



## 1. Application details

### 1.1. Permit application details

Permit application No.: 1809/1

Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Stephen Shaw and Christine Marcinowski

### 1.3. Property details

Property: LOT 1735 ON PLAN 119620 (Lot No. 1735 LYNNS SUNNYSIDE 6256)

Local Government Area: Shire Of Bridgetown-Greenbushes

Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3		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
Heddlle Vegetation Complexes: Dwellingup and Hester Complex in/High Rainfall - Central and South - Not available Bridgetown Complex in Medium to High Rainfall - not available	The proposed clearing is for the construction of a house, shed, water tank and garden/orchard. The area under application appears to be in very good condition (Keighery 1994). The vegetation is open forest as there is not a dense canopy and little understorey. The area along the northern boundary has previously been cleared and is generally devoid of vegetation.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The vegetation condition was determined through aerial photographs with a resolution of 50cm.
Beard Vegetation Associations: 3 - Medium forest; jarrah-marri			
Mattiske Vegetation Complexes Bevan 1 (BE1) Tall open forest of <i>Corymbia calophylla</i> - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> on uplands in perhumid and humid zones. Catterick (CC1) - Open forest of <i>Eucalyptus marginata</i> subsp. <i>marginata</i> - <i>Corymbia calophylla</i> mixed with <i>Eucalyptus patens</i> on slopes, <i>Eucalyptus rudis</i> and <i>Banksia littoralis</i> on valley floors in the humid zone.			

### 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 proposal is for the clearing of 3 hectares of native vegetation for construction of a house, shed, water tank and garden/orchard. The area proposed to be cleared is in an area that has approximately 60% vegetation remaining within a 10km radius. The majority of the area uncleared is within State Forests (Hester, Yornup and Palgarup), National Parks (Greater Kingston) and Timber Reserves.

The condition of the vegetation under application is considered to be in very good (Keighery 1994). Due to the unlikely significance of the area to contribute to the maintenance of rare flora and TECs and the low significance of the areas habitat values, it is unlikely that the proposed clearing comprises a high level of biological diversity.

It has been acknowledged that the application area lies within an annual rainfall region of 900mm where there is an increased risk of the spread of dieback into surrounding areas as a result of clearing activities. To mitigate this risk, conditions have been placed on the permit to ensure that hygiene practices associated with dieback are adhered to during the clearing process.

**Methodology**      Keighery, 1994

GIS databases:

-Bridgetown 50cm Orthomosaic - DLI04

-Manjimup 50cm Orthomosaic - DLI04

#### (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**

The proposal is for the clearing of 3 hectares of native vegetation for construction of a house, shed, water tank and garden/orchard. Within the local area (5km radius) there are two known records of Declared Threatened Fauna and two known records of Priority Fauna. The Declared Rare Fauna include the Forest Red Tailed Black Cockatoo and Chuditch while the priority records are of the Masked Owl (South West Species).

Given, the property under application is adjacent to a Timber Reserve and there are State Forests within the local area (10km radius) it is unlikely to yield significant impacts to fauna habitat.

**Methodology**      Keighery, 1994

GIS databases:

-Bridgetown 50cm Orthomosaic - DLI04

-Manjimup 50cm Orthomosaic - DLI04

- Fauna - SAC Bio datasets 16/07/07

#### (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**

A desktop study found 8 known records of the Declared Rare Flora (DRF) species *Diurris drummondii*, *Caladenia christinaea* and *Caladenia harringtoniae* however they all occur in different soil types to that of the area under application. There is one known priority record, *Carex tereticaulis*, which occurs approximately 5.5km north west of the area under application, however this species occurs in black peaty sand which does not occur in the area under application. Based on the above the proposed clearing is not likely to include or be necessary for the existence of, rare flora.

**Methodology**      GIS databases:

-Bridgetown 50cm Orthomosaic - DLI04

-Manjimup 50cm Orthomosaic - DLI04

- DEFL- SAC Bio datasets 16/07/07

#### (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 or Priority Ecological Communities within a 10 km radius of the proposed area. Therefore the proposed clearing is not likely to impact on TECs or comprise part of one.

**Methodology**      GIS databases:

- TEC points - SAC Bio datasets 16/07/07

- PEC Points SAC Bio datasets 16/07/07

**(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	<b>Proposal is not likely to be at variance to this Principle</b>				
	Pre-European (ha)	Current extent (ha)	Remaining (ha)	Conservation **status (%)	% In reserves/CALM managed land
IBRA Bioregions - Jarrah Forest	4,506,674.566*	2,426,079.798*	53.8*	Least Concern	14*
Shire of Bridgetown- Greenbushes	133,051*	93,291*	70.1*	Least Concern	
Vegetation type: Beard: Unit 3	2,390,534.711*	1,661,219.499*	69.5*	Least Concern	16.4*
Hedde: Dwellingup and Hester Complex in High Rainfall	83,666	71,067	84.9	Least Concern	0.2
Central and South Bridgetown Complex In Medium to High Rainfall	NA	NA	NA	NA	NA
Mattiske: Bevan 1	767,844	657,120	85.6	Least Concern	NA
Catterick	274,435	192,294	70.1	Least Concern	NA

\* (Shepherd et al. 2001)

\*\* (Shepherd, 2006)

\*\* (Department of Natural Resources and Environment 2002)

The objective for environmental protection and biodiversity conservation is to retain 30% or more of the pre-European clearing extent of each vegetation community (EPA 2002).

The area under application is located in the Jarrah Forest Bioregion. The extent of pre-European vegetation within this area is 53.8% (Shepherd, 2006).

The area subject to the proposal is covered by flora studies conducted by Beard (Shepherd et al 2001) Hedde (Hedde et al 1980) and Mattiske (Mattiske, 1998). However all vegetation associations and complexes fall well above the 30% conservation target. Based on this the area under application is not significant as a remnant of native vegetation in an area that has been extensively cleared.

**Methodology** Keighery, 1994  
EPA (2000)  
Shepherd et al (2001)  
Shepherd et al (2006)  
Hedde et al (1980)  
Department of Natural Resources and Environment (2002)  
GIS Database:  
- Pre-European Vegetation - DA 10/01  
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00  
- EPA Position Paper No. 2 Agriculture Region - DEP 12/00  
- Mattiske Vegetation - CALM 24/3/98  
- Hedde Vegetation Complexes - DEP 21/06/95

**(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 at variance to this Principle**  
There are two minor perennial water courses running through the property under application, one runs approximately 40m north of the proposed clearing and the other is 200m east of the proposed clearing. Both are first order streams and join the Blackwood River which is 1.7km north of the area proposed to be cleared. Based on the above the area proposed to be cleared is not in association with a watercourse or wetland.

**Methodology** GIS Database:  
- Hydrography, Linear - DOE 1/2/04  
- Rivers 250K - GA

**(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 purpose of the clearing is for construction of a house, shed, water tank and orchard/garden. The topography within the region is of low relief with very shallow gradients, ranging from 280-295 AHD within the area under application. The vegetation under application is not considered to be in an area associated with high salinity risk, and has not been mapped for Acid Sulphate Soils. Given the small size of the application area and its intended use, it is unlikely that the proposed clearing of native vegetation would cause appreciable land degradation.

**Methodology** GIS Database:  
-Soils, Statewide - DA 11/99  
-Topographic contours, Statewide - DOLA 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**

The local area (10km radius) has been extensively cleared and the property likely serves as a linkage between the State Forests, Timber Reserves and National Park in the area however due to the small size of the clearing, 3hectares, in comparison to the remaining vegetation on the property, 79 hectares, the proposed clearing is unlikely to impact on the environmental values of the adjacent and nearby conservation areas.

A Timber Reserve lies adjacent to the property proposed for clearing. Given that the region lies within an annual rainfall area of 900mm, there is a possibility of the spread of dieback into surrounding areas as a result of clearing activities.

To mitigate the risk of the spread of dieback, conditions have been placed on the permit to ensure that hygiene practices associated with dieback are adhered to during the clearing process.

**Methodology** GIS Database:  
- CALM Managed Lands and Waters - CALM 1/07/05  
- Bridgetown 50cm Orthomosaic - DLI04  
- Manjimup 50cm Orthomosaic - DLI04

**(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 proposed clearing site falls within the Hardy Estuary\_ Blackwood River Catchment. The region is of low relief with an annual rainfall ranging of 900mm. Groundwater salinity is mapped at between 1000-3000mg/L TDS (Total Dissolved Solids). Due to the small and nature of the area proposed to be cleared, it is unlikely that the clearing of native vegetation will cause deterioration in the quality of surface water or groundwater within the local area.

**Methodology** GIS Database:  
- Hydrographic Catchments - Catchments - DOE 23/03/05  
- Rainfall, Mean Annual - BOM 30/09/01  
- Groundwater Salinity, Statewide - 22/02

**(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**

Due to the scale and nature of the proposed clearing, it is unlikely to cause or exacerbate flooding within the local area.

**Methodology** GIS Database:  
- Topographic Contours, Statewide - DOLA 12/09/02

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

**Comments** No submissions from the public have been received.

The Shire of Bridgetown-Greenbushes has confirmed that no submission has been received from the proponents for Development Approval on this property.

There are two Native Title claims over the area under application. As the property is privately owned the granting of the clearing permit is a secondary approval and does not constitute a future act under the Native Title Act 1993.

**Methodology** GIS Database:  
- Native Title Claims - DLI 07/11/05

#### 4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Building or Structure	Mechanical Removal	3	The assessable criteria have been addressed and the proposal is not at variance to Principle (f), and is not likely to be at variance to Principles (a), (b), (c), (d), (e), (g), (h), (i) and (j).

#### 5. References

- 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.
- Heddle, 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.
- 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 Consulting (1998) Mapping of vegetation complexes in the South West forest region of Western Australia, CALM.
- Shepherd, D.P. (2006). 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.
- 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.

#### 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)

