



## 1. Application details

### 1.1. Permit application details

Permit application No.: 1929/1  
 Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Geoffrey Sales

### 1.3. Property details

Property: LOT 102 ON PLAN 43422 ( BEELA 6224)  
 Local Government Area: Shire Of Harvey  
 Colloquial name:

### 1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of:             |
|--------------------|-----------|--------------------|---------------------------------|
| 1                  |           | Mechanical Removal | Dam construction or maintenance |

## 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  |
|---|--|---|--|
| <p>Beard Vegetation Association 1184: Medium woodland-fringing; jarrah, marri, Eucalyptus rudis &amp; Agonis flexuosa (Shepherd et al. 2001).</p> <p>Lowdon (Lo) Complex: Open forest of Corymbia calophylla-Eucalyptus marginata subsp. marginata-Agonis flexuosa with some Eucalyptus wandoo and occasional Corymbia haematoxylon on slopes, and woodland of Eucalyptus rudis-Melaleuca raphiophylla on valley floor in the humid zone (Mattiske Consulting, 1998).</p> <p>Lowdon Complex: mixture of an open forest of jarrah-marri, a low open forest of peppermint on the lower valley slopes, a woodland of E. rudis-M. raphiophylla along watercourses, and a wandoo woodland on the slopes (Hedde et al. 1980).</p> | <p>The proposal involves clearing approximately 30 individual Corymbia calophylla (Marri), Eucalyptus marginata (Jarrah) and Eucalyptus rudis (Flooded gum) for the construction of a dam. The vegetation is in degraded condition (Keighery, 1994; DEC Site Visit, 2007) with little to no understorey.</p> | <p>Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)</p> | <p>The description of the clearing application area is based on a site inspection conducted by DEC officers on 5 September 2007.</p> |

## 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 approximately 30 trees for the purpose of dam construction.

The area under application is considered to be in degraded condition (Keighery, 1994; DEC Site Visit, 2007) with no understorey. The area has been extensively grazed by livestock.

Based on 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.

**Methodology** Keighery (1994);  
DEC Site Visit (2007);  
GIS databases:  
- Bunbury 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 approximately 30 trees for dam construction. The vegetation has no understorey and is considered to be in degraded condition (Keighery, 1994; DEC Site Visit, 2007).

Within the local area (10km radius from the proposed area for clearing) there are several known records of Declared Threatened Fauna, including the Quokka (*Setonix brachyurus*; T), the Western Ringtail Possum (*Pseudocheirus occidentalis*; T), Chuditch (*Dasyurus geoffroii*; T) and the Water-rat (*Hydromys chrysogaster*; P4).

Given the nature of the clearing and the surrounding vegetated area, the area under application is not considered to be significant habitat for fauna indigenous to Western Australia.

**Methodology** GIS Databases:  
- Threatened Fauna Database - DEC;  
- CALM Managed Lands and Waters - CALM 1/07/05;  
- Bunbury 50cm ORTHOMOSAIC - DLI04

**(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 one known record of the Declared Rare Flora (DRF) *Drakaea elastica* and one known record of the P4 *Anthotium junciforme* occurring in the local area (10km radius).

Given the nature of the clearing and that the area has been extensively grazed (DEC Site Visit, 2007) it is unlikely that the area includes or is necessary for the continued existence of, rare flora.

**Methodology** DEC Site Visit (2007);  
GIS databases:  
- DEFL SAC Bio Datasets;  
- Bunbury 50cm ORTHOMOSAIC - DLI04

**(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 14 km radius of the proposed area.

**Methodology** GIS databases:  
- TEC SAC Bio Datasets;  
- Bunbury 50cm ORTHOMOSAIC - DLI04

**(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**

| Pre-European                       | Current extent         | Remaining     | Conservation | % In<br>**status    |
|------------------------------------|------------------------|---------------|--------------|---------------------|
|                                    | reserves/CALM<br>(ha)* | (ha)*         | (%)*         | managed land        |
| IBRA Bioregions<br>- Jarrah Forest | 4,506,674.56           | 2,426,279.798 | 53.8         | Least Concern<br>14 |

|                                      |         |         |      |               |    |
|--------------------------------------|---------|---------|------|---------------|----|
| Shire of Harvey                      | 168,294 | 101,085 | 60.1 | Least Concern |    |
| Vegetation type:<br>Beard: Unit 1184 | 63,441  | 28,921  | 45.6 | Depleted      |    |
| Mattiske:<br>Lowdon (Lo):            | 170,364 | 86,394  | 50.7 | Least Concern |    |
| Hedde:<br>Lowdon:                    | NA      | NA      | NA   | NA            | NA |

\* (Shepherd et al. 2001)

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

\*\*\* Within the Intensive Landuse Zone

The area under application is located in the Jarrah Forest Bioregion. The extent of pre-European vegetation within this area is 53.8% (Shepherd et al., 2001).

The proposal site falls within the Shire of Harvey, which retains 60.1% of pre-European vegetation (Shepherd et al., 2001).

The Beard Vegetation Association of the area under application is 45.6% of the remaining pre-European vegetation (Hopkins et al., 2001). The Mattiske Complex is Lowdon with 50.7% remaining of pre-European vegetation.

Given the area under application, nature of the clearing and the remaining vegetation in the area, the proposed clearing is not considered significant remanent vegetation in an extensively cleared area.

**Methodology** Shepherd et al. (2001);  
Hopkins et al. (2001);  
Department of Natural Resources and Environment (2002);  
EPA (2000);  
Hedde et al. (1980);  
Mattiske Consulting (1998);  
GIS Databases:  
- Mattiske Vegetation - CALM 24/3/98;  
- Pre-European Vegetation - DA 01/01;  
- 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 at variance to this Principle**

The purpose of the proposed clearing is for construction of a dam; therefore the area under application is within an environment associated with a watercourse.

Given the above, the proposal is at variance to this Principle; however the degraded (Keighery, 1994) condition of the area has significantly modified the value of the native vegetation and therefore the association with this geomorphic wetland.

**Methodology** DEC Site Visit (2007);

GIS databases:

- ANCA, Wetlands - CALM 08/01;
- EPP Areas - DEP 06/95;
- EPP Lakes - DEP 28/07/03;
- Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain - DoE 15/9/04;
- Hydrography Linear - DoE 1/2/04;
- RAMSAR, Wetlands - CALM 21/10/02

**(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**

Due to the nature of the clearing, 30 trees, there will likely be no impact on the area leading to land degradation as the area will remain vegetated.

**Methodology** GIS databases:  
 - Acid Sulphate Soil Risk Map, SCP - DoE 01/02/04;  
 - Salinity Risk LM 25m - DOLA 00;  
 - 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 area proposed for clearing does not lie within or adjacent to areas set aside for conservation. Given the nature of the clearing and the remaining surrounding vegetation in the local area, the proposed site is highly unlikely to function as an ecological linkage to nearby conservation areas.

**Methodology** GIS databases:  
 - CALM Managed Lands and Waters - CALM 1/07/05;  
 - Register of National Estate EA 28/01/03

**(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**  
 Due to the nature of the clearing, 30 trees, the proposed clearing is unlikely to impact on the quality of surface or underground water as the area will remain vegetated.

**Methodology** GIS databases:  
 - Hydrographic Catchments, Catchments DOW;  
 - Rainfall, Mean Annual BOM 30/09/01;  
 - Public Drinking Water Source Areas (PDWSA) DOW

**(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 nature of the proposed clearing, 30 trees, it is unlikely to cause or exacerbate flooding within the local area.

**Methodology** GIS databases:  
 - Hydrography, linear -DOE 01/02/04;  
 - Topographic Contours, Statewide - DOLA 12/09/02;  
 - Rainfall, Mean annual - BOM 30/09/01

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

**Comments**

The proposed clearing is within the Wokalup Creek surface water catchment area gazetted for surface water management under the Rights in Water and Irrigation Act 1914 (RIWI). The Department of Water (DoW) Bunbury have issued a permit to interfere with beds and banks (PMB) on Lot 102 (DoW, 2007).

The Shire of Harvey (2007) advises Council does not support the proposal for the following reasons:  
 - The location is considered to be inappropriate for the construction of a dam; the watercourse has significant flow and contributes to the sustainability of the Brunswick River (PDWSA).  
 - The removal of trees along watercourses will disrupt the natural flow patterns within the area from stormwater runoff and other processes.  
 - The vegetation provides a significant habitat for bird life and fauna associated with the river.

The DoW have considered the suitability of a dam on the watercourse and have granted approval, thus addressing the Shire's first point. The two other points have been addressed in the relevant clearing Principles.

No public submissions have been received to date by the Department for this proposal.

**Methodology** DoW advice (2007);  
 Shire of Harvey (2007)

**4. Assessor's comments**

| Purpose                          | Method           | Applied area (ha)/ trees | Comment  |
|----------------------------------|------------------|--------------------------|--|
| Dam constructional or maintenanc | Mechanic Removal | 1                        | 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 Principle (f). |

## 5. References

- DEC Site Visit (2007). Department of Environment and Conservation, Western Australia. TRIM Ref: DOC33366.
- 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.
- DoW Advice (2007). Copy of permit to interfere with beds and banks - Lot 102 Beela Rd, Brunswick (G Sales). TRIM Ref: DOC40063.
- Hedde, 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.
- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.
- 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., 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.
- Shire of Harvey (2007). Submission for clearing proposal - G Sales. TRIM Ref: DOC31215.

## 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)                    |