



**1. Application details**

**1.1. Permit application details**

Permit application No.: 1008/1  
 Permit type: Area Permit

**1.2. Proponent details**

Proponent's name: Mark Bruce & Dorothy Ruth Haggerty

**1.3. Property details**

Property: LOT 2897 ON PLAN 81936 ( ELGIN 6237)  
 Local Government Area: Shire Of Capel  
 Colloquial name:

**1.4. Application**

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

**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 1136: Medium woodland; marri with some jarrah, wandoo, river gum and casuarina (Hopkins et al. 2001; Shepherd et al. 2001).	The proposal includes parkland clearing of 480 native trees and shrubs.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	Observed during site visit: the vegetation under application has no midstorey species and very sparsely scattered understorey species. The vegetation is located within an existing stock grazing paddock.
Hedde Vegetation Complex: Abba Complex - Open forest of marri-jarrah-banksia and a woodland of marri (Hedde et al. 1980).	The vegetation under application is an existing parkland cleared paddock comprising dead (and poor condition) Melaleuca spp., sparsely vegetated Nuytsia floribunda, Eucalyptus marginata and Xylomelum occidentale (DEC Site visit 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 vegetation proposed to be cleared is Completely Degraded (Keighery 1994) consisting of scattered paddock trees, (Melaleuca spp.), most of which appeared to be either dead or in poor health.

A stand of vegetation exists on the property that is in better condition than the area under application. The proponent has agreed to revegetate this area, totalling 12.71ha, and fence it from stock access. This vegetation is linked to another remnant bordering the neighbouring property and the proposed revegetation will result in the development of a larger, more intact piece of vegetation in a predominantly cleared area.

The high level of disturbance within the area under application, extensive weed invasion and low native species density suggests the vegetation has a low level of biodiversity.

Given the above information it is concluded the clearing proposal is not likely to be at variance to this principle.

**Methodology** DEC site visit 2006  
 Keighery (1994)  
 GIS databases:  
 - Busselton 50cm 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 may be at variance to this Principle**

The area proposed to be cleared consists of scattered paddock trees, *Melaleuca* spp., in Completely Degraded (Keighery 1994) condition. The majority of these trees within the proposed area are dead or in poor health. One to two shrub species exist scattered throughout a pasture dominant understorey, however these have been subject to grazing pressures for many years.

The vegetation's structure is no longer intact and it is not providing connectivity to larger remnants within the local area. The tree species may provide habitat to local bird species, however most trees observed during the site visit were either dead or dying and this vegetation is not seen to be sustainable.

The applicant has agreed to revegetate and fence an area of vegetation (12.71ha) from stock. This area is linked to vegetation existing on the neighbouring property and will create a large remnant within the local area. This area should provide habitat for local fauna.

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

**Methodology** DEC Site Report 2006;  
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**

Twenty four populations of Declared Rare Flora (DRF) are known to occur within a 10km radius of the proposed clearing. The closest recorded species, *Verticordia densiflora* var. *pedunculata*, is located 5.7km north of the area proposed to be cleared. These known DRF occurrences are not within the same vegetation complex as the area under application.

Six Priority 1 (P1); Six P2; Thirteen P3 and Nineteen P4 Flora populations are known to occur within the local area (10km radius) of the proposed clearing. The closest recorded species, *Isopogon formosus* (P3), is located 3.7km north of the area proposed to be cleared. There are no distinct vegetation links between any of these known occurrences and the area proposed to be cleared, nor are any within the same vegetation complex.

Considering the completely degraded condition of the vegetation (DEC Site visit 2006; Keighery 1994), most likely due to the effects of years of intensive stock grazing, it is considered highly unlikely that any DRF and/or Priority Flora species known to occur in the area would be able to persist in this area, even if they were there originally.

Therefore, it is unlikely the proposal is at variance to this Principle.

**Methodology** DEC Site visit (2006);  
Keighery (1994);  
GIS databases:  
- Declared Rare and Priority Flora List - CALM 13/08/03;  
- Busselton 50cm 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**

Nine Threatened Ecological Communities (TECs) occur within the local area (10km radius), with the nearest located 4km south west of the notified area. None of these is located within the same soil or vegetation type as the area under application and therefore, it is not expected that this proposal will impact upon any of these known occurrences.

Considering the impacts of stock over many years and the removal of understorey allowing grass invasion, it is considered unlikely the notified area contains or is necessary for the maintenance of threatened ecological communities.

Therefore, the proposal is not likely to be at variance to this Principle.

**Methodology** GIS databases:  
- Threatened Ecological Communities - CALM 15/7/03  
- Threatened Plant Communities - DEP 06/95  
- Busselton 50cm 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 1136 (Hopkins et al. 2001) of which there is 8.8% (Shepherd et al. 2001) of the pre-European extent remaining and therefore of an 'Endangered' status for Biodiversity conservation (Department of Natural Resources and Environment 2002). The vegetation under application is also located in the Swan Coastal Plain Bioregion in the Shire of Capel. The extent of native vegetation in these areas is 41.8% and 35.9% respectively (Shepherd et al. 2001).

The vegetation of the area applied to clear is also a component of Heddle Abba Complex (Heddle et al. 1980) of which there is 5.6% of the pre-European extent remaining and therefore of an 'Endangered' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

The vegetation proposed for clearing consists of dead or poor condition scattered paddock trees and was rated to be in Completely Degraded condition (Keighery 1994). A few understorey species were present however the area has been subject to grazing for many years.

The State Government is committed to the National Objectives Targets for Biodiversity Conservation 2001-2005 (AGPS 2001) which includes a target that prevents clearance of ecological communities below 30% of that pre-1750 (Department of Natural Resources and Environment 2002; EPA 2000). 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.

The proponent is willing to revegetate and fence an area of 12.71 hectares from stock access as conditions of a granted clearing permit, however based on the above statement, the proposed clearing may be at variance to this Principle.

**Methodology** Keighery (1994);  
EPA (2000);  
Department of Natural Resources and Environment (2002);  
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 mapped within the local area of the proposed clearing.

The Capel River is located 1.8km south of the area proposed to be cleared.

There are 17 EPP Lakes within the local area of the proposed clearing. The closest is located 5km south west of the area proposed to be cleared.

The area proposed to be cleared is within a multiple use wetland. Multiple use wetlands are considered to be 'wetlands with few important ecological attributes and functions remaining' in the Water and Rivers Commission Wetlands Position Statement.

There are approximately 10 conservation category wetlands within the local area of the proposed clearing. The closest is found 3.1km south, south east of the area proposed to be cleared.

There are no vegetation links between the area proposed to be cleared and local watercourses and conservation wetlands.

Given the distance, lack of vegetation links and the Completely Degraded (Keighery 1994) condition of the vegetation, the proposed clearing is unlikely to adversely impact on nearby watercourses or conservation wetlands.

Therefore, the proposal is not likely to be at variance to this Principle.

**Methodology** DEC Site Report 2006;

Keighery (1994);  
Water and Rivers Commission Wetlands Position Statement (06/06/01);  
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  
- Busselton 50cm 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**

There area proposed to be cleared has no known risk of Acid Sulphate Soils, has a low salinity risk and a ground water salinity of 500-1000 mg/L.

DAFWA Land Degradation Assessment Report (2006) raises no potential land degradation issues for this proposal.

Therefore the area under application is considered to be not at variance to this Principle.

**Methodology** DAFWA (2006);  
GIS databases:  
- Acid Sulfate Soil Risk Map, SCP - DoE 01/02/04  
- Salinity Risk LM 25m - DOLA 00.  
- Groundwater Salinity, Statewide - 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**

The Boyanup State Forest is located 3km east of the area proposed to be cleared. The Jarrahwood State Forest is located 5km south east of the area under application. The Ludlow-Wonnerup Area is located 9km north west of the area proposed to be cleared.

There are no vegetation links between the area proposed to be cleared and local conservation reserves. Due to the lack of vegetation links and the Completely Degraded (Keighery 1994) condition of the vegetation, it is unlikely the proposed clearing would have an adverse impact on the environmental values of nearby conservation areas.

**Methodology** Keighery (1994)  
GIS database:  
- CALM Managed Lands and Waters - CALM 1/06/04  
- Register of National Estate - EA 28/01/03  
- Busselton 50cm 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 proposed to be cleared is within the Capel River Hydrographic Catchment Area, the Capel River RIWI area and the Busselton-Capel RIWI ground water area.

The vegetation proposed to be cleared is Completely Degraded (Keighery 1994) with the majority of the trees either dead or dying.

DAFWA (2006) advise that the removal of dead single and small groups of dead trees from the areas proposed to be cleared is not expected to have a significant effect on salinity or eutrophication and found the proposed clearing is unlikely to cause appreciable land degradation.

Given this information the proposed clearing is unlikely to significantly degrade local ground or surface water quality.

It is therefore concluded the proposed clearing is not likely to be at variance to this principle.

**Methodology** DEC Site Report 2006  
Keighery (1994)

GIS databases:

- Hydrographic Catchments, Catchments - DoE 3/4/03
- RIWI Act Groundwater Areas - WRC 13/06/00
- RIWI Act Areas - WRC 05/04/02

**(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**  
DAFWA advice (2006) states 'the removal of dead single and small groups of dead trees from the areas proposed to be cleared is not expected to have a significant effect on waterlogging or flooding'.

Therefore, the proposal is not likely to be at variance to this Principle.

**Methodology** DAFWA (2006);  
GIS Database:  
- Topographic Contours, Statewide - DOLA 12/09/02

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

**Comments**  
The area proposed to be cleared is zoned rural in the Capel TPS.

It should be noted that the proposal is to clear up to 480 native trees and shrubs within the area cross hatched yellow. The applicant only wants to remove the dead and dying trees. All live trees will remain and the remnant of vegetation will be fenced from stock. The applicant has agreed to revegetate and fence this area as a condition of the permit, if granted.

**Methodology** GIS database:  
- Town Planning Scheme Zones - MFP 8/98

**4. Assessor's comments**

Purpose	Method	Applied area (ha)/ trees	Comment
Horticulture	Mechanical Removal	480	Assessable criteria have been addressed and the proposal may be at variance to Principles (b) and (e).  The assessing officer therefore recommends that the permit be granted with conditions requiring revegetation, fencing and weeding.

**5. References**

AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.

DAFWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. DoE TRIM ref XXXXX.

DEC Site Visit (2006). Department of Environment and Conservation Western Australia, Bunbury. TRIM ref SWD29799

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. 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.

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 Wetlands Position Statement (06/06/01)

## 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)