



## 1. Application details

### 1.1. Permit application details

Permit application No.: 4512/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Glenn Zoltan and David John Ossy-Orley and Lewis

### 1.3. Property details

Property: LOT 1423 ON PLAN 113228 (ARRABUP 6275)  
Local Government Area: Shire of Nannup  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
10		Burning	Hazard reduction or fire control

### 1.5. Decision on application

Decision on Permit Application: Refuse  
Decision Date: 29 January 2013

## 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 vegetation association: 3 - Medium forest; jarrah-marri (Shepherd et al. 2001).	This application is to clear up to 10 hectares of native vegetation on Lot 1423 on Deposited Plan 113228, Barrabup for the purpose of fire breaks, building protection zone and hazard separation zone.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994).	The condition of the vegetation determined through a site visit (DEC 2011).
Mapped Beard vegetation association: 1183 - Medium forest; jarrah-marri (Shepherd et al. 2001).		To	
Mattiske vegetation complex: BK - Open forest of <i>Corymbia calophylla</i> - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> on the variable slopes in perhumid and humid zones (Mattiske and Havel 1998).	The vegetation varies from degraded to excellent (Keighery 1994) condition with the majority in very good condition.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994).	
Mattiske vegetation complex: DP - Open forest to woodland of <i>Corymbia calophylla</i> with some <i>Eucalyptus marginata</i> subsp. <i>marginata</i> on slopes, woodland of <i>Eucalyptus rudis</i> 4 - <i>Banksia seminuda</i> - <i>Melaleuca preissiana</i> - <i>Agonis flexuosa</i> and tall shrubland of <i>Agonis linearifolia</i> - <i>Callistachys lanceolata</i> on fringes of streams in perhumid and humid ones (Mattiske and Havel 1998).	The vegetation under application is comprised of <i>Eucalyptus marginata</i> and <i>Corymbia calophylla</i> with some <i>E. patents</i> and <i>E. rudis</i> over <i>Persoonia longifolia</i> , scattered <i>Banksia grandis</i> , <i>Xanthorrhoea preissii</i> , <i>Bossiaea linophylla</i> and <i>Dodonaea viscosa</i> (DEC 2011).		
Mattiske vegetation complex: KI - Open forest of <i>Eucalyptus marginata</i> subsp. <i>marginata</i> - <i>Corymbia calophylla</i> - <i>Allocasuarina fraseriana</i> - <i>Banksia grandis</i> - <i>Xylomelum occidentale</i> on lateritic uplands in perhumid and humid zones (Mattiske and Havel 1998).			

## 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

This application proposes to clear up to ten hectares of native vegetation on Lot 1423 on Deposited Plan 113228, Barrabup for the purpose of fire breaks, building protection zone and hazard separation zone.

The vegetation in the area under application is comprised of *Eucalyptus marginata* and *Corymbia calophylla* with some *E. patents* and *E. rudis* over *Persoonia longifolia*, scattered *Banksia grandis*, *Xanthorrhoea preissii*, *Bossiaea linophylla* and *Dodonaea viscosa*. The vegetation is predominantly in very good to excellent (Keighery 1994) condition (DEC 2011).

Within the local area (10 kilometre radius) ten fauna species of conservation significance have been recorded (DEC 2007a). The closest records are the Western Brush Wallaby (*Macropus irma*) (priority 4 species under the

Wildlife Conservation Act (WC Act) 1950), Chuditch (*Dasyurus geoffroii*) (Vulnerable under the EPBC Act 1999 and a 'Threatened' species under the WC Act 1950) and the Quenda (*Isoodon obesulus* subsp. *fusciventer*) (priority 5 species under the Wildlife Conservation Act (WC Act) 1950), which were both recorded within two kilometres of the application area (DEC 2007a). A site visit determined that the Chuditch and Quenda inhabit the application area (DEC 2011).

Carnaby's black cockatoo (*Calyptorhynchus latirostris*) (Endangered, Wildlife Conservation Act 1950; Endangered, Environment Protection and Biodiversity Conservation Act 1999), the Forest Red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*) (Vulnerable under the EPBC Act 1999 and a 'Threatened' species under the WC Act 1950), and Baudin's black cockatoo (*Calyptorhynchus baudinii*) (Endangered, Wildlife Conservation Act 1950; Vulnerable, Environment Protection and Biodiversity Conservation Act 1999) were also recorded in the local area (10 kilometre radius) (DEC 2007a).

Tree hollows occur within the area under application, and these hollows may provide habitat for local fauna including black cockatoos. Potential habitat trees have a diameter, at average adult human chest height, of greater than 70cm. These types of trees were identified within the application area during a DEC site visit (DEC 2011).

The local area is highly vegetated, with approximately 80 percent native vegetation remaining, including large areas of state forest and national parks. These areas may be providing habitat of greater local significance than the vegetation under application.

Given the varying condition of vegetation, surrounding vegetation in similar condition, and values as habitat for a range of fauna (including conservation significant fauna) the application area may comprise a high level of biological diversity, and therefore the proposed clearing may be at variance to this principle.

#### Methodology

##### References:

DEC 2007a

DEC 2011

Keighery 1994

GIS databases:

- Donnybrook 50cm Orthomosaic - Landgate 2004

- SAC Biodatasets - accessed 19 August 2011

#### **(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**

Within the local area (10 kilometre radius) ten fauna species of conservation significance have been recorded (DEC 2007a). The closest records are the Western Brush Wallaby (*Macropus irma*) (priority 4 species under the Wildlife Conservation Act (WC Act) 1950), Chuditch (*Dasyurus geoffroii*) (Vulnerable under the EPBC Act 1999 and a 'Threatened' species under the WC Act 1950) and the Quenda (*Isoodon obesulus* subsp. *fusciventer*) (priority 5 species under the Wildlife Conservation Act (WC Act) 1950), which were both recorded within 2km of application area (DEC 2007a). A site visit determined that Chuditch and Quenda inhabit the application area (DEC 2011).

Carnaby's black cockatoo (*Calyptorhynchus latirostris*) (Endangered, Wildlife Conservation Act 1950; Endangered, Environment Protection and Biodiversity Conservation Act 1999), the Forest Red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*) (Vulnerable under the EPBC Act 1999 and a 'Threatened' species under the WC Act 1950), and Baudin's black cockatoo (*Calyptorhynchus baudinii*) (Endangered, Wildlife Conservation Act 1950; Vulnerable, Environment Protection and Biodiversity Conservation Act 1999) were also recorded in the local area (10 kilometre radius) (DEC 2007a).

Black cockatoos feed on Marri seeds and flowers and Jarrah nuts as well as other south west eucalypts. Breeding for black cockatoos occurs in winter/spring, mainly in the eastern forests and wheatbelt where they can find mature hollow-bearing trees to nest in (DEC 2007b). According to Dutson et. al. (2009) on behalf of Birds Australia, there is an Important Bird Area (IBA) located at Jalbarragup, which is approximately 9 kilometres southwest of the applied area. This IBA supports at least 20 breeding pairs of Carnaby's black cockatoo and at least three breeding pairs of Baudin's black cockatoo and associated habitat within a 10 kilometre radius of Jalbarragup town site. All habitat suitable for black cockatoos within the application area are significant.

Tree hollows occur within the area under application, and these hollows may provide habitat for local fauna including black cockatoos. Potential habitat trees have a diameter, at average adult human chest height, of greater than 70 centimetres. There are healthy trees with dead limbs and broken crowns that are likely to contain hollows and roosts suitable for native fauna and healthy trees with the potential to contain hollows and roosts. These types of trees were identified within the application area during a DEC site visit (DEC 2011).

The local area is highly vegetated, with approximately 80 percent native vegetation remaining including large areas of state forest and national parks. These areas may be providing habitat of greater local significance than the vegetation under application. Therefore, the proposed clearing may be at variance to Principle (b).

**Methodology** References:  
 DEC 2007a  
 DEC 2007b  
 Dutson et. al. 2009  
 GIS databases:  
 - Donnybrook 50cm Orthomosaic - Landgate 2004  
 - SAC Biodatasets

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

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

There are two species of rare flora recorded within the local area (10 kilometre radius).

One species is recorded approximately four kilometres from the area under application. It is found on peaty sand along swamps and river edges (Western Australian Herbarium 1998-2011).

The other species is mainly found on white/grey sand, gravelly clay or loam, winter-wet flats and clay flats (Western Australian Herbarium 1998-2011).

The local area is well vegetated, with approximately 80 percent native vegetation remaining, including large areas of State Forest and National Parks. There is suitable habitat within the application area for the rare flora mentioned above.

Therefore, the clearing may be at variance to this principle.

**Methodology** References:  
 Western Australian Herbarium 1998-2011  
 GIS databases:  
 - Donnybrook 50cm Orthomosaic - Landgate 2004  
 - SAC Biodatasets

**(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 (10 kilometre radius). Therefore, the proposed clearing is not likely to be at variance to this principle.

**Methodology** GIS Databases:  
 - SAC Biodatasets

**(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 is not likely to be at variance to this Principle**

The vegetation under application is mapped as Beard vegetation association 3, which has approximately 69 percent of its pre-European extent remaining and Beard vegetation association 1183, which has approximately 39 percent of its pre-European extent remaining within the Jarrah Forrest Interim Biogeography Regionalisation of Australia (IBRA) bioregion (Shepherd et al. 2001).

The application area is mapped as Matiske Vegetation Complexes, Blackwood, Darradup and Kingia of which 95, 71 and 96 percent of their pre-European extent are remaining respectively

The local area has approximately 80 percent of native vegetation remaining, with the majority located within State Forest and National Parks.

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 mapped vegetation types in the application area retain more than the 30 percent threshold.

As the local area retains approximately 80 percent native vegetation the area is not considered to be extensively cleared. Therefore, the clearing is not likely to be at variance to this principle.

	Pre-European (ha)	Current Extent Remaining (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				

Jarrah Forrest	4 506 656	2 514 549	56	67
Shire*				
Shire of Nannup	293 312	249 059	85	90
Beard Vegetation Association in Bioregion*				
3	2 390 591	1 657 963	69	79
Beard Vegetation Association in Bioregion*				
1183	50,867	19,595	39	41
Mattiske Vegetation Complex **				
BK 'Blackwood'	21 361	20 184	95	91
Mattiske Vegetation Complex **				
DP 'Darradup'	4 088	2 897	71	54
Mattiske Vegetation Complex **				
KI 'Kingia'	102 240	97 808	96	94

\* Government of Western Australia 2011

\*\* Mattiske and Havel 1998

**Methodology** References:  
Commonwealth of Australia 2001  
Government of Western Australia 2011  
Mattiske and Havel 1998  
Shepherd et al. 2001  
GIS Databases:  
- Pre European Vegetation  
- Mattiske Vegetation  
- Donnybrook 50cm Orthomosaic - Landgate 2004  
- SAC Biodatasets

**(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 may be at variance to this Principle**  
There is a perennial lake within the northern section of the application area.

Some of the vegetation under application may be considered likely to be associated with a wetland. Therefore, the proposal may be at variance to this principle.

**Methodology** GIS Databases:  
- Hydrography, linear

**(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 property under application is mapped as soil type Tc5 which Northcote et al. (1960-1968) describes as dissected plateau at low elevation of gently undulating to low hilly relief and characterized by extensive block laterite and lateritic (ironstone) gravels; some swamps: chief soils on slopes and undulating areas generally are hard acidic yellow mottled soils containing small to very large amounts of ironstone gravels.

The proposed clearing has a low risk of wind erosion and is not considered likely to cause appreciable land degradation. Therefore, the proposed clearing is not likely to be at variance to this clearing principle.

**Methodology** References:  
Northcote et al 1960-68  
GIS Databases:  
- Soils, statewide



**(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 area proposed to be cleared is adjacent to Jarrahbrook, Cambray and Millbrook State Forests. Approximately 80 percent of the local area (10 kilometre radius) is State Forest or managed by the Department of Environment and Conservation (DEC).

The proposed clearing may indirectly impact on the environmental values of the adjoining conservation reserves through the spread or introduction of weed species or dieback by machinery. The consequences associated with the spread of such exotic species into areas reserved for conservation include the significant degradation of the reserve and the potential local extinction of species.

Given the indirect impact through the spread of weeds and dieback; it is considered likely that the clearing as proposed may impact on the environmental values of nearby conservation areas. Therefore, the clearing as proposed may be at variance to this principle.

**Methodology** GIS Databases:  
-DEC Tenure

**(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**

There is one perennial lake that is present within the application area. The retention of a 30 metre vegetated buffer will assist in mitigating the impacts the clearing may have on the lake and the quality of surface and ground water.

The groundwater salinity of the application area is not mapped.

Therefore the proposed clearing is not likely to be at variance to this principle.

**Methodology** GIS Database:  
- Hydrography, linear

**(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 not likely to cause, or exacerbate, the incidence or intensity of flooding and is not likely to be at variance to this principle.

**Methodology** GIS Databases:  
- Topographic Contours, Statewide  
-Hydrography linear,

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

**Comments**

The application is to clear up to ten hectares of native vegetation on Lot 1243 on Deposited Plan 113228, Barrabup for the purpose of fire breaks, building protection zone and hazard separation zone.

The application area is zoned as Rural under the Town Planning Scheme.

The Shire of Nannup (2011) advised the Department of Environment and Conservation (DEC) that the application does not comply with the Shire of Nannup's Local Planning Scheme No.3, in that there is no approved Fire Management Plan to support the clearing requested: and there is currently an outstanding application for an amendment to the Shire of Nannup Local Planning Scheme No. 3, to change the zone of the property in question, to facilitate a proposed subdivision. This scheme amendment has not been approved, due to the Fire Management Plan, for the property not being approved. In summary, the Shire of Nannup does not support the application.

The application area falls within the Blackwood groundwater area covered by the Rights in Water and Irrigation Act 1914.

**Methodology** References:  
Shire of Nannup 2011  
GIS Databases:  
- Cadastre  
- Town Planning Scheme Zones  
- RIWI Act, Groundwater areas

#### 4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2007a) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/> (Accessed 19/08/2011).
- DEC (2007b) DEC Fauna Habitat Notes.xls. February 2007. Department of Environment and Conservation, Western Australia.
- DEC (2011) Site Inspection Report for Clearing Permit Application CPS 4502/1, Lot 1423 Barrabup Road, Nannup. Site inspection undertaken 29/08/2011. Department of Environment and Conservation, Western Australia (DEC Ref. A430987).
- Dutson, G., Garnet, S. and Gole, C. (2009). Australia's Important Bird Areas: Key sites for bird conservation. Bird Australia (RAOU) Conservation Statement No. 15, October 2009.
- Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- 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.
- Shire of Nannup (2011) Application to clear native vegetation - Lot 1423 on Deposited plan 113228, Barrabup. Received 19/08/2011. DEC Ref: A423001
- Western Australian Herbarium (1998-2011) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed 20/09/2011).

#### 5. 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)