



## 1. Application details

### 1.1. Permit application details

Permit application No.: 636/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Randall Mark Smith

### 1.3. Property details

Property: LOT 1 ON DIAGRAM 55063 ( BOYANUP 6237)  
Local Government Area: Shire Of Capel  
Colloquial name: Brookdale Road - Vol 1638 Fol 721; Lot 1 on Plan 55063

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
15		Mechanical Removal	Grazing & Pasture

## 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
Hedde - Bassendean Complex - Central and South - ranges from woodland of jarrah-sheoak-banksia on the sand dunes, to a low woodland of Melaleuca spp., and sedgelands on the low-lying depressions and swamps. B. illicifolia, B. littoralis and M. preissiana are common on the low-lying moister soils, where marri replaces jarrah in dominance. Other plant species include Kunzea vestita, Hypocalymma angustifolium, Adenanthos obovatus, and Verticordia spp.	<p>The vegetation condition is considered to be Very Good in both the northern and southern areas under application (Keighery BJ, 1994).</p> <p>The southern area's overstorey consisted of sparse jarrahs (Eucalyptus marginata), peppermint trees (Agonis flexuosa), banksias (Banksia littoralis, Banksia illicifolia) and moonahs (Melaleuca preissiana). The understorey species included grass trees (Xanthorrhoea preissii) and Conostylis. There was evidence the area had been subject to thinning and fire in the past. Weeds were invasive, including pasture species from the neighbouring property.</p> <p>The northern area's vegetation had obviously been cleared in the past. No mature trees were sighted within the proposed area. The vegetation consisted mostly of young moonahs (Melaleuca preissiana), with Conostylis present in the understorey. Weeds existed through much of the vegetation.</p> <p>The third area under application is located in the middle of the property and the vegetation's condition is considered to be Good</p>	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	
See above		Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to	

"A total of 5 Threatened fauna and 5 Priority fauna species occur within the local area. The photographs and descriptive comments contained within the DoE site report confirm that vegetation found at this site would provide suitable habitat for *Isodon obesulus fusciventer* (Quenda, P5) and *Setonix brachyurus* (Quokka (T)). These species prefer areas of dense understorey vegetation, particularly near swamps and along watercourses, that provides dense visual screening from predators. The notified area has linkages to other blocks of remnant vegetation (both riparian and terrestrial), which increases its value as potential habitat. The DoE site report of 28/6/05 remarks on the occurrence of Peppermint trees (*Agonis flexuosa*). When considered in conjunction with the other information provided, the vegetation that is proposed to be cleared is likely to provide suitable habitat for *Pseudocheirus occidentalis* (Western Ringtail Possum (T)). It is possible that the notified area contains habitat suitable for *Macropus irma* (Western Brush Wallaby, P4). This species is known to prefer areas of forest and woodland that support a dense shrub layer. It is likely that habitat occurring within the notified area is utilised by a diverse range of non-threatened fauna. This habitat could be considered 'significant' as per criterion b4) and b5) above since the notified area: - occurs within a vegetation association that has been extensively cleared and which is not well-represented in the conservation estate; - contains part of an EPP 2004 conservation category wetland and is situated within a corridor of vegetation that provides linkage to a further two EPP 2004 conservation category wetlands; and - is in an area where the surrounding landscape has been extensively developed."

Given the above information the Department concludes the clearing proposal may be at variance to this principle.

**Methodology** CALM Report 2005

**(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.**

**Comments Proposal is at variance to this Principle**

Two Priority 4 specimens exist within the area proposed for clearing. The species, *Franklandia triaristata* is restricted to a few populations near Busselton (Flora of Australia Vol 16 1995).

*Eleocharis keigheryi* (Declared Rare Flora) occurs 7.8km north east of the area under application. There are 4 other specimens in the local area (10km radius) and all occur within the same Beard and Heddle vegetation types as the area proposed for clearing, they are not linked however by vegetation.

The closest Priority 1 species, *Synaphea odocoileops*, exists 6km south west from the proposed clearing. Four other specimens are found within the local area. These specimens are found within the same Beard vegetation type as the vegetation under application, however they are not linked by vegetation.

There are two Priority 2 species in the local area: *Trichocline* sp. *Treeton* occurs 6.39km south west of the area under application and occurs within the same Beard vegetation type as the area under application. This specimen is linked to area proposed for clearing by vegetation.

There are five Priority 3 species in the local area and all occur in the same Beard and Heddle vegetation types as the area under application. The closest is *Acacia semitrullata*, which is 4.1km north east of the area under application.

32 Priority 4 specimens, not including the two existing within the vegetation proposed for clearing, exist within the local area. Many of these species exist within the same Beard and Heddle vegetation types and are linked to the area under application by vegetation.

CALM advice was received on 04/10/05 and the following comments were made:

"A total of 5 Declared Rare flora and 25 Priority flora species occur within the local area. The closest occurrence of Declared Rare flora is approximately 3.9 kilometres from the notified area. Two records of *Franklandia triaristata* (Lanoline Bush, P4) occur within the notified area."

Given the above information the Department concludes the proposal is at variance to this principle.

**Methodology** CALM Report 2005  
Flora of Australia Vol 16 1995  
GIS Database:  
- Declared Rare and Priority Flora List - CALM 13/08/03

**(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**

CALM advice was received on the 04/10/05 and the following recommendations were made:

"Two occurrences of TEC Type 1b and two occurrences of TEC Type 07 occur within the local area. The closest occurrence is approximately 5 kilometres from the notified area. It is unlikely that this proposal will impact upon these known State listed TEC occurrences. There is insufficient information to determine whether



The Department believes the proposal is at variance to this principle.

**Methodology** CALM Report 2005  
GIS Database:  
- EPP Lakes - DEP 28/07/03  
- Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain - DoE 15/9/04  
- EPP Wetlands 2004 (DRAFT) - DOE 21/7/04  
- Hydrography Linear - DoE 1/2/04

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

**Comments** **Proposal is at variance to this Principle**

DAWA provided the following comments:

Soil and Land mapping, Barnesby, B.A and Proulx-Nixon, M.E. (1994). Land Resources from Harvey to Capel on the Swan Coastal Plain Western Australia indicates that the property is dominated by the following map units:

1. Bassendean B1 phase (B1) - Extremely low to very low relief dunes, undulating sandplain and discrete sand rises. On/in the moderately deep, bleached grey sands sometimes with a pale yellow B horizon or a weak iron-organic hardpan at depths generally greater than 2 metres.

2. Bassendean B3 phase (B3) - Closed depressions and poorly defined stream channels. Poorly to very poorly drained. On/in the moderately deep, bleached sands with an iron-organic pan, or clay subsoil. Surfaces area dark grey sand or sandy loam.

The report found the soil type for the middle section of vegetation proposed for clearing has closed depressions and poorly defined stream channels, which are poorly to very poorly drained and are largely wet soils on swamps. DAWA commented that 25% of the map unit has a 'high risk' of waterlogging and 60% of it has a 'very high' risk.

The report also found that both the northern and southern sections under application could be suitable for development as the risk of further clearing causing land degradation is low.

It can therefore be concluded that the area proposed for clearing in the middle section under application is at variance to the proposal, and the northern and southern sections are not likely to be variance.

**Methodology** DAWA Report 2005

**(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 at variance to this Principle**

CALM provided the following comments on the proposed clearing:

"Tuart Forest National Park occurs approximately 9.3 kilometres from the notified area. It is unlikely that this proposal will impact upon this CALM-managed area. State Forest (27) occurs approximately 7 kilometres from the notified area. It is unlikely that this proposal will impact upon this CALM-managed area. The closest privately managed remnant vegetation (in conjunction with CALM) is a Land for Wildlife site, located approximately 6.6 kilometres from the notified area. The notified area contains part of an EPP 2004 conservation category wetland, and on this basis this proposal is likely to be at variance to this Principle."

Given the conservation rating of the wetland, and the Department's position on not supporting any impacts to the wetland, the Department concludes the proposal is at variance to this principle.

**Methodology** CALM Report 2005  
GIS Database:  
- Geomorphic Wetlands (Mgt Categories) - Swan Coastal Plain - DoE 15/9/04

**(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 may be at variance to this Principle**

As requested, the Department of Agriculture provided comments in relation to land degradation risks for the proposed clearing. DAWA's report has identified that of the three sections of vegetation proposed for clearing, the section in the middle of the property has a high risk of land degradation in the form of eutrophication. In this area soil and landscape information indicates that this soil type has an extreme risk of phosphorous loss thus the potential for eutrophication to ground water is high within this map unit.

The report also advised that further clearing could increase surface runoff, during summer storm events, which would contribute to increased stream flows.

The clearing proposal will further reduce an already predominantly cleared vegetation type and local area. The vegetation under application also contains priority flora and possibly provides habitat for threatened fauna species. The clearing may also impact a wetland identified as being environmentally significant.

Given an approval of the proposal may conflict with the final recommendations of the North Boyanup Structure Plan, and the environmental issues identified, the Department recommends the application be refused.

## 5. References

- CALM Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref IN24080.
- DAWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref SWO27124.
- 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.
- ENV Australia (2004) North Boyanup Structure Plan: Environmental Study, Prepared for Department of Planning and Infrastructure. Perth, Western Australia
- 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.
- Hill, A.L., Semenuik, C. A, Semenuik, V. Del Marco, A. (1996) Wetlands of the Swan Coastal Plain. Volume 2b, Wetland mapping, classification and evaluation. Wetland Atlas. WRC and DEP. Perth WA.
- 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)