



## **CLEARING PERMIT**

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

### **PERMIT DETAILS**

Area Permit Number: 3620/1

File Number: DEC14604

Duration of Permit: From 15 May 2010 to 15 May 2012

### **PERMIT HOLDER**

Shire of Dandaragan

### **LAND ON WHICH CLEARING IS TO BE DONE**

LOT 11025 ON DEPOSITED PLAN 173679 (JURIEN BAY 6516)

### **AUTHORISED ACTIVITY**

The Permit Holder shall not clear more than 10.39 hectares of native vegetation within the area hatched yellow on attached Plan 3620/1

### **CONDITIONS**

Nil.

A handwritten signature in black ink, appearing to be "K. Faulkner", written over a horizontal line.

Kelly Faulkner

MANAGER

NATIVE VEGETATION CONSERVATION BRANCH

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

15 April 2010

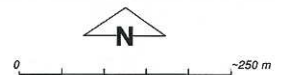
# Plan 3620/1



## LEGEND

### Clearing Instruments

- Areas Approved to Clear
- Cadastre
- Hill River 50cm Orthomosaic - Landgate 2006



Scale 1:8644

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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

K. Faulkner

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.



Department of Environment and Conservation

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Date 15/4/10





## 1. Application details

### 1.1. Permit application details

Permit application No.: 3620/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Shire of Dandaragan

### 1.3. Property details

Property: LOT 11025 ON PLAN 173679 ( JURIE BAY 6516)  
Local Government Area: Shire of Dandaragan  
Colloquial name: Jurien Bay Horse Club

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
10.39		Mechanical Removal	Building or Structure

## 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
Mapped Beard (1980) vegetation association 1026 is described as Mosaic: Shrublands; <i>Acacia rostellifera</i> , <i>A. cyclops</i> (in the south) & <i>Melaleuca cardiophylla</i> (in the north) thicket / Shrublands; <i>Acacia lasiocarpa</i> & <i>Melaleuca acerosa</i> heath.	The area under application consists of 10.39 hectares of native vegetation which is dominated by <i>Acacia cyclops</i> , <i>Acacia lasiocarpa</i> subsp. <i>lasiocarpa</i> , <i>Diplolaena dampieri</i> , <i>Melaleuca cardiophylla</i> , <i>Anthocercis litoralis</i> , <i>Olearia axillaris</i> (DEC, 2010).	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The condition of the vegetation was determined by a site inspection conducted by the Department of Environment and Conservation (DEC, 2010) and from digital imagery (Hill River 50cm Orthomosaic - Landgate 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 applicant's proposal is to clear 10.39 hectares of native vegetation within Lot 11025 on Plan 173679, Jurien Bay (Crown Reserve 45328) for the purpose of expanding the Jurien Bay Horse Club facilities. Areas will be cleared for sheds, roads, stalls and holding yards, the remaining vegetation will be left in place for the horses to move between and graze on.

The vegetation under application comprises coastal heath dominated by *Acacia cyclops*, *Acacia lasiocarpa* subsp. *lasiocarpa*, *Diplolaena dampieri* and *Melaleuca cardiophylla* (DEC, 2010). The vegetation has been assessed as being in a good condition (Keighery, 1994). There is some disturbance at the site through weed encroachment on the edges of the remnant (DEC, 2010).

No rare or priority flora were recorded on the same vegetation and soil type as the applied area it is therefore considered unlikely that the area under application will include or be necessary for the continued existence of any rare flora.

A site visit undertaken by DEC observed kangaroo scats but did not identify any significant habitat (eg tree hollows) for fauna of conservation significance (DEC, 2010).

DEC site visit indicated that there was no evidence of rare and priority flora and that the proposal is unlikely to have a significant effect on biodiversity (DEC, 2010). Therefore, this proposal is not likely to be at variance to this principle.

**Methodology** DEC (2010)  
Keighery (1994)

GIS database:

- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- Hill River 50cm Orthomosaic - Landgate 2006
- SAC Biodatasets - accessed 15/03/10

**(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**

Nearly all of the fauna recorded within a 10km radius of the application area were recorded on the offshore islands to the west of the application area. An Australian Bustard (*Ardeotis australis*) was recorded 1.4km to the East and a Ghost Bat (*Macroderma gigas*) recorded 6.7km to the north east of the application area.

The vegetation type of the area under application is well represented in the local area and as such, this vegetation is not likely to be significant habitat for fauna indigenous to Western Australia.

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

**Methodology** GIS database:  
- SAC Biodatasets - accessed 15/03/10

**(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 were no rare or priority flora taxa recorded on the same vegetation and soil type as the applied area. The closest recorded flora species was *Guichenotia alba* (P3) which was recorded 1.2km to the east of the application area and was mapped as occurring on the same vegetation type to that of the application area. Both *Stylidium maritimum* (P3) and *Grevillea christineae* (DRF) were recorded within 2.5km to the north of the application area but were both found on different soil and vegetation types.

Considering no priority or rare flora was recorded on the same vegetation and soil type it is unlikely that the area under application will include or be necessary for the continued existence of any rare flora  
Therefore, this proposal is not likely to be at variance to this Principle.

**Methodology** DEC (2010)  
  
GIS database:  
- Pre European Vegetation - DA 01/01  
- SAC Biodatasets - accessed 15/03/10  
- 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**

There are no known records of Threatened Ecological Communities (TEC) within the local area (10km radius).

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

**Methodology** GIS Database:  
- SAC Biodatasets - accessed 11 Nov 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	<b>Proposal is not likely to be at variance to this Principle</b>		
	Pre-European (ha)	Current extent (ha)	Remaining (%)
IBRA Bioregions*			
Swan Coastal Plain	1 501 208.80	583 140.87	38.84
Shire*			
Dandaragan	670 535.00	299 219.48	44.62
Beard Vegetation Association*			
1026	58 419.15	53 009.02	90.74
Beard Vegetation Association with Bioregion*			
1026	69 842.58	63 141.29	90.41

\* (Shepherd et al. 2007)

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001).

The application area lies within an agricultural area covered by the EPA Position Paper No2, which restricts further clearing for agricultural purposes (EPA, 2000). The proposed clearing is not for agricultural purposes and the percentages of remaining vegetation within the Bioregion, Shire and vegetation association are relatively high.

Within the local area (10km radius) there is approximately 80% of native vegetation remaining. This being considered the vegetation under application is not considered to be a significant remnant within an extensively cleared area.

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

**Methodology** Commonwealth of Australia (2001)  
EPA (2000)  
Shepherd et al. (2007)

GIS Databases:  
- Local Government Authorities - DLI 8/07/04  
- Pre European Vegetation - DA 01/01  
- SAC Biodatasets - accessed 11 Nov 09

**(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 application area is 950 meters east of the coast and a non perennial lake is located 600m to the south. There are no mapped wetlands or watercourses within the proposed clearing area and vegetation within the application area is not riparian.

Therefore, the proposed clearing is unlikely to be at variance to this principle.

**Methodology** GIS Databases:  
- ANCA wetlands - Environment Australia 26/3/99  
- EPP Lakes Policy Area - DEP 14/05/97  
- Hydrography linear - DOW 13/7/06

**(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 chief soils of the applied clearing area are described by Northcote et al (1960-68) as "shallow calcareous sands with aeolianite occurring as a continuous substrate within 12 inches of the surface." These soils have a high risk of wind erosion due to their sandy content which may be exasperated due to exposure to strong winds.

The proposal is to clear limited areas for infrastructure and to leave the remaining vegetation in place for the horses to move between and graze on. Considering this the proposed clearing is not likely to cause appreciable land degradation.

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

**Methodology** Northcote et al (1960-68)

GIS database:

- Average Annual Rainfall Isohyets - WRC 29/09/98
- Annual Evaporation Contours (Isopleths) - WRC 29/09/98
- Hydrography, linear - DOW 13/7/06
- Soils, Statewide DA 11/99
- Topographic contours statewide - DOLA and ARMY 12/09/02

**(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**

Drovers Cave National Park is located 3.8km north east of the application area. Beekeepers Nature Reserve is located 2.6km North and Jurien Bay Marine Park is 900m west of the project area. The removal of the vegetation under application is not likely to impact the environmental values of these conservation reserves nor is it likely to effect ecological corridors between them.

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

**Methodology** GIS Databases:

- DEC Tenure - DEC Sept 08
- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02

**(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 is not situated within a Public Drinking Water Source Area nor are there any watercourses within the application area. The soils in the area are sandy and there is a medium risk of salinity in the area under application.

Considering the close proximity of the area under application to the ocean, it is plausible to assume that the quality of the underground water in the local area is saline. Clearing of vegetation in the area under application is not likely to deteriorate the quality of underground water any further, as it is expected to be already saline.

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

**Methodology** GIS database:

- Groundwater Salinity Statewide DoW 13/07/06
- Hydrography, linear - DOW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Public Drinking Water Supply Areas (PDWSAs) -07/02/06
- 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 proposed clearing is unlikely to cause or exacerbate flooding as the area under application is situated in a region of low average annual rainfall of 600mm and has highly permeable sandy soils.

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

**Methodology** DEC (2010)  
EPA (2000)  
Keighery (1994)  
Shepherd (2007)

#### GIS Databases:

- Hill River 50cm Orthomosaic - Landgate 2006
- Hydrography linear - DOW 13/7/06
- Local Government Authorities - DLI 8/07/04
- SAC Biodatasets - accessed 15 Mar 2010
- Pre European Vegetation (DA 2001)

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

#### Comments

The proposed clearing area is within EPA Position Statement No.2 Agricultural Region (EPA, 2000). However, the proposed clearing is not for agricultural purposes.

No submissions have been received for this application.

**Methodology** EPA (2000)

### 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, found that the proposed clearing is not likely to be at variance to any of the clearing Principles.

### 5. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2010) Site Inspection Report for Clearing Permit Application CPS 3620/1, Lot 11025 on Plan 173679, Jurien Bay. Site inspection undertaken 19/03/10. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC123752).
- 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.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- 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.

### 6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management (now DEC)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment (now DEC)
DoW	Department of Water
DMP	Department of Mines and Petroleum (ex DoIR)
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)