

# Plan 113/1



## LEGEND

- Land parcels related to instrument
- Road Centrelines - DLI 1/5/04
- Cadastre - DLI 1/05/05

- Clearing Instruments**
- Areas Approved to Clear
  - Areas Subject to Conditions
- Swan Coastal Plain North  
40cm Orthomosaic - DLI 05



0 ————— 75 m

Scale 1:2700  
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

*[Signature]*  
Paul Rosair  
Director, Regional Operations, Department of Environment

Date *29.9.05*

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



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## 1. Application details

### 1.1. Permit application details

Permit application No.: 113/1

Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: MR Chi Van Do

### 1.3. Property details

Property: LOT 3 ON PLAN 5992

Local Government Area: City Of Wanneroo

Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.5		Mechanical Removal	Horticulture

## 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 1949: Low woodland, banksia on low sandhills, swamps in swales with tea-tree and paperbark (Shepherd et al 2001, Hopkins et al 2001).</p> <p>Hedde vegetation complex - Bassendean Complex Central and South: Vegetation ranges from woodland of Eucalyptus marginata, Casuarina fraseriana, Banksia spp. to low woodland of Melaleuca species, and sedgelands on the moister sites. This area includes the transition of E. marginata to E. totiana in the vicinity of Perth (Hedde et al 1980).</p> <p>Hedde vegetation complex - Bassendean Complex North Transition: A transition complex of low open forest and low woodland of Banksia species - Eucalyptus totiana on a series of high sand dunes. The understorey species reflect similarities with both the Bassendean-North and Karrakatta-North vegetation complexes (Hedde et al 1980).</p>	<p>The area under application consists of a 2.5 ha block of native vegetation within a horticultural development. The outer edge of the vegetation is infested with weeds including bracken and horticultural rubbish such as piping and plastic. There is a small area of good vegetation in the centre of the block. This good vegetation consisted of Melaleuca preissiana, Eucalyptus rudis and Banksia ilicifolia as well as a few Macrozamia species.</p>	<p>Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)</p>	<p>The description of the vegetation to be cleared and its condition was obtained from site visits in December 2004 and in August 2005.</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 area under application is significantly degraded through weed invasion and the dumping of horticultural rubbish such as piping and plastics. There is a small area of good vegetation (approximately 50m by 50m) in the centre of the area under application. There are a number of Bush Forever sites within the local area as well as the Gnarara - Moore River State Forest. It is highly unlikely that the area under application is of higher biodiversity value than these conservation reserves.

**Methodology** Site visit - 24/08/05 and 01/12/04  
 GIS Databases:  
 - Bushforever - MFP 07/01  
 - CALM Managed Lands and Waters - CALM 01/08/04

**(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**

CALM (2004) advise that the Specially Protected species Australasian Bittern (*Botaurus poiciloptilus*) and Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) are known to occur in the local area. The Australian Bittern is known from the nearby Jandabup Lake Nature Reserve and the Carnaby's Black Cockatoo may use the local area for feeding (CALM 2004). Two Priority Listed species are also known to occur in the local area and include Little Bittern (*Ixobrychus minutus*) and the Quenda (*Isodon obesulus fusciventer*) (CALM 2004). Due to the degraded nature of the area under application it is unlikely that the clearing as proposed would have a significant impact on these and other endemic fauna species.

**Methodology** CALM (2004) Land Clearing Proposal Advice (DoE Trim Ref ND568)  
Site visit (1/12/2004 and 24/08/2005)

**(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**

The Declared Rare Flora species *Caladenia huegelii* and *Pityradia axillaris* are known to occur in the local area (5km radius) (CALM 2004). CALM (2004) advises however, that it is unlikely that these species would occur within the area under application as *P. axillaris* has since be confirmed as occurring in the Moore River region rather than Gngangara and *C. huegelii* is unlikely to occur in the habitat under application (observation made from photos provided to CALM from the site visit on 1/12/2004). Given the degraded nature of the area under application and that the area has been used as a rubbish dump for horticultural waste, it is unlikely that the area under application would contain any species of conservation significance.

**Methodology** CALM (2004) Land Clearing Proposal Advice (ND568)  
Site visit (1/12/2004 and 24/08/2005)

**(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 Threatened Ecological Community (TEC) SCP20a 'Banksia attenuata woodland over species rich dense shrublands' is known to occur on the same broad vegetation type as the area under application (CALM 2004). However given the degraded nature of the area under application and after reviewing the site photos, CALM (2004) advises that the vegetation under application is not typical of that associated with SCP20a. Therefore it is unlikely that the clearing as proposed would be at variance to this Principle.

**Methodology** CALM (2004) Land Clearing Proposal Advice (DoE Trim Ref ND568)  
Site visit (1/12/2004)

**(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 consists of Beard vegetation association 1949 which has approximately 34,012 ha (25.6%) of its original extent remaining (Shepherd et al 2001, Hopkins et al 2001) and the Heddle vegetation complexes Bassendean Central and South which has 23,624 ha (27%) and Bassendean North Transition with 16,308 ha (92.3%) remaining (Heddle et al 1980).

The State Government is committed to the National Objectives and Targets for Biodiversity Conservation which includes a target that prevents clearance of ecological communities with an extent below 30% of that present pre-European (Department of Natural Resources and Environment 2002, EPA 2000). Although two of the vegetation complexes within this application are just below this 30% minimum, given the degraded nature of the area under application the vegetation may not be an accurate representation of these complexes. Further, the area which is not degraded is approximately 50m x 50m and is surrounded by degraded, weed infested vegetation. This is not conducive to its sustainability and therefore is not a significant remnant in an area that has been significantly cleared

**Methodology** Hopkins et al (2001)  
Heddle et al (1980)  
Shepherd et al (2001)  
Department of Natural Resources and Environment (2002)  
EPA (2000)  
Site visits - 21/08/05 and 01/12/04

**(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 categorised as a Resource Enhancement Wetland with a portion of the vegetation under application being considered wetland dependent. However given the degraded nature of the vegetation under application, the infestation of weeds such as bracken, the presence of large amounts of horticultural rubbish and the surrounding land uses, it is unlikely that this wetland would be able to sustain its ecological values and functions. If the wetland remained, it is considered that it would only be further degraded by the surrounding land uses given its isolation from other areas of vegetation.

**Methodology** Site visits - 21/08/05 and 01/12/04  
GIS Databases:  
- Geomorphic Wetlands (Mgt Categories) - Swan Coastal Plain - DOE 15/09/04

**(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**

Advice from DAWA (2004) indicates that the area under application could be at risk of wind erosion and eutrophication. During the site visit, discussions were held with the consultant and the proponent as to the possibility of planting a wind break along the northern and western boundaries of the property. This is the direction of the prevailing winds and there is little to no vegetation between this property and the adjoining property. The proponent has agreed to plant three rows of vegetation consisting of upper-storey, mid-storey and under-storey species along the northern and western boundary. It is considered that the establishment of this wind break would help reduce the risk of wind erosion and eutrophication from occurring.

**Methodology** DAWA (2004) Land Degradation Assessment Advice (DoE Trim No ND404)  
Site visits - 21/08/05 and 01/12/04

**(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**

A number of CALM managed areas including the Jandabup Nature Reserve and Gngangara Moore River State Forest are located within the local area. There are also several Bush Forever sites within a 5km radius of the area under application. The area under application is small and isolated, and therefore the vegetation has a limited stepping stone value for fauna movement with nearby Bush Forever Sites and CALM managed areas (CALM 2004). As such, it is considered that the clearing as proposed would not likely be at variance to this Principle.

**Methodology** CALM (2004) Land Clearing Proposal Advice (DoE Trim Ref ND568)  
GIS Databases:  
- CALM Managed Lands and Waters - CALM 01/08/04  
- Bushforever - MFP 07/01

**(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 are no drainage lines within the area under application. There is some risk of eutrophication of the surrounding wetlands in the local area, however the proponent has agreed to revegetate the northern and western boundaries thereby minimising this risk. The area under application lies above an unconfined sand aquifer on the Swan Coastal Plain, therefore the clearing as proposed is unlikely to impact upon groundwater quality (Robin Smith pers coms 2004).

**Methodology** Robin Smith - DOE Hydrogeologist (pers coms 2004)  
Site visits - 21/08/05 and 01/12/04  
GIS Databases:  
- Hydrography, linear - DOE 01/02/04

**(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**

There are no significant waterbodies within the area immediately adjacent to the proposed clearing. The area under application is located on relatively flat terrain and is located on soils that would be well drained during most seasons (DAWA 2004). As such, it is considered unlikely that the clearing as proposed would be at variance to this Principle.

**Methodology** DAWA (2004) Land Degradation Assessment Report (DoE Trim ND382)

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

### Comments

The City of Wanneroo (2004) did not support the clearing as proposed as there is no Development Approval for this property. During discussions held with the proponent and the consultant while conducting the site visit, the assessing officer advised that Development Approval should be applied for as soon as possible. Since this time, the consultant working on behalf of the proponent has informed the assessing officer that an application for Development Approval is in the process of being lodged.

In addressing the illegal clearing mentioned in one of the submissions from the public, it should be noted that the current owner acquired the property in December 2003, after the time that the submission advises the clearing had taken place. Therefore it was not considered relevant to this application.

In relation to the other points raised by both public submissions, these have been addressed in Principles b, g and i.

An application for an additional groundwater allocation has been received by the Department of Environment and is currently being processed. There is sufficient water available and no obvious environmental issues associated with the amendment, as such it is highly probable that the amendment would be granted given that the proponent is willing to install meters on their bores.

**Methodology** Direct interest submission from City of Wanneroo (DoE Trim Ref ND220)  
Submissions from the public (DoR Trim Ref NI778 and ND168)  
CPS Water Allocation Checklist

## 4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Horticulture	Mechanical Removal	2.5	Grant	<p>The clearing as applied for has been assessed and is not likely to be at variance to the Clearing Principles. The assessing officer therefore recommends that a permit is granted with the following condition to address any potential wind erosion and eutrophication issues:</p> <p>The permit holder shall revegetate the area shown in red. The revegetation shall be established and maintained to an average planting density of 1000 plants per hectare. The species shall consist of overstorey, midstorey and understorey species that are native to the local area.</p>

## 5. References

- CALM Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref ND568.
- DAWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref ND404.
- 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.
- 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.
- 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
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)