



## 1. Application details

### 1.1. Permit application details

Permit application No.: 1116/1  
 Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: B & J Catalano Pty Ltd on behalf of Geoffrey T Pearson and Pearson Nominees Pty Ltd

### 1.3. Property details

Property: LOT 2 ON PLAN 15419 (Lot No. 2 LUDLOW MYALUP 6220)  
 Local Government Area: Shire Of Harvey  
 Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.66		Mechanical Removal	Extractive Industry

## 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 Association 998: Medium woodland; tuart (Hopkins et al. 2001; Shepherd et al. 2001).	The proposal involves clearing approximately 0.66 hectares of remnant heathland.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The description of the clearing application area is based on a site inspection conducted by DEC officers on 14 March 2007.
Heddle Vegetation Complex: Cottesloe - Central and South: heaths on limestone outcrops; mosaic of a woodland of tuart and an open forest of tuart-jarrah-marri (Hedde et al. 1980).	The applied area comprises Melaleuca systema with the occasional Templetonia retusa, Acanthocarpus preissii and Hardenbergia comptoniana (Landform Research 2004).  The area has been heavily grazed over many years, and more recently modified, through the impacts of heavy machinery (DEC Site Visit, 2007).		

## 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 at variance to this Principle**  
 The proposal is for the clearing of 0.66 hectares for the purpose of extractive industry. The vegetation under application is considered to vary in condition between degraded and good (Keighery, 1994).  
  
 The applied area is situated on a limestone ridge running north-south approximately 400m from Lake Preston. The local area is approximately 60% vegetated, with the majority of that vegetation managed by DEC as State Forest and National Park.  
  
 Given the scale (0.66 ha) and the surrounding local vegetation the proposed clearing does not hold a high level of biodiversity and is therefore not at variance to this Principle.

**Methodology** Keighery (1994);  
  
 GIS Databases:  
 - CALM Managed Lands and Waters - CALM 1/07/05;

**(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 at variance to this Principle**

The proposal is for the clearing of 0.66 hectares for the purpose of extractive industry. The vegetation under application is considered to vary in condition between degraded and good (Keighery, 1994).

There are several records of threatened and priority fauna within close proximity of the applied area (10 km radius). SW Region (2007) advises the area is known to support populations of the Western Ringtail Possum (Threatened); however there are no recorded occurrences within a 5 km radius of the proposed clearing.

The adjacent RAMSAR wetland has seasonal inundation of waterbirds, which utilise surrounding vegetation for habitat and nesting. Given that there is approximately 450m of cleared and disturbed lands between this vegetation and the wetland, it is unlikely that these birds would utilise the remaining vegetation.

The local area is approximately 60% vegetated, with the majority of that vegetation managed by DEC as State Forest and National Park; therefore given the scale (0.66 ha) and the surrounding local vegetation the area under application is not considered significant habitat for fauna indigenous to Western Australia and is therefore not at variance to this Principle.

If approved, conditions requiring the revegetation of the cleared area after extraction should be imposed to offset the loss of fauna habitat.

**Methodology** Keighery (1994);  
SW Region (2007);

GIS Databases:

- CALM Managed Lands and Waters - CALM 1/7/05;
- Threatened Fauna, SAC Bio Dataset - 22/8/07;
- Swan Coastal Plain South 40cm ORTHOMOSAIC - DLI05

**(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**

Several populations of *Diuris purdiei* (DRF), *Drakaea micrantha* (DRF), *Drakaea elastica* (DRF), and numerous other priority flora populations have been recorded within a 10 km radius of the area proposed for clearing.

*Diuris purdiei*, *Drakaea micrantha* and *Drakaea elastica* are all tuberous, perennial herbs that flower in September to October (*D. elastica* Oct-Nov). All three species occur in white-grey sands adjoining winter-wet swamps (DEC, Flora Base, 2008).

The soils of the applied area are described as an undulating dune landscape underlain by aeolianite which is frequently exposed; small swales of estuarine deposits are included: chief soils are siliceous sands with smaller areas of brown sands and leached sands in the wetter sites (Northcote et al. 1960-68).

The local area is approximately 60% vegetated, with the majority of that vegetation managed by DEC as State Forest and National Park; therefore given the scale (0.66 ha), degraded condition and the surrounding local vegetation the area under application is not likely to be sustaining flora species of conservation significance, and is therefore not likely to be at variance to this Principle.

**Methodology** DEC, Flora Base (2008);  
Northcote et al. (1960-68);

GIS Databases:

- DEFL, SAC Bio Dataset - 22/8/07;
- CALM Managed Lands and Waters - CALM 1/7/05;
- Swan Coastal Plain South 40cm ORTHOMOSAIC - DLI05

**(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**

The area under application is situated on a limestone ridge on the Swan Coastal Plain. The vegetation type of the applied area is considered to be closely aligned with floristic community SCP 26b "Woodlands and mallees on limestones" (Landform Research, 2004), which is not currently listed as Threatened.

The most closely aligned threatened ecological community (TEC) to the vegetation under application is floristic community type SCP 26a "Melaleuca huegellii, Melaleuca systema shrublands of limestone ridges"; however given the degraded condition and the absence of Melaleuca huegellii, an indicator species of this community type, it is unlikely to be present within the applied area (Landform Research, 2004; DEC, Species and Communities Branch, 2008); therefore the area under application is considered unlikely comprise the whole or part of, or be necessary for the maintenance of a TEC, and is therefore not likely to be at variance to this Principle.

**Methodology** Landform Research (2004);  
DEC, Species and Communities Branch (2008);

GIS Databases:  
- TEC Database - SAC Bio Dataset - 22/8/07

**(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	Pre-European (ha)	Current extent (ha)	Remaining %	% in reserves/DEC-	area managed land
Swan Coastal Plain		1,501,211	579,227	38.6*	32.5
Shire of Harvey		170,746	91,945	53.8*	3.2
Beard Unit: - 998		51,015	21,345	41.8*	27.3
Hedde Complex: - Cottesloe Central and/ South		44,995	18,474	41.1**	8.8

\* (Shepherd, 2006)

\*\* (EPA, 2006)

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

The application is located within the Shire of Harvey on the Swan Coastal Plain. The extent of native vegetation in these areas is 53.8% and 38.6% (Shepherd, 2006), respectively. The local area is approximately 60% vegetated, with the majority of that vegetation managed by DEC as State Forest and National Park

The Cottesloe Central and South complex represents the area under application. There is approximately 41% (EPA, 2006) of this vegetation type remaining on the Swan Coastal Plain, with less than 9% in secure tenure.

Given the scale (0.66 ha) and the remaining vegetation in the local area (60% in 10 km radius), the proposed clearing is not considered significant remnant vegetation in an extensively cleared area and is therefore not at variance to this Principle.

If approved, conditions requiring the revegetation of the cleared area after extraction should be imposed.

**Methodology** Shepherd (2006);  
EPA (2006);

Hopkins et al. (2001);

GIS databases:  
- Hedde Vegetation Complexes - DEP 21/06/95  
- Local Government Authorities - DLI 8/07/04  
- Pre European Vegetation - DA 01/01  
- Swan Coastal Plain 40cm ORTHOMOSAIC - DLI05

**(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**

The area under application is located within the Yalgorup Lakes System, a large system of estuary and saline lakes. This system is recognised as one of 63 declared wetlands of international importance listed in Australia (RAMSAR, 1971).

The applied area is located approximately 450 metres from Lake Preston, a defined wetland of national importance within the Yalgorup Lakes System (ANCA, 1996). Such wetlands are recognised under objective one of the Wetlands Conservation Policy for Western Australia as valuable; and their protection requires the retention of a minimum 200 metre buffer from intensive land uses such as extractive industry (Government of Western Australia, 1997).

Given the distance (450 metres) from wetlands in the local area, the proposed clearing is not associated with, or providing a buffer for local wetlands or watercourses, and is therefore not at variance to this Principle.

**Methodology** RAMSAR (1971);  
ANCA (1996);  
Government of Western Australia (1997);

GIS databases:

- 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;
- Swan Coastal Plain South 40cm ORTHOMOSAIC - DLI05

**(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 soils of the applied area are described as an undulating dune landscape underlain by aeolianite which is frequently exposed; small swales of estuarine deposits are included: chief soils are siliceous sands with smaller areas of brown sands and leached sands in the wetter sites (Northcote et al. 1960-68).

The groundwater salinity is 500 - 1000 mg/L and the hydrogeology consists of shallow aquifers with surficial sediments.

Given the application is for the clearing of 0.66 ha in a grazed area; the level of groundwater salinity; the hydrogeology of the area; and the remaining vegetation in the local area (60% in 10 km radius), the proposed clearing is not likely to cause appreciable land degradation and therefore is not likely to be at variance to this Principle.

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

GIS Databases:

- Groundwater Salinity, Statewide - DoW;
- Hydrogeology, Statewide - DoW;
- Soils, Statewide - DA 11/99;
- Swan Coastal Plain 40cm ORTHOMOSAIC - DLI05

**(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 applied area is surrounded by the Yalgorup National Park (Register of National Estate; System 6 Conservation Reserve; EPP Area; Conservation Category Wetland) and the Myalup State Forest (DEC Managed Land).

Given the application is for the clearing of 0.66 ha in a grazed area and the remaining surrounding vegetation in the local area (60% in 10 km radius), the proposed clearing is unlikely to impact on the environmental values of any nearby conservation reserve.

If approved, dieback and weed management conditions should be imposed, to ensure adequate safeguards and hygiene measures are adopted to avoid the introduction or spread of *Phytophthora* and weeds.

**Methodology** GIS databases:  
- CALM Managed Lands and Waters - CALM 1/06/04;  
- Register of National Estate - EA 28/01/03;  
- System 6 Conservation Reserves - DEP 06/95;  
- Swan Coastal Plain 40cm ORTHOMOSAIC - DLI 05

**(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 soils of the applied area are described as an undulating dune landscape underlain by aeolianite which is frequently exposed; small swales of estuarine deposits are included: chief soils are siliceous sands with smaller areas of brown sands and leached sands in the wetter sites (Northcote et al. 1960-68).

The groundwater salinity is 500 - 1000 mg/L and the hydrogeology consists of shallow aquifers with surficial sediments.

The slope of the area under application is 20 to 25 metres AHD (Australian Height Datum) over 50 m.

Given the application is for the clearing of 0.66 ha in a grazed area with a low slope gradient, the proposed clearing is not likely to affect the quality of surface or underground water and therefore is not likely to be at variance to this Principle.

**Methodology GIS databases:**

- Hydrography, Linear - DoE 1/2/04;
- Topographic Contours, Statewide - DOLA 12/9/02;
- Hydrogeology, Statewide - DoW;
- Groundwater Salinity, Statewide - 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**

Given the scale (0.66 ha) and the remaining surrounding vegetation in the local area (60% in 10 km radius), the proposed clearing is unlikely to cause or exacerbate the incidence or intensity of flooding and is therefore not likely to be at variance to this clearing principle.

**Methodology GIS databases:**

- CALM Managed Lands and Waters - CALM 1/7/05

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

**Comments**

This application was originally for 3.5 ha, however during assessment approximately 3 ha of this area was cleared. This clearing is currently under investigation by the EEU.

The Shire of Harvey (2006) advised approval for limestone extraction over Stage 1 was granted in April 2006. Stage 1 does not incorporate the area under application.

After being notified by the DEC of the pending unauthorised clearing investigation, Council decided to defer its decision on Stage 2 until the matter had been resolved. In July 2007, the DEC reassessed the value of the remaining vegetation and decided to approve clearing of the remaining vegetation, subject to the applicant obtaining a valid EIL. In lieu of this, Council approved the EIL for Stage 2 in December 2007 (Shire of Harvey, 2007).

Given the proximity to a RAMSAR wetland the original extraction proposal (3.5 ha) on Lot 2 was considered by the Environmental Protection Authority in April 2005. The proposal was not assessed, and public advice was given (EPA, 2005), recommending that the impacts can be managed through the approvals process of an Extractive Industries Licence, administered by the relevant decision making authority (i.e. Shire of Harvey).

The property is zoned General Farming Place of Landscape Value under the Shire of Harvey District Planning Scheme No.1. The Greater Bunbury Region Scheme (GBRS) states that no new land uses be allocated to areas around Lake Preston (WAPC, 2000).

Given the proximity to a RAMSAR wetland, it is recommended the proponent establish their obligations under the EPBC Act 1999 in relation to the proposed clearing and land use.

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

**Methodology**

- Shire of Harvey (2006);
- Shire of Harvey (2007);
- EPA (2005);
- WAPC (2000);

**GIS Databases:**

- Town Planning Scheme Zones - MFP 08/98

#### 4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Extractive Industry	Mechanical Removal	0.66	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 not or not likely to be at variance to all ten clearing Principles.  If approved, conditions requiring the revegetation of the cleared area after extraction should be imposed.

#### 5. References

- DEC Additional Site Visit (2007). Site Inspection Report, Department of Environment and Conservation (DEC). Bunbury, Western Australia. TRIM Ref: DOC17996.
- DEC Site Visit (2006). Site Inspection Report, Department of Environment and Conservation (DEC). Bunbury, Western Australia. TRIM Ref: DOC5248.
- DEC, Flora Base (2008). <http://florabase.calm.wa.gov.au/browse/profile/10796>. (Retrieved 2 January 2008).
- Environmental Protection Authority (EPA) (2005). Public Advice Given: Extension to Existing Limestone Quarry adjacent to Lake Preston. Ref: CRN211316.
- EPA (2006) Guidance for the Assessment of Environmental Factors -level of assessment of proposals affecting natural areas within the System 6 region and Swan Coastal Plain portion of the System 1 Region. Report by the EPA under the Environmental Protection Act 1986. No 10 WA.
- Government of Western Australia (1997) Wetlands Conservation Policy for Western Australia, Department of Conservation and Land Management and the Water and Rivers Commission, Perth WA.
- 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.
- 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.
- Landform Research (2004). Excavation and Rehabilitation Management Plan: Renewal of Limestone Quarry Lots 2, 4 and 5, Ludlow Road, Myalup, Doyles Lime Service. TRIM Ref: DOC19182.
- 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.
- SAC Bio Datasets (22/8/07). Department of Environment and Conservation, SAC Bio Datasets, Kensington, Western Australia.
- 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 (2006). Copy of planning permission for extractive industry (limestone) on Lot 2 Ludlow Rd, Myalup (Stage 1 only). TRIM Ref:
- Shire of Harvey (2007). Correspondence: copy of EIL for Lot 2 Ludlow Rd (Stage 2). TRIM Ref: DOC41707.
- Western Australian Planning Commission (WAPC) (2000). Greater Bunbury Regional Scheme - Scheme Report, August 2000.

#### 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)



