikely impact on these linkage attributes.

The benchmark of 15% vegetation representation in conservation areas (JANIS Forests Criteria, 1997) has not been met for either Cottesloe Complex or Yoongarillup Complex, which currently have representations of 8.8% and 13.9% respectively. However, it is not considered likely that the removal of dead *Eucalyptus* spp. from this degraded area would impact on the overall retention of the vegetation complex values.

Methodology GIS Databases:
Register of National Estate - EA 28/01/03
CALM Managed Lands and Waters - CALM 1/07/05

(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 has a low risk of salinity and acid sulphate soils and is not located within a Public Drinking Water Source Area (PDWSA). A Conservation Category Wetland is located approximately 500 metres from the applied area, although this is outside of the recommended buffer distances described within Water and Rivers Commission (2001).

Given that the vegetation proposed for removal is dead, and the woodland area is predominantly in a degraded condition, the clearing as proposed is considered not likely to cause deterioration in the quality of surface or ground water.

Methodology Water and River Commission (2001)
GIS Databases:
- PWDSA
- Acid Sulphate Soils Risk Map, SCP - DoE

(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**

As the vegetation under application consists of dead material hydrologically disconnected from the water table, its removal is considered unlikely to impact on the incidence of localised or downstream flooding.

Methodology Site inspection (8/3/2006)

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

Comments

The property owners for Lot 235 Old Coast Road were in receipt of a Commercial Producers Licence, for the purpose of collecting firewood. This Licence is now not required under the Wildlife Conservation Act 1950.

No other approvals from the Department of Environment or Department of Water are required.

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Firewood Collection	Cutting	120	Grant	<p>The assessable criteria have been addressed and no objections against the Principles were raised. The assessing officer therefore recommends that the application be approved subject to the following conditions and advice.</p> <p>Conditions:</p> <ol style="list-style-type: none">1. The permit holder shall not clear living vegetation.2. The Permit holder shall record the number of trees cleared, and report this data to the Department of Environment by 31 June every year. <p>Advice:</p> <p>The Permit Holder is advised that dead trees within the Lot 235 Old Coast Road may contain hollows and / or habitat that could potentially be utilised by native fauna. It is recommended that all vegetation considered for removal be assessed by the Permit Holder for signs of habitat, with the preferential clearing of vegetation that does not contain these attributes.</p>

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 (2003) 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.

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.

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.

Water and Rivers Commission (2001). Position Statement: Wetlands.

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)