



## 1. Application details

### 1.1. Permit application details

Permit application No.: 1411/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Paul Lance SETAB PTY LTD (SETAB PTY LTD)

### 1.3. Property details

Property: LOT 9 ON PLAN 6389 (House No. 2163 OLD COAST BOUVARD 6210)  
Local Government Area: City Of Mandurah  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
	2	Mechanical Removal	Hazard reduction or fire control
0.04		Mechanical Removal	Fence Line Maintenance
0.07		Mechanical Removal	Hazard reduction or fire control

## 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
Karrakatta Complex Central and South - Predominantly open forest of <i>E.gomphocephala</i> - <i>E.marginata</i> - <i>E.calophylla</i> and woodland of <i>E.marginata</i> - <i>Banksia</i> species. (Hedde et al. 1980)	The proposal includes the clearing of native vegetation within three areas on the property: 1. A 3m wide strip of native vegetation along the western boundary for the purpose of fenceline maintenance (0.04ha) 2. Two trees along the northern boundary for the purpose of hazard reduction 3. Understorey and grasses within a 0.07 ha building envelope for fire hazard reduction.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation clearing description based on site visits conducted by DEC officers on 12 July 2006 and 2 November 2006.
	The vegetation under application comprises woodland of <i>Eucalyptus</i> sp., <i>Acacia</i> sp. and <i>Banksia</i> sp. with an understorey of numerous grasses, weeds, <i>Jacksonia</i> sp. and <i>Macrozamia reidii</i> (DEC site visit, 2/11/06). The area under application shows signs of multiple disturbances such as weeds, clearings, and a house and garden, and is considered to be degraded.		

### 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 proposed clearing includes 0.1ha of vegetation in a degraded condition and two trees. Given the limited area and the low species diversity it is not considered likely that the vegetation under application is representative of an area of high biodiversity.

**Methodology** DEC site visit 2/11/06

**(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 clearing proposed comprises three areas of vegetation in a degraded condition totalling 0.1ha and two trees. Given the limited extent of the proposed clearing and degraded condition of the vegetation the vegetation under application is not considered likely to provide significant habitat for indigenous fauna.

**Methodology** DEC site visit 2/11/06

**(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 are 5 known occurrences of Declared Rare Flora (DRF) and 4 known occurrences of Priority Flora within the local area (5km radius of the applied area). All of the identified DRF species are found within different vegetation complexes and soil associations and therefore the vegetation under application is not likely to include, or be necessary for the continued existence of, rare flora.

**Methodology** DEC site visit 2/11/06  
GIS Databases:  
Declared Rare and Priority Flora List - CALM 01/07/05

**(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 is one recorded occurrence of a Threatened Ecological Community (TEC), which is located approximately 3.2km to the southwest of the applied area. The study conducted by Bush Forever (Government of Western Australia 2000) identified the TEC associated with the Spearwood Dune system as Melaleuca huegelii - Melaleuca acerosa shrublands on Limestone ridges (26a).

Given the distance to the nearest TEC, the vegetation on site does not include the indicator species identified in the above TEC and the area is not associated with a limestone ridge, the proposed clearing is not considered likely to impact any TEC.

**Methodology** DEC site visit 12/7/06  
Government of Western Australia (2000)  
GIS Database:  
Threatened Ecological Communities - CALM 12/4/05

**(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 contained within Lot 9 is identified by Hedde et al. (1980) as 'Karrakatta complex - Central and south' of which there is 29.5% of pre-European vegetation remaining, and which is considered to be of a 'vulnerable' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

'Karrakatta Complex - Central and South' also currently has 2.5% (EPA 2003) in secure tenure, with JANIS (1997) recommending that 15% of the pre-1750 distribution of each vegetation ecosystem should be protected in a comprehensive, adequate and representative reserve system.

Although the identified vegetation complex has less than the recommended minimum threshold remaining, the vegetation under application comprises vegetation in a degraded condition. It is therefore not considered likely that the vegetation under application is significant as a remnant of vegetation in an area that has been extensively cleared and is not likely to be of significant conservation value.

Pre-European area (ha)    Current extent (ha)    Remaining %

	Conservation status***% in reserves/DEC- managed land			
IBRA Bioregion - Swan Coastal Plain	1,529,235	657,450	43.0*	Depleted
LGA - City of Mandurah	18,611	8,933	48.0*	Depleted
Local Area (~10km radius)				
Hedde vegetation complex				
Karrakatta Complex - Central & South	49,912	14,729	29.5**	Vulnerable
	2.5			

\* (Shepherd et al. 2001)

\*\* (EPA, 2003)

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

**Methodology** DEC site visit 2/11/06  
 Department of Natural Resources and Environment (2002)  
 EPA (2003)  
 Janis (1997)  
 Shepherd et al. (2001)  
 GIS Databases:  
 Hedde Vegetation Complexes - DEP 21/06/95  
 Pre-European Vegetation - DA 01/01

**(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 area under application is located approximately 50m to the east of the Peel Inlet Waterbody, which is classified as a Conservation Category Wetland (CCW). Wetlands in this category support a high level of ecological attributes and functions and have the highest priority for management (Water and Rivers Commission 2001).

Although the areas under application are in close proximity to the Peel Inlet, no wetland dependent vegetation was observed within these areas (DEC Site Visit, 2006) therefore the proposed clearing is not likely to be at variance to this Principle.

**Methodology** DEC site visit 2/11/06  
 Water and Rivers Commission (2001)  
 GIS Database:  
 Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC

**(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 area under application is identified as Spearwood S4b phase, which is flat to gently undulating sand plain with shallow to moderately deep siliceous yellow-brown and grey-brown sands with minor limestone outcrops. These soils have a low risk of erosion, salinity and eutrophication. There is a high risk of Acid Sulphate Soils associated with the soils identified on site (State of Western Australia 2005) however the proposed clearing is not likely to disturb these soils at a depth of 3m.

In addition, the Department of Agriculture and Food (DAFWA) (2006) advise that, given the high permeability of the soils and the topography of the site there is a low risk of water erosion and waterlogging. Given this information the proposed clearing is not considered likely to cause appreciable land degradation.

**Methodology** DEC Site visit 2/11/06  
 DAFWA (2006)  
 State of Western Australia (2005)

**(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**

Yalgorup National Park is located approximately 60m to the west of the applied area and a number of Nature reserves are located approximately 4km to the east of the applied area, on the opposite shore of the Peel Inlet. The applied area is also approximately 50m from the Peel Inlet, which is a Conservation Category Wetland.

Although the area under application is in close proximity to the aforementioned conservation areas, it comprises a limited amount of vegetation in a degraded condition and it is not considered likely to impact on the environmental values of any adjacent or nearby conservation area.



**Methodology** DEC site visit 2/11/06  
GIS Database:  
CALM Managed Lands and Waters - CALM 1/07/05  
Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC

**(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 applied area is located approximately 50m from the Peel Inlet, at an elevation of 5 metres with minimal slope. The applied area is not located within a Public Drinking Water Source Area (PDWSA) and groundwater salinity is 500-1000 mg/L. There is a high risk of Acid Sulphate Soils, however the proposed clearing is not likely to disturb these soils at a depth of 3m (State of Western Australia 2005).

The Department of Agriculture and Food (2006) advise that 'due to the high permeability of the deep sandy soils and the topography, no significant surface water is expected to leave the property' and therefore the risk of water erosion, and subsequent sedimentation, is minimal. It is therefore not considered likely that the proposed clearing would cause deterioration in the quality of surface or underground water.

**Methodology** DEC site visit 2/11/06  
DAFWA (2006)  
Water and Rivers Commission (2001)  
GIS Databases:  
Acid Sulfate Soil Risk Map, SCP - DOE 04/11/04  
Groundwater Salinity, Statewide - 22/02/00  
Hydrography, linear (hierarchy) y DOW  
Public Drinking Water Source Areas (PDWSAs) - DOE 07/02/06

**(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**

Lot 9 is located approximately 50m from the Peel Inlet, at an elevation of 5 metres. DAFWA (2006) advise that flooding impacts are not likely to occur on site due to the high permeability of the sandy soils. The proposal is therefore not likely to be at variance to this Principle.

**Methodology** DEC site visit 2/11/06  
DAFWA (2006)  
GIS Databases:  
Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC  
Topographic Contours, Statewide - DOLA 12/09/02

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

**Comments**

In a submission the City of Mandurah (2006) advises that a development application for a caravan park has been received for Lot 9, however no approvals have been given. The City recommends that the applicant should be required to undertake investigations into DRF, TEC and Priority species prior to any approvals to clear.

In a submission, the Peel Harvey Catchment Council (2006) provide the following comments for the original application area of 1.5ha:

- Remnants of the Swan Coastal Plain with basic vegetation structure intact or ability to be regenerated are of high conservation value
- the applied area may contain flora species that are utilised for habitat by Carnaby's cockatoo, which has been recorded 4.5km from Greenwood Way. The vegetation should be assessed for the presence of rare flora and for fauna habitat values, including hollows in both live and dead trees
- Wind erosion is highly likely on the sandy soils present on site, and water erosion could be a problem during high-tide events
- The applied area is in close proximity to the Ramsar-listed Harvey Estuary, which is also a Conservation Category Wetland (CCW), and Yalgorup National Park and the proposed clearing may impact these areas
- the clearing of native remnant vegetation is not necessarily a valid hazard reduction method and the fuel load may actually increase as a result of weed invasion in the cleared area
- approval of the proposal may set a dangerous precedent for public perception of valid bushland management and fire control techniques

The Southern Estuary Progress Association (2006) has no objections to the proposed clearing of Lot 9 Old Coast Road.

The comments provided in the above submissions have been addressed in the Clearing Principles. The applied area has been reduced to 0.1ha, and alternatives for fire risk management have been discussed with the applicant and the City of Mandurah Ranger Services.

Lot 9 Old Coast Road is part of a Native Title Claim however, since it is privately owned the Native Title has been extinguished under the Native Title Act. Therefore the clearing as proposed should not fall under the future act process of the Native Title Act 1993.

No other statutory approvals are required for the proposal by the Department of Environment and Conservation and the Department of Water.

**Methodology** City of Mandurah (2006) Submission  
 Peel Harvey Catchment Council (2006) Submission  
 Southern Estuary Progress Association (2006) Submission  
 GIS Database: Native Title Claims - DLI 7/11/05

#### 4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Fence Line Maintenance	Mechanical Removal	0.04	Grant	The assessable criteria have been addressed, and no objections were raised. The assessing officer therefore recommends that the clearing permit be granted.
Hazard reduction or fire control	Mechanical Removal	2	Grant	The assessable criteria have been addressed, and no objections were raised. The assessing officer therefore recommends that the clearing permit be granted.
Hazard reduction or fire control	Mechanical Removal	0.07	Grant	The assessable criteria have been addressed, and no objections were raised. The assessing officer therefore recommends that the clearing permit be granted.

#### 5. References

- City of Mandurah (2006) Submission (DEC TRIM ref. DOC9751).
- DAFWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. DoE TRIM ref XXXXX.
- 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.
- 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.
- EPA (2003) 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 (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth WA.
- 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.
- JANIS Forests Criteria (1997) Nationally agreed criteria for the establishment of a comprehensive, Adequate and Representative reserve System for Forests in Australia. A report by the Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-committee. Regional Forests Agreement process. Commonwealth of Australia, Canberra.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Peel Harvey Catchment Council (2006) Submission (DEC TRIM ref. DOC8240).
- 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.
- Southern Estuary Progress Association (2006) Submission (DEC TRIM ref. DOC2969).
- State of Western Australia (2005) Agmaps Land Manager CD Rom.
- Water and Rivers Commission (2001) Water and Rivers Commission Position Statement: Wetlands.

#### 6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
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 DoE)