



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

### PERMIT DETAILS

Area Number: 3048/2  
File Number: DEC1386  
Duration of Permit: From 18 July 2009 to 18 July 2011

### PERMIT HOLDER

Keith Jack Bock  
Mary Jeanie Bock

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 1579 on Plan 208449

### AUTHORISED ACTIVITY

Clearing of up to 23.67 hectares of native vegetation within the area hatched yellow on attached Plan 3048/2.

### CONDITIONS

#### 1. Dieback and weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) shall not move soils in wet conditions;
- (c) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (d) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

### Definitions

The following meanings are given to terms used in this Permit:

*dieback* means the effect of *Phytophthora* species on native vegetation;

*fill* means material used to increase the ground level, or fill a hollow;

*mulch* means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

*weed/s* means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.

Keith Claymore  
A/ ASSISTANT DIRECTOR  
NATURE CONSERVATION DIVISION

*Officer delegated under Section 20  
of the Environmental Protection Act 1986*

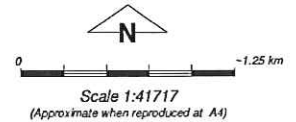
4 November 2009

# Plan 3048/2



## LEGEND

- |  |                               |
|--|-------------------------------|
| <b>Clearing Instruments</b>                      | <b>Cadastre for labelling</b> |
| <input type="checkbox"/> Areas Approved to Clear | Jacup 1.4m Orthomosaic -      |
| <input type="checkbox"/> Road Centrelines        | Landgate 2003                 |
| <input type="checkbox"/> Cadastre                |                               |



Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

*K Claymore* Date *4/1/09*  
 K Claymore  
 Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



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\* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.



## 1. Application details

### 1.1. Permit application details

Permit application No.: 3048/2  
 Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: **Keith Jack and Mary Jeanie Bock**

### 1.3. Property details

Property: LOT 1579 ON PLAN 208449 (House No. 8225 RABBIT PROOF FENCE JACUP 6337)  
 Local Government Area:  
 Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
23.67		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
Beard Vegetation Associations:  519 - Shrublands; mallee scrub, Eucalyptus eremophila  128 - Bare areas; rock outcrops	Areas under application are considered to be in degraded (Keighery 1994) condition and accessible to stock (grazed).	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The vegetation condition and description was determined from site inspection undertaken 20 April 2009.

## 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 may be at variance to this Principle**

CPS3048/1 has received an appeal against the conditions of the permit. The Minister's allowed the appeal against Condition (2) of the permit - Fencing. This condition is to be removed from the permit. Additionally, as raised in the Appeals Convenor report the following conditions are to be amended:  
 - The removal of the word "degraded" under "Authorised Activity"  
 - The removal of Condition 1. Clearing not authorised

As Condition 1. Clearing not authorised within areas cross hatched red is to be removed from the permit, the vegetation within the areas cross hatched red has not been assessed in the report.

The application is to clear 23.67ha of native vegetation for the purpose of agriculture, to allow machinery access and improve productivity. The application area consists of 6 areas with 5 in the eastern half of the property and one close to Exchange road in the northern half of the property. These are considered to be in degraded (Keighery, 1994) condition (DEC, 2009) owing to stock access and weed intrusion.

The area under application falls within EPA Position Statement No.2 agricultural area, which has a general presumption against clearing within this area for agricultural purposes (EPA, 2000).

The local area (20km radius) contains approximately 40% native vegetation. The larger remnant neighbouring the application area contains greater diversity of species and is in excellent (Keighery 1994) condition (DEC 2009). This area is therefore considered of greater significance in the local area, however the proposed clearing of fringing vegetation has the potential to impact on biological diversity and vegetation condition within these remnants.

Weed and dieback conditions will be imposed in order to reduce the potential impacts to neighbouring remnants of vegetation.

Methodology DEC (2009)  
 EPA (2000)

Keighery (1994)

GIS database:

- CALM Managed Lands and Waters - CALM 01/06/05
- SAC Biodatasets - accessed 30 March 09
- Declared Rare and Priority Flora List - CALM 13/08/03
- Pre European Vegetation - DA 01/01
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

**(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**

Whilst 4 rare and one priority fauna species were recorded within the local (10km radius) area, all were more than 7km from the application area, with most recorded within the Lake Magenta Nature Reserve.

The application is for the clearing of small remnants of vegetation, while a large remnant in excellent (Keighery 1994) condition is to remain on the property. This larger remnant is considered to be a stepping stone between conservation areas. All the areas under application have stock access (sheep) and as such show varying signs of disturbance (DEC 2009).

The vegetation contained within the application area is not likely to provide locally significant habitat for fauna, however, given the extent of clearing in the local area these areas of vegetation may be facilitating fauna movement between larger remnants.

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

**Methodology** DEC (2009)  
Keighery (1994)

GIS database:

- CALM Managed Lands and Waters - CALM 01/06/05
- SAC Biodatasets - accessed 30 March 2009
- Hydrography linear - DOW 13/7/06
- Hydrography linear (hierarchy) - DoW 13/7/06

**(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**

The vegetation under application is in a degraded (Keighery 1994) condition, and all sections are accessed by stock (sheep).

Two rare and six priority flora species have been recorded in the local area (10km radius). *Stylidium galioides* (DRF), *Thelymitra psammophila* (DRF), *Leucopogon florulentus* (P3), *Melaleuca ordiniflora* (P2), *Pulenaea adunca* (P3), *Caladenia plicata* (P4), *Acacia brachyphylla* var. *recurvata* (P3) and *Desmocladius biformis* (P3).

*Stylidium galioides* inhabits granite outcrops on mountain peaks within the Fitzgerald River National Park south west of the application area. This species is therefore not likely to exist within the application area.

*Thelymitra psammophila* favours open conditions amongst low shrubs and sedges, often in sandy clay soil, which becomes saturated during the winter months (Brown et al 1998). Given the low lying poor drainage areas within the proposed clearing area it is possible this species may occur here, although, soil types within the application area are predominantly sandy and perhaps too saline to support this species. No flora surveys have been provided to date, and as it is considered this species may be present within the application area.

*Leucopogon florulentus* was recorded less than 200m from the application area, and *Melaleuca ordiniflora* was recorded 6km north, within the same soil and vegetation types. As the vegetation within the application areas is degraded and currently grazed by stock it is unlikely that this species would be within the application areas.

Given its degraded (Keighery 1994) condition, the application areas are not likely to be providing locally significant habitat for rare or priority flora, and as such the proposed clearing is not likely to be at variance to this principle.

**Methodology** Brown et al (1998)  
DEC (2009)  
Keighery (1994)

- GIS database:
- Declared Rare and Priority Flora List - CALM 13/08/03
  - Pre European Vegetation - DA 01/01
  - SAC Biodatasets - accessed 30 March 09
  - Soils, Statewide DA 11/99

**(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**  
 No threatened or priority ecological communities have been recorded within the local (10km radius) area. The clearing as proposed is therefore not likely to be at variance to this principle.

**Methodology**    GIS Database:  
 - SAC Biodatasets - accessed 30 March 09  
 - Pre European Vegetation - DA 01/01  
 - Soils, Statewide DA 11/99

**(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 application lies within the Shire of Jerramungup and the Mallee IBRA Bioregion, which retains 43.98% and 54.63% native vegetation respectively (Shepherd 2007). Orthomosaic imagery suggests the local (20km radius) area is approximately 40% vegetated, however approximately 80% of this is within the Lake Magenta Nature Reserve 10km north of the application area.

The area under application falls within EPA Position Statement No.2 agricultural area, which has a general presumption against clearing within this area for agricultural purposes (EPA, 2000).

The vegetation under application is of Beard Vegetation Associations 519 and 128, which retain 57.63% and 62.50% of their pre-European extent within the Mallee Bioregion (Shepherd 2007).

Whilst the vegetation under application is in a degraded (Keighery 1994) condition and as such is considered to support a lower level of biological diversity, it is likely to be contributing to biological stepping stones between larger remnants.

**Methodology**    Keighery (1994)  
 Shepherd (2007)  
 EPA (2000)

- GIS Databases:
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
  - Local Government Authorities - DLI 8/07/04
  - Pre European Vegetation - DA 01/01
  - SAC Biodatasets - accessed 30 March 09
  - NLWRA, Current Extent of Native Vegetation 20 Jan 2001

**(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 at variance to this Principle**  
 A minor non-perennial watercourse flows through the application area, and the Gairdner River is 9km south west. The applicant has mentioned his desire to exclude clearing within this gully (DEC 2009).

The north half of the application area is mapped as being part of the Cobomup Suit - a South Coast Significant Wetland. This is associated with the minor non-perennial watercourse which flows west through the neighbouring remnant vegetation.

The application is therefore at variance to this principle. However, given the altered state of the vegetation under application surrounding this watercourse, coupled with the existence of the large, excellent (Keighery 1994) condition remnant, the significance of it as riparian vegetation is reduced.

**Methodology**    DEC (2009)  
 Keighery (1994)

- GIS database:
- Evapotranspiration Isopleths - WRC 29/09/98

- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Salinity Risk LM 25m - DOLA 00
- Topographic Contours, Statewide - DOLA 12/09/02

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

**Comments Proposal may be at variance to this Principle**

Some of the areas under application are low lying, and mapped as high risk of salinity. The groundwater salinity ranges from 7000 to 14000 mg/L. The proposed clearing may incrementally increase recharge and contribute to salinisation.

The soils are mapped as gently undulating pediments with narrow ironstone gravel ridges; some swamps and lakes: chief soils are hard, and sandy, alkaline yellow and yellow mottled soils.

Clearing of deep rooted perennials is likely to incrementally increase recharge and salinisation and therefore, may be at variance to this principle, however given the degraded (Keighery, 1994) condition of the vegetation under application (grazed by stock) revegetation conditions will not be placed on the permit.

**Methodology Keighery (1994)**

GIS database:

- Average Annual Rainfall Isohyets - WRC 29/09/98
- Annual Evaporation Contours (Isopleths) - WRC 29/09/98
- Hydrogeology, statewide - DOW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Salinity Risk LM 25m - DOLA 00
- Soils, Statewide DA 11/99
- Topographic contours statewide - DOLA and ARMY 12/09/02
- Hydrogeology, Statewide 05 Feb 2002

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

The application area lays approximately half way between Lake Magenta Nature Reserve (10km north) and Fitzgerald River National Park (10km south west). The vegetation under application may be contributing to ecological stepping stones between these two larger remnants through a highly cleared landscape where only small pockets of vegetation and paddock trees remain.

Given the highly cleared extent of the local (10km radius) area, the clearing as proposed may incrementally impact on flow of genetic material between conservation areas. The proposal may therefore be at variance to this principle.

**Methodology GIS Databases:**

- CALM Managed Lands and Waters - CALM 01/06/05
- Hydrography, linear - DOW 13/7/06
- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02
- System 1 to 5 and 7 to 12 areas - DEC 11/7/06

**(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**

A minor non-perennial watercourse runs within the application area. This is mapped as being part of the Cobomup Creek South Coast Significant wetland. The application area lies within the Gordon Inlet - Gairdner River hydrographic catchment.

The groundwater salinity is mapped as 7000-14000 mg/L, and some areas are at high risk of salinity.

Clearing of deep rooted perennials is likely to incrementally increase recharge and salinisation and therefore, may be at variance to this principle. However given the degraded (Keighery, 1994) condition of the vegetation under application (grazed by stock), revegetation conditions will not be placed on the permit.

**Methodology Keighery (1994)**

GIS database:

- Evapotranspiration Isoleths - WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Salinity Risk LM 25m - DOLA 00
- Topographic Contours, Statewide - DOLA 12/09/02

**(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**

The annual evaporation rate is mapped as 500mm, and the annual rainfall 400mm. The topography is low to medium relief, and Cobomup Creek, part of a South Coast Significant Wetland, is mapped as occurring within the application area. The vegetation to be cleared consists of 6 separate pockets of vegetation spread across the property and as such runoff as a result of clearing is reduced. The clearing as proposed is therefore not likely to be at variance.

**Methodology GIS database:**

- Evaporation Isoleths - WRC 29/09/98
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DoW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Topographic Contours, Statewide - DOLA 12/09/02

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

**Comments**

CPS3048/1 has received an appeal against the conditions of the permit. The Minister's allowed the appeal against Condition (2) of the permit - Fencing. This condition is to be removed from the permit. Additionally, as raised in the Appeals Convenor report the following conditions are to be amended:

- The removal of the word "degraded" under "Authorised Activity"
- The removal of Condition 1. Clearing not authorised

As Condition 1. Clearing not authorised within areas cross hatched red is to be removed from the permit, the vegetation within the areas cross hatched red has not been assessed in the report.

The area under application falls within EPA Position Statement No.2 agricultural area, which has a general presumption against clearing within this area for agricultural purposes (EPA, 2000).

In exceptional circumstances the EPA would consider supporting clearing for agriculture within this region if:

- There are alternative mechanisms for protecting biodiversity.
- The area to be cleared is relatively small, depending on the scale at which biodiversity changes over the area, including extent of vegetation in the surrounding area and recognising that values will vary for different ecosystems.
- The proponent demonstrates that the elements set out in Section 4.3 of this Position Statement are being met. This will require extensive local and regional biodiversity work.
- Land degradation, including aquatic environments and threatening processes, such as dieback, salinisation or disruption of catchment processes, on-site and off-site would not be exacerbated.

Consideration of the clearing proposed against these abovementioned principles is outlined below:

(a) The vegetation under application is considered to be in a degraded (Keighery 1994) condition as a result of stock access and weed invasion, and as such the biodiversity within this section is significantly lower. No alternative mechanisms have been proposed by the applicant to ameliorate the impacts to biodiversity likely to result from the proposed clearing.

(b) The vegetation under application is considered to have comparatively lower biodiversity and it is recognised that the vegetation comprises Beard vegetation associations which are well represented in the Mallee bioregion (57.63% and 62.50% remaining), and the local area (20km radius) is approximately 40% vegetated. This, coupled with the small area and degraded condition of the vegetation to be cleared, reduces its significance as a remnant in terms of biological diversity.

(c) It is considered that the principles of section 4.3 are met for the proposed clearing of the vegetation under application.

(d) Any clearing within the agricultural area is likely to incrementally increase groundwater recharge, and

therefore the potential for land salinisation on- and off-site. Clearing of the degraded vegetation under application, is likely to have a low significant impact on groundwater recharge due to its low density of deep rooted vegetation, although will be likely to have some contribution to the cumulative impacts of groundwater recharge that results from clearing.

A Soil Conservation Notice has been registered on Lot 1579 on plan 208449, however the application area is outside the boundaries of the SCN.

**Methodology** EPA (2000)  
Keighery (1994)

#### **4. Assessor's comments**

##### **Comment**

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing is at variance to Principles (f), may be at variance to Principles (a), (b), (e), (g), (h) and (i) and is not likely to be at variance to the remaining clearing Principles.

#### **5. References**

- Brown A., Thomson-Dans C. and Marchant N.(1998). Western Australia's Threatened Flora, Department of Conservation and Land Management, Western Australia.
- DEC (2009) Site Inspection Report for Clearing Permit Application CPS 3048/1, Lot 1579 Exchange Road, Jacup. Site inspection undertaken 20/4/2009. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC83650).
- 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, 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. (2007). Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

#### **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)