# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 1251/1
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Director Assest Mangement Department of Agriculture

### 1.3. Property details

Property: KWINANA TOWNSITE LOT 77 ON DEPOSITED PLAN 210379 (ABERCROMBIE RD)
Local Government Area: Town Of Kwinana
Colloquial name:

### 1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|---|---|---|---|
| 10.6 | | Mechanical Removal | Horticulture and pasture |

## 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 |
|---|---|---|---|
| Heddle Vegetation Complex - Cottesloe Complex Central and South - Mosaic of woodland of E. gomphocephala and open forest of E. gomphocephala - E. marginata - E. calophylla; closed heath on the Limestone outcrops. (Heddle et al, 1980)<br><br>Beard Vegetation Association - 998: Medium Woodland; Marri (Shephard et al. 2001) | The proposal includes the clearing of 10.6 hectares of native vegetation to create plots for pasture and horticultural research. The area under application was grazed historically and the vegetation is a combination of regrowth and planted trees. The applied area does not include the road reserve that dissects Lot 77.Vegetation in the northwest portion is in a degraded to good condition and comprises woodland of Eucalyptus marginata, Banksia attenuata, B.grandis, Xanthorrhoea preissii, Macrozamia reidlei over grasses and weeds. In the north east portion vegetation is in a degraded condition and in addition comprises E.marginata, E.gomphocephala, Allocasuarina fraseriana and Acacia pulchella. In the southeast portion vegetation is in a good to degraded condition and includes vegetation similar to the northwest portion and a small patch of Melaleuca huegelii on a limestone ridge. E.todtiana was also observed in this area.<br><br>The vegetation under application comprises | Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994) | The vegetation description was obtained during a site visit on Monday 26 June 2006. |

## 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 vegetation under application is in a degraded condition, with limited understorey due to historical clearing and grazing. Given the low level of species diversity within the applied area, and the nearby conservation areas, it is not considered likely that the vegetation contained within Lot 77 is representative of an area of outstanding biodiversity in the Bioregion or the local area.

**Methodology** Site visit 26/6/06

### (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 vegetation under application is in a degraded condition with limited understorey, therefore limiting the potential of the applied area for faunal habitat. Although some faunal habitat may be present within the applied area, it is not likely to be significant when compared to habitat contained within the two Bush Forever sites located approximately 1.3km to the east and southwest of the applied area.

**Methodology** Site visit 26/6/06
GIS Databases:
Bushforever - MFP 07/01
Swan Coastal Plain South 40cm Orthomosaic - DLI 05

### (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**

Within the local area (5km radius of the application) there are nine known occurrences of Declared Rare and Priority Flora species, including Drakaea elastica, Caladenia huegelii, and Diuris micrantha. All of these occurrences are located on different soil associations and vegetation complexes to the applied area.Given the difference between the applied area and the known locations of these DRF, they are not likely to be present on site. In addition, the applied area was grazed historically, and given the degraded condition of the vegetation under application, the proposal is not considered likely to impact DRF species.

**Methodology** Site visit 26/6/06
GIS Database: 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 are three known occurrences of Threatened Ecological Communities within the local area, the closest of which is located approximately 700m to the north. The buffer for this TEC is located 75m to the north of the applied area. This TEC is described as Melaleuca huegelii M.acerosa shrublands of limestone ridges (26a), as it is the only TEC associated with the Spearwood Dune system (Government of Western Australia 2000). A limestone ridge is present towards the southern portion of the applied area, however vegetation on this ridge was degraded and comprised only Melaleuca huegelii. Given the degraded condition and the composition of the vegetation under application, it is not considered likely to be representative of, or necessary for the maintenance of a TEC.

**Methodology** Site visit 26/6/06
Government of Western Australia (2000)
GIS Databases: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 under application is identified by Heddle et al. (1980) as 'Cottesloe complex - central and south' of which there is 41.1% of pre-European vegetation remaining, and which is considered to be depleted (Department of Natural Resources and Environment 2002).

The vegetation under application is also part of Beard vegetation association 998 of which there is 35.9% remaining (Shepherd et al. 2002), and which also is considered to be depleted (Department of Natural Resources and Environment 2002).

The State Government is committed to the National Objective Targets for Biodiversity Conservation, which includes targets that prevent clearance of ecological communities with a representation below 30% of the pre-1750 extent

(Department of Natural Resources and Environment 2002; EPA 2003). Given that the identified vegetation complexes are above the minimum threshold, the proposal is not considered likely to be at variance to this Principle.

| | Pre-European area (ha) | Current extent (ha) | Remaining % | Conservation status*** | % in reserves/CALM-managed land |
|---|---|---|---|---|---|
| IBRA Bioregion | 1,529,235 | 657,450 | 43%* | Depleted | |
| Shire-Town of Kwinana | 11980.55 | 4760.18 | 39.7%* | Depleted | |
| Local Area (~10km radius) | ~13,300 | ~7,000 | ~53% | Least Concern | |
| Beard vegetation association -998 | 51,094 | 18,320 | 35.9%* | Depleted | 13% |
| Heddle vegetation complex - Cottesloe Complex - Central and South | 44,995 | 18,474 | 41.1%** | Depleted | 8.8% |

* (Shepherd et al. 2001)
**(EPA, 2003)
***(Department of Natural Resources and Environment 2002)

**Methodology**
Site visit 26/6/06
Department of Natural Resources and Environment (2002)
EPA (2003)
Shepherd et al. (2001)
GIS Databases:
Heddle 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 1.8km to the south of the Spectacles wetlands, which is a Conservation Category Wetland (CCW), and 1.3km southeast of a Resource Enhancement Category wetland. The nearest watercourse to the proposal is the Peel Main Drain, which is located approximately 2.5km to the east.

Given that no wetland dependent vegetation was observed during the site visit, and the distance of the applied area to the nearest watercourse or wetland, the proposal is not considered likely to have an impact on vegetation associated with a wetland or watercourse.

**Methodology**
Site visit 26/6/06
GIS Databases:
Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DOE
Hydrography, linear (hierarchy) - DOE 13/4/05

**(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**

Soils within the applied area are defined as deep rapidly drained siliceous yellow-brown sands and have a low risk of salinity and acid sulphate soils. There is also a low risk of waterlogging and water erosion due to the transmissive nature of the sands.

DAFWA (2006) advice states 'the greatest risk is likely to be wind erosion during periods when the bays have limited organic dry matter covering them, however with the appropriate management it is unlikely to occur.'

The Soil and Land Commissioner advises that the clearing is unlikely to cause appreciable land degradation and therefore is unlikely to be at variance with this Principle.

**Methodology**
Department of Agriculture and Food (2006)
State of Western Australia (2005)
GIS Database: Acid Sulfate Soil Risk Map, SCP - DOE 04/11/04

**(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**

The area under application is located approximately 1.4km northeast from Bush Forever site 349 and 1.4km to

the west of Bush Forever site 269. Given this distance and the degraded condition of the vegetation under application, the proposal is not considered likely to impact any nearby conservation areas.

The 'Cottesloe Complex - Central and South' currently has 8.8% (Heddle et al 1980) 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. Given the degraded condition of the vegetation it is not considered likely to be of conservation value and therefore the proposal is not considered likely to be at variance to this Principle.

**Methodology** Site visit 26/6/06
Janis Forests Criteria (1997)
GIS Databases:
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**

The applied area in not within a Public Drinking Water Source Area (PDWSA) and the nearest waterbody is located approximately 1.3km to the northwest. There is a low risk of salinity and acid sulphate soils.Given the current low density of vegetation over a large area under application it is not considered likely that the proposal will result in substantial alteration or deterioration of the water table, or deterioration of surface water.

**Methodology** GIS Databases:Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain ý DOEHydrography, linear (hierarchy) - DOE 13/4/05Public 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**

No areas of flooding exist within the area under application and there is a general relief in topography to the southwest. Given the transmissive nature of the sands identified on site, the proposal is not considered likely to cause, or exacerbate, the incidence of flooding.

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

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

**Comments**

The road reserve dissecting Lot 77 is not included in the applied area and therefore the applicant is not authorised to clear this road reserve.Lot 77 Abercrombie Road is Crown Land and is part of a Native Title Claim however; the Department of Agriculture and Food (DAFWA) have a management order for the designated purpose of 'Agricultural Research Station' and therefore the clearing as proposed should not fall under the future acts process of the Native Title Act 1993.

DAFWA currently holds a Groundwater Licence issued by the Department of Water (DoW) for 253,000kL per annum. Advice received from DoW Kwinana Peel region indicates that given the groundwater abstraction for 2004/2005 was 155,160k/L, sufficient water for the additional 10.6ha of research and development plots should be available under the current groundwater licence.

No other approvals required by the Department of Environment and Conservation or the Department of Water.

**Methodology** GIS Database: Native Title Claims - DLI 7/11/05

## 4. Assessor's recommendations

| Purpose | Method | Applied area (ha)/ trees | Decision | Comment / recommendation |
|---|---|---|---|---|
| Miscellaneous | Mechanical Removal | 10.6 | Grant | The assessable criteria have been addressed and no objections were raised. The assessing officer therefore recommends that the permit be granted. |

## 5. References


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.

Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning 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.
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.
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) |