



## CLEARING PERMIT

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

<b>Purpose Permit number:</b>	CPS 5300/1
<b>Permit Holder:</b>	Department of Water
<b>Duration of Permit:</b>	7 December 2012 – 7 December 2017

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

### PART I – CLEARING AUTHORISED

**1. Purpose for which clearing may be done**

Clearing for the purpose of groundwater bore maintenance and access tracks.

**2. Land on which clearing is to be done**

Lot 3033 on Plan 59581 (Yanchep, State Forest 65)  
Lot 5608 on Plan 208676 (Yanchep, State Forest 65)  
Lot 5611 on Plan 208677 (Yanchep)  
Lot 11620 on Plan 243039 (Yeal)  
Lot 5610 on Plan 208647 (Yeal, State Forest 65)  
Lot 12984 on Deposited Plan 219940 (Neergabby)  
Road Reserve (PIN 11543834) (Coonabidgee)

**3. Area of Clearing**

The Permit Holder must not clear more than 0.73 hectares of native vegetation within the combined areas hatched yellow on attached Plan 5300/1 AM3 and Plan 5300/1 AM5 and Plan 5300/1 AM6 and Plan 5300/1 AM9 and Plan 5300/1 AM14 and Plan 5300/1 AM17 and Plan 5300/1 AM21.

**4. Application**

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

**5. Type of clearing authorised**

This Permit authorises the Permit Holder to clear native vegetation for the *project activities* described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those *project activities* under the or *Water Corporation Act 1995* or any other written law.

**6. Compliance with Assessment Sequence and Management Procedures**

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

## PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

### **7. Avoid, minimise etc clearing**

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- (a) avoid the clearing of native vegetation;
- (b) minimise the amount of native vegetation to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

### **8. 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 only move soils in *dry 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.

### **9. Retain vegetative material and topsoil, revegetation and rehabilitation**

The Permit Holder shall:

- (a) retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil in an area that has already been cleared; and
- (b) within 3 months following clearing authorised under this permit, *revegetate* and *rehabilitate* the area(s) that are no longer required for the purpose for which they were cleared under this Permit by:
  - (i) ripping the ground on the contour to remove soil compaction; and
  - (ii) laying the vegetative material and topsoil retained under condition 9(a) on the cleared area(s).

## **DEFINITIONS**

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

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

*dry conditions* means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

*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;

*project activities* means those activities described in condition 1 of this Permit;

*regenerate/ed/ion* means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing *mulch*;

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

*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 *Agriculture and Related Resources Protection Act 1976*.



M Warnock  
MANAGER, COMPLIANCE AND AUDIT SECTION  
NATIVE VEGETATION CONSERVATION BRANCH

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

15 November 2012

# Plan 5300/1 - AM3



## LEGEND

- Perth Metropolitan North  
15cm Orthomosaic - Landgate  
2011
- Clearing Instruments
  - Areas Approved to Clear
- ~ Road Centrelines
- Cedastre for labelling



Scale 1:4279  
(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.

*M Warnock* Date 15/11/12

M Warnock

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

Our environment, our future  
WA Crown Copyright 2002

\* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.

# Plan 5300/1 - AM5



## LEGEND

- Perth Metropolitan North  
15cm Orthomosaic - Landgate  
2011
- Clearing Instruments
- Areas Approved to Clear
- Road Centrelines
- Cadastre for labelling

■ Areas Approved to Clear



0 ~375 m

Scale 1:13291  
(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.

*M Warnock* Date 15/11/12

M Warnock

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

Our environment, our future  
WA Crown Copyright 2002

# Plan 5300/1 - AM6



## LEGEND

Perth Metropolitan North  
15cm Orthomosaic - Landgate  
2011

Clearing Instruments

□ Areas Approved to Clear

~ Road Centrelines  
Cadastral for labelling



0 ————— 300 m

Scale 1:10320  
(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.

*M Warnock* Date 15/11/12

M Warnock

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

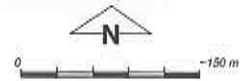
Our environment, our future  
WA Crown Copyright 2002

# Plan 5300/1 - AM9



## LEGEND

- |   |  |
|---|--|
| Perth Metropolitan North<br>15cm Orthomosaic - Landgate<br>2011 | Road Centrelines<br>Cadastre for labelling |
| Clearing Instruments  | Local Government<br>Authorities            |
| Areas Approved to Clear   |  |



Scale 1:6100  
(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.

*M Warnock* Date 15/11/12

M Warnock

Officer with delegated authority under Section 20 of the Environmental Protection Act 1985

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

Our environment, our future  
WA Crown Copyright 2002

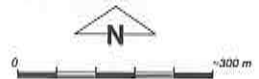
\* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.

# Plan 5300/1 - AM14



## LEGEND

- |   |  |
|---|--|
| Perth Metropolitan North<br>15cm Orthomosaic - Landgate<br>2011 | ✓ Road Centrelines<br>Cadastre for labelling |
| Clearing Instruments  | Local Government<br>Authorities              |
| □ Areas Approved to Clear                                       |  |



Scale 1:11199  
(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.

*M Warnock* Date 15/11/12

M Warnock  
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

Our environment, our future  
WA Crown Copyright 2002

\* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.



# Plan 5300/1 - AM17



## LEGEND

- |   |  |
|---|--|
| Perth Metropolitan North<br>15cm Orthomosaic - Landgate<br>2011 | Road Centrelines<br>Cadastre for labelling |
| Clearing Instruments  | Local Government<br>Authorities            |
| Areas Approved to Clear   |  |



Scale 1:4900  
(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.

*M Warnock* Date 15/11/12  
M Warnock

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

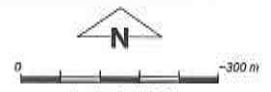
Our environment, our future  
WA Crown Copyright 2002

# Plan 5300/1 - AM21



## LEGEND

- Perth Metropolitan North  
15cm Orthomosaic - Landgate  
2011
- Clearing Instruments
- Areas Approved to Clear
- Road Centrelines
- Cadastral for labelling
- Local Government  
Authorities



Scale 1:11528  
(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.

*M Warnock* Date 15/11/12

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

Our environment, our future  
WA Crown Copyright 2002

\* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.



## 1. Application details

### 1.1. Permit application details

Permit application No.: 5300/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Department of Water

### 1.3. Property details

Property: LOT 12984 ON PLAN 219940 ( NEERGABBY 6503)  
LOT 5611 ON PLAN 208677 (House No. 625 INDIAN OCEAN YANCHEP 6035)  
LOT 5610 ON PLAN 208674 ( YEAL 6503)  
ROAD RESERVE ( COONABIDGEE 6503)  
LOT 11620 ON PLAN 243039 ( YEAL 6503)  
LOT 5608 ON PLAN 208676 (House No. 297 OLD YANCHEP YANCHEP 6035)  
LOT 3033 ON PLAN 59581 (House No. 751 OLD YANCHEP YANCHEP 6035)  
Local Government Area: City of Wanneroo and shire of Gingin  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.73		Mechanical Removal	Bore construction

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 15 November 2012

## 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
The vegetation under application is mapped as:	The application is for the proposed clearing of 0.73 ha at 7 locations within State Forest and on Local Government land for the purpose of replacing groundwater monitoring bores and creating access tracks where required.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation condition was determined from orthomosaic aerial imagery (Perth Metropolitan North 15cm - Landgate 2011)
Beard Vegetation Association 949 - Low woodland; banksia; 1009 - Medium woodland; marri & river gum and 1014 - Mosaic: Low woodland; banksia / Shrublands; teatree thicket (Shepherd et al , 2001).		To	
Hedde Bassendean Vegetation Complex North - low open forest and low open woodland of Banksia species E. todtiana to low woodland of Melaleuca species and sedgelands which occupy the moister sites; Karrakata Complex North - predominantly low open forest and low woodland of Banksia species E- Eucalyptus todtiana (Pricklybark), less consistently open forest of Eucalyptus gomphocephala (Tuart) - Eucalyptus todtiana (Pricklybark) - Banksia species. (Hedde et al, 1980)	The vegetation under application has been historically disturbed and is considered to be in a good to degraded (Keighery 1994) condition.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	

### 3. Assessment of application against clearing principles

The application to clear up to a total of 0.73 hectares of native vegetation at seven locations within the City of Wanneroo and Shire of Gingin for the purpose of upgrading Gngangara Mound groundwater monitoring bores and creating access tracks to each is unlikely to have any significant environmental impacts. The vegetation under application is considered to be in a degraded to good (Keighery, 1994) condition.

Bore sites AM3, AM5 and AM9 have one priority flora species recorded within 2km of these sites and AM6 has two flora species within a 300m. Bore site AM5 also has one rare flora species (an orchid) recorded within a 300m of its location. As the application areas have been historically disturbed and the proposed clearing at each bore site is small (0.1ha) the proposal to clear it is not considered likely to include habitat for these species. There is greater than 80% of surrounding vegetation within the local area (10km radius) making the vegetation under application not significant habitat for native fauna.

As five of the bore sites occur within DEC conservation estate, permit conditions to avoid and minimise clearing, weed and dieback management and revegetation of the bore sites post construction will reduce any potential environmental impact at each of these sites.

Given the clearing involves a small amount at each site (0.1ha) and the local area is highly vegetated, it is unlikely the proposed clearing will cause or exacerbate land degradation, flooding or impact on water quality.

The clearing as proposed is not likely to be at variance to clearing principles (a), (b), (c), (d), (g), (h), and (i) and not at variance to principles (e), (f) and (j).

#### Methodology

##### References:

- Keighery (1994)
- Shepherd et al (2001)

##### GIS databases:

- Hydrography, linear
- Hedde Vegetation Complexes
- Pre-European vegetation
- SAC Bio datasets (Accessed October 2012)

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

#### Comments

The proposed clearing is within the Environmental Protection (Gngangara Mound Crown land) Policy 1992. The purpose of this policy is to protect the level and quality of groundwater on or under the policy area including native vegetation and wetlands.

Department of Water (DoW) are required to investigate, monitor and apply modelling work for environmental management of the Gngangara groundwater system and the ecosystems it supports. DoW, under the Water Agencies (Powers) Act 1984, may enter upon land to undertake such works as applied for in this application (DoW, 2012).

City of Wanneroo (CoW) supports the proposed clearing within its jurisdiction and has requested that clearing be kept to a minimum (CoW, 2012).

Bush Forever raises no objection to the clearing, however recommends that an offset package be prepared (DoP, 2012).

#### Methodology

##### References:

- CoW (2012)
- DoW (2012)
- DoP (2012)

##### GIS database:

- EPP, Gngangara mound

### 4. References

- CoW (2012) City of Wanneroo advice for Clearing Permit Application CPS 5300/1 (DEC Ref: A563210).  
DoP (2012) Department of Planning advice for Clearing Permit Application CPS 5300/1 (DEC Ref: A565666).  
DoW (2012) Department of Water advice for Clearing Permit Application CPS 5300/1 (DEC Ref: A550970).  
Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.

- 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.
- 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. Technical Report 249. Department of Agriculture Western Australia, South Perth.

## 5. 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)