



GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 4136/1
Permit Holder:	Commonwealth Scientific and Industrial Research Organisation
Duration of Permit:	14 March 2011 - 14 March 2013

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 installing a meteorological flux tower.

2. Land on which clearing is to be done

LOT 11620 ON PLAN 243039 (YEAL 6503)
LOT 10501 ON PLAN 219172 (YEAL 6503)
LOT 3671 ON PLAN 205139 (YEAL 6503)
LOT 3670 ON PLAN 205139 (YEAL 6503)

3. Area of Clearing

The Permit Holder must not clear more than 0.0016 hectares of native vegetation within the area hatched yellow on attached Plan 4136/1.

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. 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

6. 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*:

- (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (ii) shall only move soils in *dry conditions*;
- (iii) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (iv) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

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;

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*.

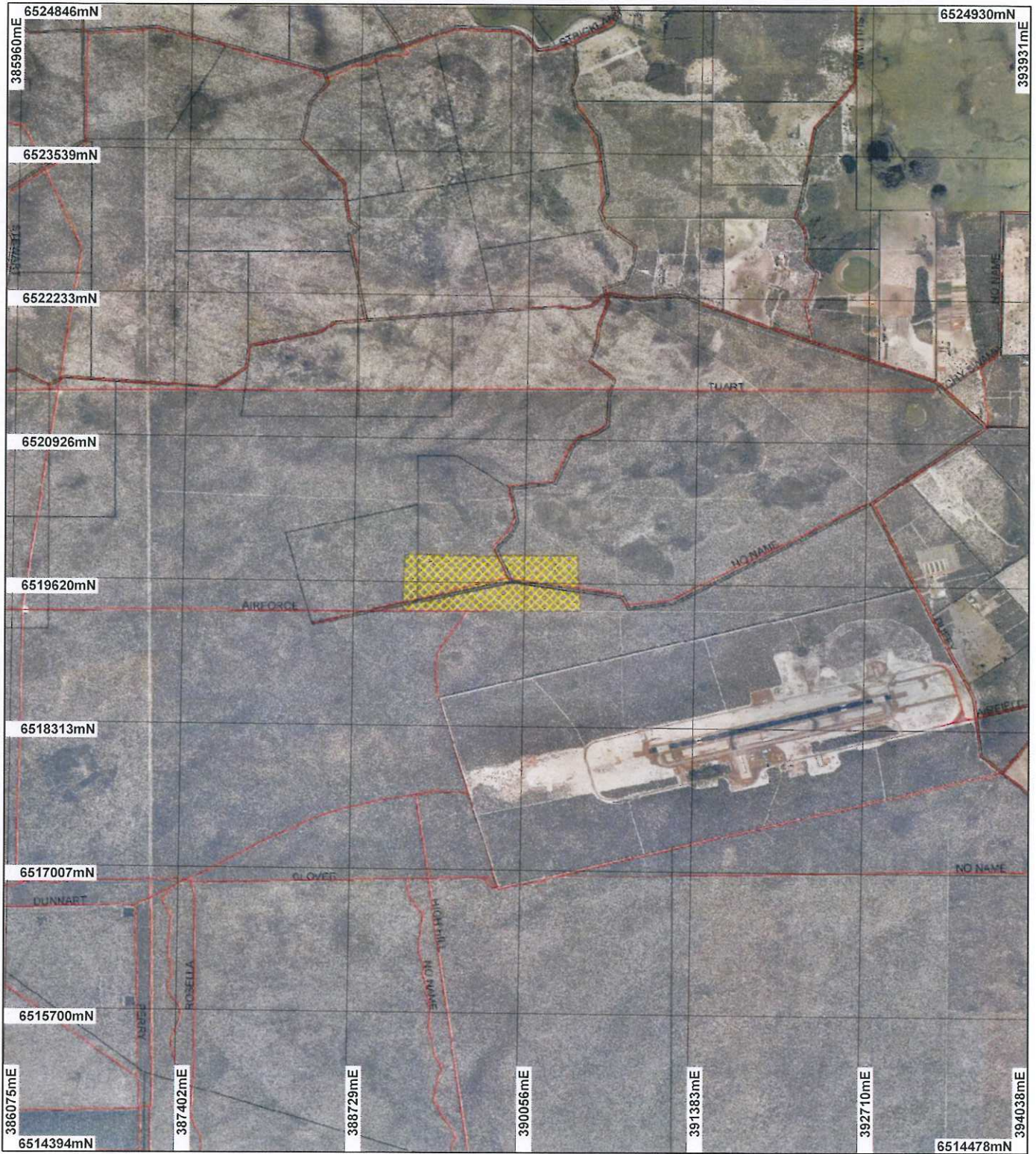


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH



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

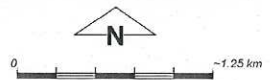
17 February 2011

Plan 4136/1



LEGEND

- | | |
|---|---|
| Clearing Instruments | |
|  | Gingin 50cm Orthomosaic - Landgate 2006 |
|  | Gingin 50cm Orthomosaic - Landgate 2008 |
|  | Road Centrelines |
|  | Cadastre |



Scale 1:46464
(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.

K. Faulkner Date 11/2/11

K. Faulkner
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.: 4136/1
 Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Commonwealth Scientific and Industrial Research Organisation

1.3. Property details

Property: LOT 11620 ON PLAN 243039 (YEAL 6503)
 LOT 10501 ON PLAN 219172 (YEAL 6503)
 LOT 3671 ON PLAN 205139 (YEAL 6503)
 LOT 3670 ON PLAN 205139 (YEAL 6503)

Local Government Area: Shire of Gingin
 Colloquial name: Yeal Nature Reserve

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.0016		Mechanical Removal	Building or Structure

1.5. Decision on application

Decision on Permit Application: Grant
 Decision Date: 17 February 2011

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 has been identified as Beard vegetation association 1014 which Shepherd (2009) describes as 'Mosaic: Low woodland; banksia / Shrublands; teatree thicket'.	The proposal is to clear 0.0016 hectares of native vegetation within Yeal Nature Reserve, Yeal.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The condition of the vegetation under application was determined via digital imagery (Gingin 50cm Orthomosaic - Landgate 2008).

3. Assessment of application against clearing principles

Comments **Proposal is not likely to be at variance to this Principle**
 The proposal is to clear 0.0016 hectares of native vegetation within Yeal Nature Reserve for the purpose of installing a flux tower for measuring meteorological fluxes above Banksia woodland for the purpose of researching recharge and water balance of the Gngangara Mound.

The clearing under application falls within Beard vegetation association 1014 which retains approximately 56 per cent native vegetation within the Swan Coastal Bio Region. The local area (10km radius) surrounding the proposed clearing site contains approximately 85 per cent vegetation cover.

Given the relatively small scale of the proposed clearing, which is located within a large intact remnant, the proposed clearing is not likely to be at variance to any of the clearing principles.

Methodology GIS Databases:
 - Gingin 50cm Orthomosaic - Landgate 2008
 - Hydrography linear - DOW 13/7/06
 - Hydrography linear (hierarchy) - DoW 13/7/06
 - Local Government Authorities - DLI 8/07/04
 - Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
 - Pre European Vegetation - DA 01/01
 - SAC Biodatasets - accessed 10 February 2011

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

Comments

Department of Environment and Conservation's Property Unit are in the process of finalising a Lease for CSIRO over the land under application.

The area under application falls within the Gngangara groundwater area which is a proclaimed area under the Rights in Water and Irrigation Act 1914. This area is also a public drinking water source area.

Methodology

4. References

- 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. (2009) Adapted from: 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)