



## 1. Application details

### 1.1. Permit application details

Permit application No.: 1666/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Kevin John Neil

### 1.3. Property details

Property: LOT 5414 ON PLAN 131429 ( CRANBROOK 6321)  
LOT 5997 ON PLAN 138204 (Lot No. 5997 UNANUP CRANBROOK 6321)  
LOT 5767 ON PLAN 227801 ( CRANBROOK 6321)  
LOT 1 ON DIAGRAM 16165 ( CRANBROOK 6321)  
LOT 2 ON DIAGRAM 28698 (Lot No. 2 UNANUP CRANBROOK 6321)  
LOT 8935 ON PLAN 209098 ( CRANBROOK 6321)

Local Government Area: Shire Of Cranbrook  
Colloquial name: Kojonup Location 8935

### 1.4. Application

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

## 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 Type 967: Medium woodland; wandoo & yate	Vegetation to be cleared consists of individual and small groups (2-4) of paddock trees. Trees are Eucalyptus wandoo. The trees appear to be suffering from wandoo decline with some dead and dying. Surrounding paddocks are being grazed and the condition of paddocks is 'completely degraded' (Keighery, 1994)	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	Condition of vegetation was observed during a site visit on the 23 Jan 2007.

## 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 areas proposed to be cleared consist of isolated and small groups (2-4) of paddock trees. The paddocks in which they stand have been heavily grazed, resulting in a 'completely degraded' (Keighery, 1994) vegetation condition. The species proposed to be cleared are Eucalyptus wandoo. Many of these trees were observed as suffering the effects of wandoo decline, with some dead and dying trees noted (Site visit 2007).

The proposed clearing is within the boundaries of EPA Position Statement No.2 and has a low vegetation representation. The local area demonstrates a highly cleared landscape with small patches of remnant vegetation.

Given that the proposal is for one species of tree in a completely degraded environment it is unlikely, even in comparison with local areas, to be representative of a high level of biological diversity.

**Methodology** Keighery 1994  
Shepherd et al 2002  
Site Visit Report 2007  
EPA 2000

GIS Databases:

- Interim Biogeographic Regionalisation of Australia (subregions) - EA
- Mount Barker North 1.4m Orthomosaic - DLI01
- Pre-European Vegetation - DA 01/01

**(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 at variance to this Principle**

The Eucalyptus wandoo trees that are proposed to be cleared are mature to senescent and site photos show that numerous of the trees have suitable nesting hollows for Carnaby's Cockatoos (*Calyptorhynchus latirostris*).

Carnaby's cockatoo's have been recorded within the local area and due to their preference for E wandoo species there is a likelihood that the proposed clearing areas would provide habitat to this species. Advice from DEC Species and Communities Branch indicated the likelihood of Carnaby's habitat was high and trees with a DBHOB (Diameter Breast Height Over Bark) of greater than 670mm are encouraged to be retained.

Wandoo trees have been documented for their importance in providing wildlife habitat. White and Manning (2005) state that as the wood is dense, durable and less affected by termites standing dead trees and shed branches provide good habitat for small mammals, reptiles and other bird species. The foliage and bark also support a large population of invertebrate species which in turn encourages insectivorous birds.

The proposed clearing lies within the boundaries of EPA Position Statement no.2, which focuses on past detrimental clearing within Western Australia's agriculture zone. The range of E.wandoo has been fragmented by the large amounts of clearing within this zone and as such the retention of these important habitat trees is important.

Given the highly cleared landscape in which the proposed clearing lies and the likelihood of carnaby's cockatoo habitat it is likely that clearing would be at variance to this principle. Conditions relating to the preservation of significant habitat trees would be imposed if the permit were granted.

**Methodology** EPA 2000  
White P, Manning L 2005  
Site Visit Report 2007  
GIS Databases:  
- SAC Biodatasets 01/08/07  
- EPA Position Paper No 2 Agriculture Region - DEP 12/00  
- Mount Barker North 1.4m Orthomosaic - DLI01

**(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 radius) there are 2 recorded species of Declared Rare Flora (DRF).

- \* *Dryandra mucronulata* subsp. *retrorsa*
- \* *Gastrolobium lehmannii*

Soil characteristics known to be preferred by *Gastrolobium lehmannii* are not found within the proposed clearing area and are therefore unlikely to occur within the notified areas.

*Dryandra mucronulata* subsp. *retrorsa* appears to be confined to the small pockets of Beard vegetation type 3 found with the local area.

Additionally, as the clearing is for isolated and small groups (2-4) of trees located within heavily, and continually, grazed paddocks it is unlikely that the proposed clearing areas include DRF.

**Methodology** Site Visit Report 2007  
GIS Databases:  
- SAC Biodatasets 01/08/07  
- Mount Barker North 1.4m Orthomosaic - DLI01  
- Pre-European Vegetation - DA 01/01

**(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 no known threatened ecological communities within the proposed clearing area or surrounding local area (10 km radius).

The clearing is limited to isolated and small groups (2-4) of Eucalyptus wandoo with no other native vegetation being impacted upon.

It is therefore unlikely that the clearing would be at variance to this principle.

**Methodology** Site Visit Report 2007  
GIS Databases:  
- SAC Biodatasets 01/08/07

**(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 area proposed to be cleared falls within the Beard Vegetation type 967 of which there remains approximately 13.5%. It also falls within the IBRA (Interim Biogeographic Regionalisation Australia) bioregion of Avon Wheatbelt in the sub region AW2. There is approximately 13% of this IBRA region remaining (EPA, 2000) with only 9.7% remaining that contains the Beard Vegetation type 967.

As the area proposed to be cleared is represented by just one species, Eucalyptus Wandoo, it is not considered to be a true representation of Beard Vegetation type 967.

The area applied to be cleared also falls within the boundaries outlined in the EPA Position Statement No. 2. This paper states that 'further reduction in native vegetation through clearing for agriculture cannot be supported'. However section 4.2 of this paper indicates that if an environmental benefit is gained through protection of higher quality remnant vegetation, clearing may be supported. Conditions relating to fencing and revegetation will be imposed if the permit is granted.

Additionally, section 4.2 indicates that if land degradation issues are not exacerbated the clearing may also be supported. As the clearing is for isolated and small groups (2-4) of Eucalyptus wandoo, many of which are dead or dying, it is unlikely that land degradation will be significantly affected by the proposed clearing. A report by DAFWA advises that clearing is unlikely cause appreciable land degradation.

Although this area is situated within a vegetation type with a low remaining percentage and lies within the boundaries of EPA Position Statement no.2, the tree's proposed to be cleared stand in 'completely degraded' (Keighery, 1994) paddocks with no understorey and many of the trees appear to be suffering from wandoo decline. These factors together with the proposed environmental gain by fencing areas with higher environmental value suggests that the clearing cannot be said to be at variance to this principle.

**Methodology** Keighery, 1994  
EPA 2000  
Shepherd et al 2002  
DAFWA 2007  
Site Visit Report 2007  
GIS Databases:  
- Pre-European Vegetation - DA 01/01  
- EPA Position Paper No 2 Agriculture Region - DEP 12/00  
- Interim Biogeographic Regionalisation of Australia (subregions) - EA  
- Mount Barker North 1.4m Orthomosaic - DLI01

**(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 areas proposed to be cleared are isolated or small groups of Eucalyptus wandoo. These trees are found mainly in the mid to upper slopes of the property, however some are found on the lower slopes within 100m of the Slab Hut Gully River which traverses the property.

The area surrounding these trees is grazed and found to be in 'completely degraded' condition (Keighery, 1994) with no understorey. The trees may have formerly been part of the riparian vegetation, however in their current situation they are not likely to be associated with the watercourse. This proposal is not likely to be at variance to this principle.

**Methodology** Keighery 1994  
Site Visit Report 2007  
GIS Databases:  
- Mount Barker North 1.4m Orthomosaic - DLI01  
- Hydrography, linear (hierarchy) - DOW

**(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 areas proposed to be cleared contain isolated and small groups (2-4) of paddock trees. The notified areas are unfenced allowing livestock to graze on vegetation, which has resulted in a 'completely degraded' (Keighery, 1994) condition of vegetation with no understorey and no basic bush vegetation structure.

Given the changes in topography the soil types are variable throughout the notified area. They can be broadly described as Grey deep and shallow sandy duplex (DAFWA, 2007).

Given these soil types DAFWA (2007) have advised that the risk of wind erosion is low, additionally given the gradients and current pasture cover water erosion is also listed as low risk.

The report by DAFWA (2007) examined the current Dryland Salinity found within the property and found that the clearing would not result in a significant change to salinity levels.

Given the completely degraded areas that the paddock trees are found within, there is unlikely to be any increase in sedimentation or associated eutrophication levels caused by the clearing.

Given the above factors it is unlikely that the clearing would be at variance to this principle.

**Methodology**

Keighery 1994  
Site Visit Report 2007  
DAFWA 2007  
GIS Databases:  
- Topographic contours, Statewide, DOLA 12/09/02  
- Groundwater Salinity, Statewide - DOW  
- Mount Barker North 1.4m Orthomosaic - DLI01

**(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**

Rock Hole Dam Nature reserve lies approx 7km to the southwest of the proposed clearing. There are no other known conservation areas within the local area (10 km).

Given the distance between the proposed clearing area and the nature reserve it is unlikely that the notified area provides any buffering functions. Aerial photography suggests limited connectivity between the two properties, however the value of this would be related towards the areas of higher quality vegetation within the notified property rather than the isolated paddock trees.

It is unlikely that the proposed clearing would be at variance to this principle.

**Methodology**

Site Visit Report 2007  
GIS Databases:  
- CALM Managed Lands and Waters - CALM 1/07/05  
- Mount Barker North 1.4m Orthomosaic - DLI01

**(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 comprises isolated and small groups (2-4) of trees. Dryland salinity has been observed within the property and groundwater salinity mapping identifies the area as being between 7000-14000 TDS MG/L. Within the property lies the Slab Hut Gully River which feeds into the Gordon River.

The trees proposed to be cleared are mainly Eucalyptus wandoo which are often highly valued for their groundwater uptake. Clearing the E.wandoo from this property may have some effect on the groundwater salinity levels, however a site visit (2007) by DEC staff noted that many of the trees proposed to be cleared appeared to be suffering from wandoo decline. Numerous of the trees are dead or dying thereby reducing the potential for groundwater uptake. A report from DAFWA (2007) advises that as the clearing is for isolated trees no significant change in salinity levels is expected.

The isolated trees lie within paddocks that are unfenced and are currently being grazed by livestock. The condition of vegetation within these areas is 'completely degraded' (Keighery, 1994) with no understorey (Site visit 2007). Given the condition of vegetation and type of clearing proposed the risk of eutrophication and sedimentation is low.

The clearing is therefore not likely to be at variance to this principle.

**Methodology** Keighery 1994  
 Site Visit Report 2007  
 DAFWA 2007  
 GIS Databases:  
 - Groundwater Salinity, Statewide - DOW  
 - Mount Barker North 1.4m Orthomosaic - DLI01

**(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**  
 A report from the Department of Agriculture and Food WA (DAFWA) indicates that as the area proposed to be cleared is comprised of single and small groups of trees with no understorey, the risk of clearing resulting in flooding is low.

**Methodology** Site Visit Report 2007  
 DAFWA 2007

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

**Comments**  
 The area falls within the EPA Position Statement No. 2 'Clearing of Native Vegetation, with particular reference to the Agricultural Area'. This has been addressed under principle (e) and should the permit be granted conditions relating to fencing and revegetation would be imposed.

**Methodology**

**4. Assessor's comments**

Purpose	Method Applied	Comment
Cropping	Mechanical Removal 410	The assessing officer has found that the proposed clearing is at variance to Principle (b) and maybe at variance to principle (e). Conditions are recommended if a clearing permit is granted.

**5. References**

DAFWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. DoE TRIM ref DOC 23881  
 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.  
 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.  
 Site Visit Report, 23 January 2007, Department of Environment and Conservation.  
 White, P, Manning, L, 2005, Wondering about wandoo, Landscape, Department of Environment and Conservation, Vol 20 No 3 pp17-21

**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)