



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

### PERMIT DETAILS

Area Permit Number: 3081 / 1

File Number: DEC11089

Duration of Permit: From 6 September 2009 to 6 September 2014

### PERMIT HOLDER

Carbone Bros Pty Ltd on behalf of Ilario Maiolo

### LAND ON WHICH CLEARING IS TO BE DONE

LOT 5397 ON PLAN 215971

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 5 hectares of native vegetation, within the areas hatched yellow on attached Plan 3081/1.

### CONDITIONS

#### 1. Type of clearing authorised

- (a) Clearing authorised under this Permit must be completed by 6 September 2011, being two years from the date from which this Permit becomes valid.
- (b) The Permit Holder shall not clear native vegetation unless sand extraction activities are enacted within 6 months of the clearing being undertaken

#### 2. Dieback and weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) shall not move soils in wet conditions;
- (c) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (d) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

#### 3. Retain vegetative material and topsoil, ripping, revegetation and rehabilitation

- (a) The Permit Holder shall retain the vegetative material and topsoil removed by clearing authorised under this Permit.
- (b) Within six months of any area no longer being required for the purpose of material extraction the Permit Holder must *revegetate* the area permitted to be cleared by:
  - (i) Deliberately *planting* and/or seeding native vegetation using local species from within 20 km of the area cleared; and
  - (ii) Laying vegetative material and topsoil retained in accordance with condition 3(a) on the area.
- (c) Within one year of undertaking *revegetation* in accordance with condition 3(b), the Permit Holder must where, in the opinion of an *environmental specialist*, *revegetation* does not provide

adequate stabilisation of surface soils, undertake additional planting or seeding of native vegetation in accordance with the requirements of condition 3(b)(i) and ~~3(b)(ii).~~

#### 4. Records to be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
  - (i) the species composition, structure and density of the cleared area;
  - (ii) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
  - (iii) the date that the area was cleared; and
  - (iv) the size of the area cleared (in hectares).
- (b) In relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 3 of this Permit:
  - (i) the location of any areas *revegetated* and *rehabilitated*, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
  - (ii) a description of the *revegetation* and *rehabilitation* activities undertaken;
  - (iii) the size of the area *revegetated* and *rehabilitated* (in hectares); and
  - (iv) the species composition, structure and density of *revegetation* and *rehabilitation*.

#### 5. Reporting

- (a) The Permit Holder must provide to the CEO, on or before 30 June of each year, a written report of records required under condition 4 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 6 May 2014, the Permit Holder must provide to the CEO a written report of records required under condition 4 of this Permit where these records have not already been provided under condition 5(a) of this Permit.

#### Definitions

The following meanings are given to terms used in this Permit:

**dieback** means the effect of *Phytophthora* species on native vegetation;

**direct seeding** means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

**environmental specialist** means a person who is engaged by the Permit Holder for the purpose of providing environmental advice, who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;

**fill** means material used to increase the ground level, or fill a hollow;

**mulch** means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

**planting** means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

**regenerate/ed/ion** means *revegetation* that can be established from in situ seed banks contained either within the topsoil or seed-bearing *mulch*;

**rehabilitate/ed/ion** means actively managing an area containing native vegetation in order to improve the ecological function of that area;

*revegetate/ed/ion* means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area;

*term* means the duration of this Permit, including as amended or renewed;

*weed/s* means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agricultural and Related Resources Protection Act 1976*.

A handwritten signature in black ink, reading "Keith Claymore". The signature is written in a cursive style with a horizontal line underneath the name.

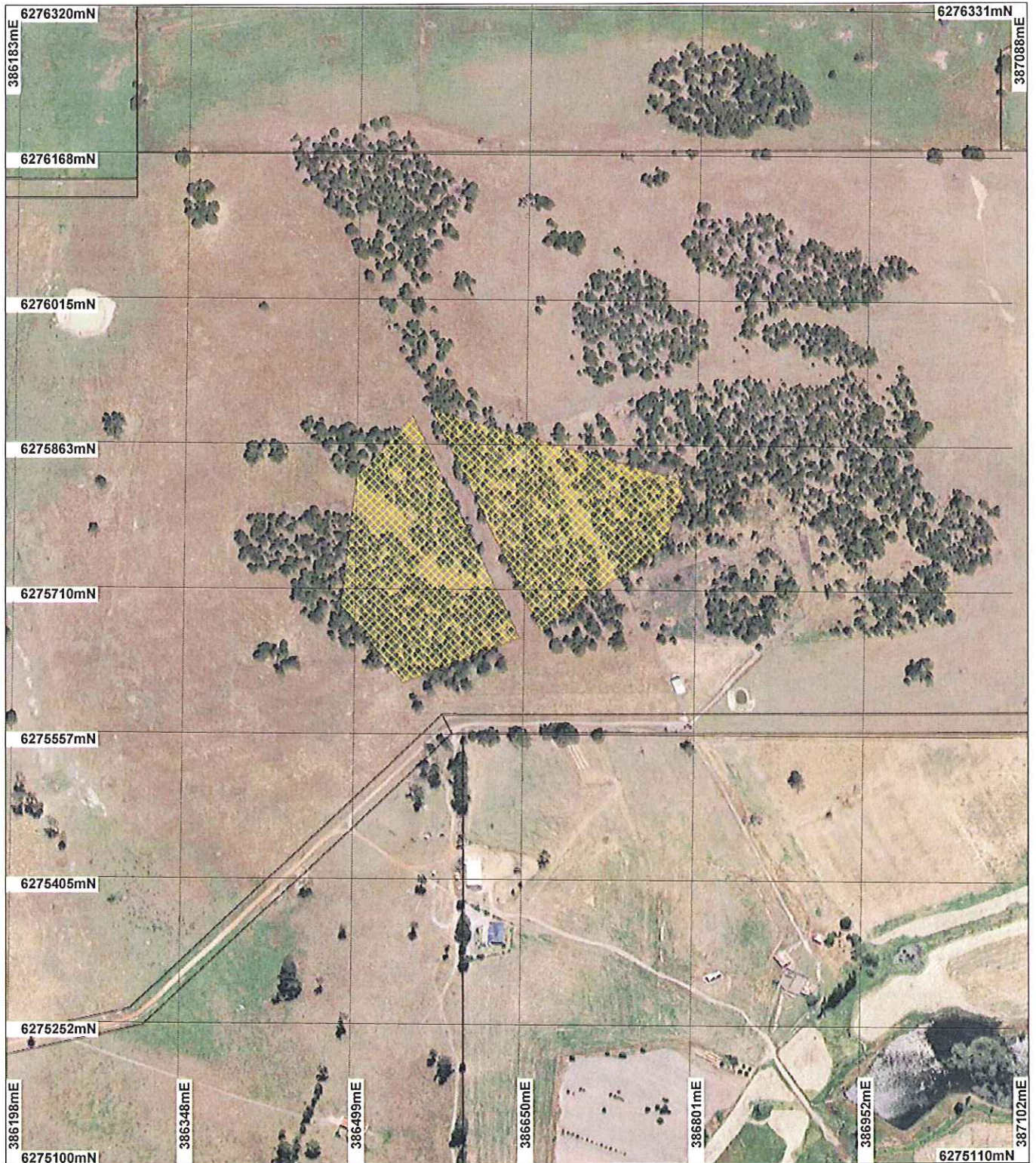
Keith Claymore  
A/ ASSISTANT DIRECTOR  
NATURE CONSERVATION DIVISION

*Officer delegated under Section 20  
of the Environmental Protection Act 1986*

6 August 2009



# Plan 3081/1



## LEGEND

Clearing Instruments  
Cadastre  
Donnybrook 50cm  
Orthomosaic - Landgate



0 150 m

Scale 1:5364

(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.

*Kurt Claymore* 6/8/09

K Claymore

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

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



Department of  
Environment and Conservation

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## 1. Application details

### 1.1. Permit application details

Permit application No.: 3081/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Carbone Bros Pty Ltd on behalf of Ilario Maiolo

### 1.3. Property details

Property: LOT 5397 ON PLAN 215971 ( UPPER CAPEL 6239)  
Local Government Area: Shire Of Donnybrook-Balingup  
Colloquial name:

### 1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|--------------------|-----------|--------------------|---------------------|
| 5                  |           | 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 Unit:<br>1017 - Medium open woodland; jarrah & marri, with low woodland; banksia<br>(Shepherd, 2007)   | The proposal is to clear 5 hectares of native vegetation for the purpose of gravel extraction.   | Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994) | The condition of the vegetation was determined through aerial mapping (Donnybrook 50cm 2004) and site photos submitted with the clearing permit application form (Lundstrom Environmental, 2009). |
| Mattiske Vegetation Complex:<br>RO - Rosa - Woodland to open forest of <i>Corymbia calophylla</i> - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> - <i>Xylomelum occidentale</i> on slopes and tall shrubland of <i>Agonis linearifolia</i> in valley floors in the humid zone.<br><br>KI - Kingia - Open forest of <i>Eucalyptus marginata</i> subsp. <i>marginata</i> - <i>Corymbia calophylla</i> - <i>Allocasuarina fraseriana</i> - <i>Banksia grandis</i> - <i>Xylomelum occidentale</i> on lateritic uplands in perhumid and humid zones.<br><br>(Mattiske Consulting, 1998) | The vegetation under application is subject to grazing disturbance which has resulted in no native understorey and limited native mid storey vegetation remaining. |  |   |

## 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 to clear 5 hectares of native vegetation for the purpose of gravel extraction.

The vegetation under application is subject to grazing disturbance and is in a degraded (Keighery, 1994)

condition.

There is little remaining mid storey native vegetation and no understorey vegetation remaining within the applied area (Lundstrom Environmental, 2009).

In addition, there are larger areas of remnant vegetation in better condition, adjacent to the property.

Therefore the vegetation under application is not likely to contain a high level of biodiversity in a local context and the clearing as proposed is not likely to be at variance to this principle.

**Methodology**

**References:**

Keighery (1994)  
Lundstrom Environmental (2009)

**GIS Database:**

CALM Managed Lands and Waters - CALM 01/06/05  
SAC Biodatasets - accessed 22 April 2009  
Mattiske Vegetation (01/03/1998)  
Hedde Vegetation Complexes - DEP 22/06/95  
Pre European Vegetation - DA 01/01  
Clearing Regulations, Environmentally Sensitive Areas 30 May 2005  
NLWRA, Current Extent of Native Vegetation 20 Jan 2001

**(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 local area (10km) retains approximately 70% native vegetation most of which is in better condition than the applied area.

There are a number of priority, threatened or endangered fauna recorded within the local area, namely:

- *Geotria australia* (Pouched Lamprey, P1)
- *Phascogale tapoatafa* (Brush-tailed Phascogale, VU)
- *Dasyurus geoffroyi* (Chuditch, VU)
- *Calyptorhynchus banksii naso* (Forest Red-tailed Black Cockatoo, VU)
- *Isodon obesulus fusciventer* (Quenda, P5)
- *Tyto novaehollandiae novaehollandiae* (Masked Owl SW ssp, P3)

There are no hollow bearing trees known to occur within the applied area (Lundstrom Environmental, 2009).

The area under application is part of an ecological stepping stone linkage between two larger remnants of native vegetation. This proposal is likely to incrementally degrade this linkage however given the vegetation which is currently retained within the local area the area under application is not likely to be significant for the maintenance of, or as habitat for, native fauna.

Given the degraded (Keighery, 1994) condition of the vegetation the clearing as proposed is not likely to be at variance to this principle.

**Methodology**

**References:**

Keighery (1994)  
Lundstrom Environmental (2009)

**GIS Database:**

CALM Managed Lands and Waters - CALM 01/06/05  
SAC Biodatasets - accessed 22 April 2009

**(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 two rare flora recorded within the local area (10km radius), namely *Verticordia densiflora* var. *pedunculata* (9.7km west) and *Banksia squarrosa* subsp. *argillacea* (8.4km west).

Neither records of rare flora occur on the same vegetation complexes as the applied area.

Given the degraded (Keighery, 1994) condition of the vegetation and the vegetation type under application the clearing as proposed is not likely to be at variance to this principle.

**Methodology** References:  
Keighery (1994)

GIS Database:  
Mattske Vegetation (01/03/1998)  
Hedde Vegetation Complexes - DEP 22/06/95  
Pre European Vegetation - DA 01/01  
SAC Biodatasets - accessed 22 April 2009  
Soils, Statewide DA 11/99

**(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 occurrences of threatened ecological communities (TECs) within the local area (10km radius).

Therefore the clearing as proposed is not likely to be at variance to this principle.

**Methodology** GIS Database:  
SAC Bio Datasets accessed 22 April 2009

**(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.**

| <b>Comments</b>              | <b>Proposal is not likely to be at variance to this Principle</b> |                        |                  |                                      |
|------------------------------|---|------------------------|------------------|--------------------------------------|
|                              | Pre-European<br>(ha)  | Current extent<br>(ha) | Remaining<br>(%) | % In reserves<br>DEC Managed<br>Land |
| IBRA Bioregions*             |   |                        |                  |                                      |
| Jarrah Forest                | 4,671,007   | 2,601,026              | 55.68            | 71.15                                |
| Shire*                       |   |                        |                  |                                      |
| Donnybrook-Balingup          | 156,029   | 91,178                 | 58.44            | 81.44                                |
| Beard Vegetation Complex*    |   |                        |                  |                                      |
| 1017                         |   |                        |                  |                                      |
| statewide                    | 17,528  | 11,478                 | 65.48            | 70.80                                |
| in JF                        | 11,846  | 9,326                  | 78.72            | 87.11                                |
| Mattske Vegetation Complex** |   |                        |                  |                                      |
| Rosa                         | 165,113   | 130,379                | 79               | N/A                                  |
| Kingia                       | 1,002,353   | 995,087                | 97.3             | N/A                                  |

\* (Shepherd et al. 2007)

\*\* (Mattske Consulting 1998)

The local area retains approximately 70% native vegetation cover, most of which is in better condition than the applied area.

Given the above, the vegetation under application is not likely to be significant as a remnant in an extensively cleared landscape.

Therefore the clearing as proposed is not likely to be at variance to this principle

**Methodology** References:  
Mattske Consulting (1998)  
Shepherd (2007)  
Shepherd et al. (2001)

GIS Database:  
Interim Biogeographic Regionalisation of Australia - EA 18/10/00  
Local Government Authorities - DLI 8/07/04  
Pre European Vegetation - DA 01/01  
SAC Biodatasets - accessed 22 April 2009  
NLWRA, Current Extent of Native Vegetation 20 Jan 2001



**(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 closest wetlands or watercourses to the applied area are a minor non-perennial watercourse located 300m west and a major non-perennial watercourse 550m north of the applied area.

Given the distance between the applied area and these watercourses the clearing as proposed is not likely to be at variance to this principle.

**Methodology GIS Database:**

ANCA wetlands - Environment Australia 26/3/99  
CALM Managed Lands and Waters - CALM 01/06/05  
EPP Lakes Policy Area - DEP 14/05/97  
EPP, Wetlands 2004 (DRAFT) - EPA 21/7/04  
Clearing Regulations, Environmentally Sensitive Areas 30 May 2005  
Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain DEC 11/04/07  
Hydrography linear - DOW 13/7/06  
Hydrography linear (hierarchy) - DoW 13/7/06  
Ramsar wetlands - DEC 03  
South Coast Significant Wetlands - WRC 10/06/2003

**(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 mapped as Tc5 being chiefly hard acidic yellow mottled soils containing various amounts of ironstone gravel (Northcote et al., 1968).

The soils under application are not prone to appreciable wind erosion however Lundstrom Environmental (2009) have identified the potential for gravel extraction to emit dust into the atmosphere and have identified management actions to mitigate the potential impacts of dust (Lundstrom Environmental, 2009).

Therefore the clearing as proposed is not likely to be at variance to this principle.

**Methodology References:**

Lundstrom Environmental (2009)

**GIS Database:**

Average Annual Rainfall Isohyets - WRC 29/09/98  
Annual Evaporation Contours (Isopleths) - WRC 29/09/98  
Hydrogeology, statewide DOW 13/07/06  
Hydrographic catchments, catchments - DoW 01/06/07  
Hydrography, linear - DOW 13/7/06  
Salinity Risk LM 25m - DOLA 00  
Soils, Statewide DA 11/99  
Topographic contours statewide - DOLA and ARMY 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**

There are two areas of conservation significance within the local area, namely the Jarrah State Forest (300m west) and the Boyanup State Forest (800m north).

Given the distance between these areas of conservation significance and the applied area, the clearing as proposed is not likely to be at variance to this principle.

**Methodology GIS Database:**

CALM Managed Lands and Waters - CALM 01/06/05  
Hydrography, linear - DOW 13/7/06  
Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02  
System 1 to 5 and 7 to 12 areas DEC 11/7/06



**(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 closest wetland or watercourse to the applied area is a minor non-perennial watercourse (300m west) and a major non-perennial watercourse (550m north).

Given the distance between the applied area and these watercourses the clearing as proposed is not likely to be at variance to this principle.

**Methodology GIS Database:**

Evapotranspiration Isopleths - WRC 29/09/98  
Groundwater Salinity Statewide DoW 13/07/06  
Hydrographic catchments, catchments - DoW 01/06/07  
Hydrography, linear - DoW 13/7/06  
Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05  
Salinity Risk LM 25m - DOLA 00  
Topographic Contours, Statewide - DOLA 12/09/02

**(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**

The local area (10 km radius) retains approximately 70% native vegetation and given the midslope situation of the applied area the removal of 5 ha of native vegetation is not likely to cause or exacerbate the incidence or intensity of flooding.

Therefore the clearing as proposed is not likely to be at variance to this principle.

**Methodology GIS Database:**

Evaporation Isopleths - WRC 29/09/98  
Hydrographic catchments, catchments - DoW 01/06/07  
Hydrography, linear - DoW 13/7/06  
Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05  
Topographic Contours, Statewide - DOLA 12/09/02

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

**Comments**

The proposal is for the purpose of gravel extraction; therefore an Extractive Industry licence from the Shire of Donnybrook-Balingup is required. The Shire of Donnybrook-Balingup council meeting of 22 July 2009 resolved to grant an EI licence subject to certain terms and conditions (DOC91624).

The property under application is zoned as intensive farming, as the purpose for clearing is not for intensive farming special approval from the Shire of Donnybrook-Balingup is required.

**Methodology GIS Database:**

Cadastral - Landgate Dec 07  
Town Planning Scheme Zones - MFP 31/08/98

**4. Assessor's comments**

**Comment**

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 likely to be at variance to any of the clearing Principles.

**5. References**

- Heddl, 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.
- Lundstrom Environmental (2009) Extractive Industries Licence Renewal Application prepared for Carbone Bros Pty Ltd, unpublished document, DOC81312.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- Shepherd, D.P. (2007). Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in

## 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)                    |