



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 5711/1
Permit Holder:	Commonwealth Department of Defence - Defence Support and Reform Group - Central and West (Western Australia)
Duration of Permit:	19 October 2013 – 19 October 2018

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 placing shipping containers for target practice.

2. Land on which clearing is to be done

Lot 4229 on Deposited Plan 220698, Wedge Island

3. Area of Clearing

The Permit Holder must not clear more than 0.05 hectares of native vegetation within the area hatched yellow on attached Plan 5711/1.

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.

PART II – MANAGEMENT CONDITIONS

5. 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*:

- clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- shall only move soils in *dry conditions*;
- ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- 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; and

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in the former Department of Environment and Conservation Regional Weed Assessments, regardless of ranking; or
- (c) not indigenous to the area concerned.

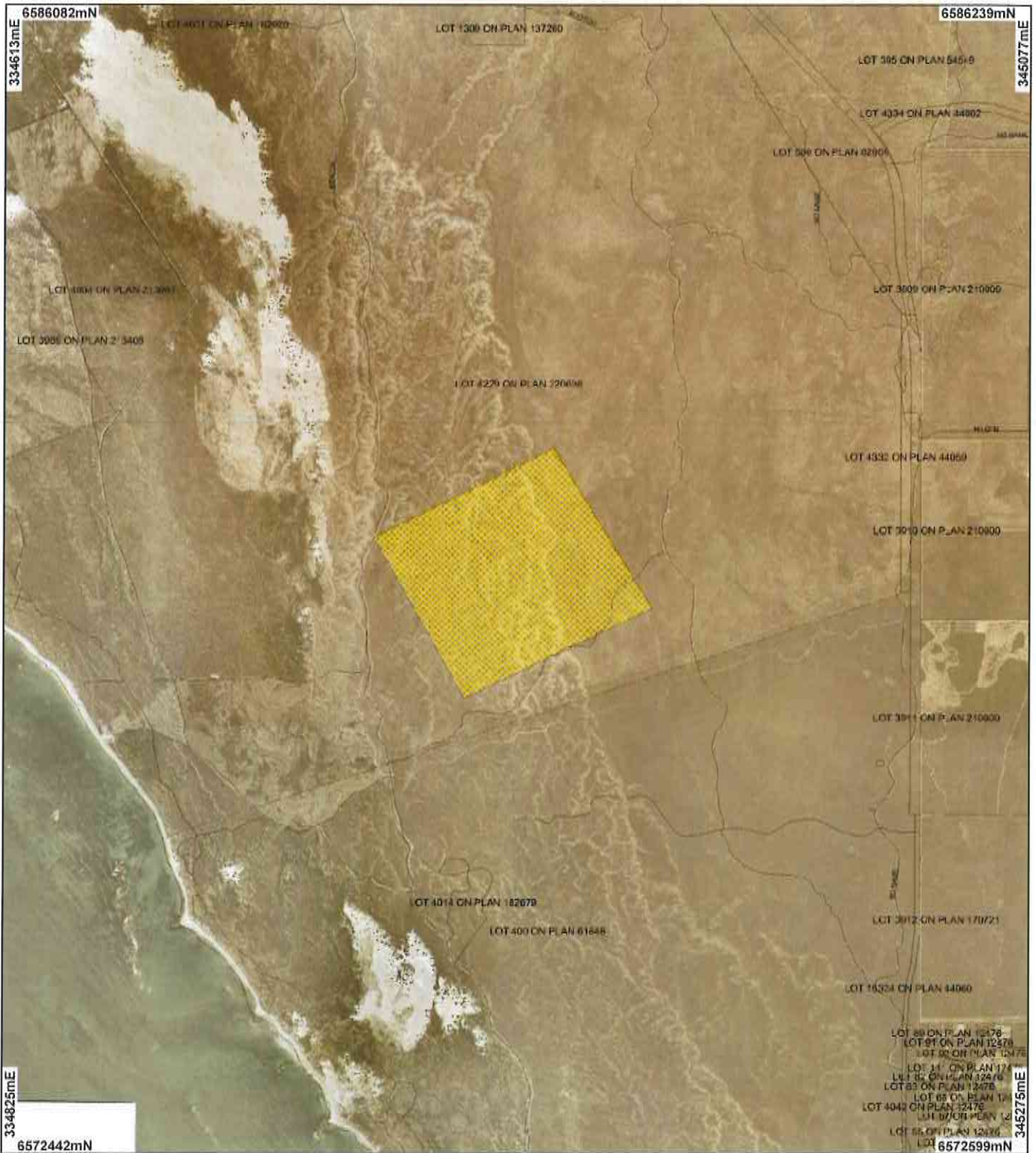


M Warnock
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH




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

19 September 2013

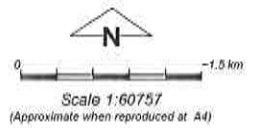
Plan 5711/1



LEGEND

- Clearing Instruments**
-  Areas Approved to Clear
 -  Road Centrelines
 -  Cadastre for labelling

Wedge Island 1.4m
Orthomosaic - Landgate
2004



Geocentric Datum Australia 1994

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

M Wamock Date 19/9/13
M Wamock

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.



Government of Western Australia
Department of Environment Regulation

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



Clearing Permit Decision Report

Government of Western Australia
Department of Environment Regulation

1. Application details

1.1. Permit application details

Permit application No.: 5711/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Department of Defence

1.3. Property details

Property: LOT 4229 ON PLAN 220698 (WEDGE ISLAND 6044)
Local Government Area: Shire of Gingin
Colloquial name:

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 19 September 2013

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 Beard Vegetation Association: 1026 - Mosaic: Shrublands; Acacia rostellifera, A. cyclops (in the south) & Melaleuca cardiophylla (in the north) thicket / Shrublands; Acacia lasiocarpa & Melaleuca acerosa heath. 1029 - Shrublands; scrub-heath dryandra-calothamnus association with Banksia prionotes on limestone in the northern Swan Region (Shepherd et al, 2001).	The application to clear 0.05 hectares of native vegetation within the Lancelin Defence Training Area (Lot 4229 on Deposited Plan 220698, Shire of Gingin) is for the purpose of placing shipping containers for target practice.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The vegetation under application comprises Melaleuca systema and Acacia rostellifera heath. Other widespread species include Hemiandra pungens, Olearia rudis and Acacia cochlearis (Ecoscape, 2004; SMEC, 2007; Eco Logical Australia, 2013).

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 may be at variance to this Principle**
The application to clear 0.05 hectares of native vegetation within the Lancelin Defence Training Area (Lot 4229 on Deposited Plan 220698, Shire of Gingin) is for the purpose of placing shipping containers (6.1 metres by 2.4 metres in size) for target practice.

The vegetation under application comprises Melaleuca systema and Acacia rostellifera heath (DEC, 2007). Other flora species include Hemiandra pungens, Olearia rudis and Acacia cochlearis (Ecoscape 2004). The vegetation within the applied areas is considered to be in a very good (Keighery, 1994) condition (Eco Logical

Australia 2013).

The Lancelin Defence Training Area (LDTA) is located within an area of high floristic diversity, with a correspondingly high number of habitat types and floristic communities (Ecoscape 2004). There are 186 native flowering plant species, approximately 185 species of bird, 55 species of reptile and 29 species of mammals that may inhabit the LDTA (Ecoscape, 2004).

In addition, there are ten species of Priority listed flora that occur in the local area (10km radius) with one species, *Stylidium* sp. (Priority 3), known from within the application area's 400 metre by 400 metre clearing footprint. Given the small area proposed to be impacted per shipping container placement (0.001 hectares), the potential impact on this species is considered to be short term and negligible given the containers will be regularly re-positioned allowing for the native vegetation to regenerate.

A Priority Ecological Community (PEC) is located 4.8 kilometres to the east of the application area. The PEC has been identified as Claypans with mid-dense shrublands of *Melaleuca lateritia*. Given that this PEC occurs within a different soil and vegetation complex to the vegetation under application the proposed area is not considered to comprise of this PEC.

Given the high biodiversity of the LDTA and the very good condition of the vegetation, the clearing as proposed may be at variance to this Principle.

However, given the very small area proposed to be cleared (0.05 hectares within a footprint of 459 hectares) and the large amount of extensive surrounding vegetation, it is unlikely the proposed clearing will have any detrimental impact on biodiversity.

Methodology References
- Keighery (1994)
- DEC (2007)
- Ecoscape (2004)
- Eco Logical Australia (2013)

(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 comprises *Melaleuca systema* and *Acacia rostellifera* heath (DEC, 2007), is in a very good (Keighery, 1994) condition (Eco Logical Australia 2013) and has a relatively dense groundcover with low lying shrubs.

The Priority 4 (P4) Brush Wallaby (*Macropus irma*) and Quenda (*Isodon obesulus fusciventer* - P5) are known to occur in the local area and inhabit similar vegetation to the areas under application.

Although the vegetation under application may contain suitable fauna habitat, it is unlikely to be significant in a local context. Given the very small area proposed to be cleared (0.05 hectares) and the extensive surrounding vegetation, the proposed clearing is not likely to be at variance to this Principle.

Methodology References
- Keighery (1994)
- DEC (2007)
- Eco Logical Australia (2013)

(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 no known records of threatened flora within the application area. Two species which are recorded within the local area (10km radius) occur on different soil and vegetation complexes to that of the vegetation within the application area.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS database
- SAC Bio datasets (accessed September 2013)

(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 (TEC) within a 10 kilometre radius of the application area. The nearest TEC known as Floristic Community Type SCP07- Herb rich saline shrublands

in clay pans is located approximately 44 kilometres south east of the applied area. This TEC occurs on different soils and within a different vegetation complex to the applied area.

Given the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Databases
- SAC Bio datasets (accessed September 2013)

(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 at variance to this Principle**

The vegetation under application is associated with Beard vegetation associations 1026 and 1029, which have 94 and 71 per cent vegetation extent remaining respectively in the Bioregion (Government of Western Australia, 2013).

The amount of vegetation remaining within the local area (10 kilometre radius) is approximately 80 per cent (Wedge Island 1.4 Orthomosaic Landgate 2004).

Given the very small amount of clearing (0.05 hectares) and the high representation of the vegetation associations, as well as the extensive surrounding vegetation, the proposed clearing is not at variance to this Principle.

	Pre-European (ha)	Current extent (ha)	Extent Remaining (%)
IBRA Bioregions			
Swan Coastal Plain	1,501,221	587,708	39
Shire of Gingin	319,671	177,334	55
Vegetation type:			
Beard 1026:*	58,419	54,978	94
Beard 1029 *	68,329	48,903	71

*Government of Western Australia, 2013

Methodology References
- Government of Western Australia (2013)
- Wedge Island 1.4 Orthomosaic Landgate (2004)
GIS databases
- Interim Biographic Regions of Australia
- Pre-European Vegetation

(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 at variance to this Principle**

There are no wetlands or watercourses mapped within the applied area. The closest surface hydrological feature is a series of damplands and non-perennial swamps located approximately 3.7km north east whilst the Indian Ocean is 3.7km to the west of the applied area. The vegetation under application is not considered to be growing in association with these areas.

Therefore the proposed clearing is not at variance to this Principle.

Methodology GIS Database:
- Geomorphic Wetlands (Classification)- Swan Coastal Plain
- Hydrography, linear
- WA Coastline

(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 application area is located within the Quindalup dune system, and is associated with soils of siliceous sands (Northcote et al 1960-68). These soils typically have a very high risk of wind erosion (Ecoscape 2004). However, given that the targets (shipping containers) will be placed upon the vegetation and no vegetation is proposed to be removed, soil erosion is unlikely.

Permeability of the sands of the Quindalup system is high; however they are prone to cementing leading to surface runoff and potential minor gully erosion (Ecoscape 2004). However, only very small areas are proposed

to be impacted (0.001 hectares per targets/shipping container) and there is significant vegetation cover surrounding the applied area.

Given the above, the clearing as proposed is not likely to be at variance to this Principle.

Methodology References:
- Ecoscape (2004)
- Northcote et al (1960-68)

GIS Databases:
- Soils, Statewide
- Topographic Contours, Statewide

(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 conservation reserves located within the local area (10 kilometre radius). Nilgen Nature Reserve is located 800 metres south of the application area and Bashford Nature Reserve is located approximately 4.4km to the east.

Given the very small area proposed to be cleared (0.05 hectares) and the extensive surrounding vegetation, the clearing as proposed is not likely to be at variance to this Principle.

Methodology GIS Databases
- DEC tenure

(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 at variance to this Principle**
There are no wetlands or watercourses mapped within the application area. The closest surface hydrological feature is a series damp lands and a non-perennial swamps located approximately 3.7 kilometres north east.

The proposed clearing is unlikely to have any impact on surface water quality due to the distance to the hydrological feature and the fact that drainage flows in a westerly direction, away from the hydrological features to the east. Also, given the very small amount of proposed clearing (0.05 hectares) and the extensive surrounding vegetation, groundwater will not be affected.

The clearing as proposed is not at variance to this Principle.

Methodology GIS Databases:
- Geomorphic Wetlands (Classification), Swan Coastal Plain

(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 application area is located within the Quindalup dune system, and is associated with chief soils of siliceous sands (Northcote et al 1960-68). Permeability of the sands of the Quindalup system is high, however they are prone to cementing leading to surface runoff and potential minor gully erosion (Ecoscape 2004). However, this is unlikely to occur given the small amount of clearing (0.05 hectares) and extensive surrounding vegetation.

Flooding impacts are unlikely to occur due to the small clearing area and the areas relatively high position in the landscape, ranging in elevation from 60 to 80 metres.

Given the above, the clearing as proposed is not likely to be at variance to this Principle.

Methodology References:
- Ecoscape (2004)
- Northcote et al (1960-68)

GIS Databases:
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
- Hydrography, Linear
- Soils, Statewide
- Topographic Contours, Statewide

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

Comments

There are no Aboriginal Sites of Significance listed within the areas under application.

Lot 4229 on Plan 220698 is owned by the Department of Planning and Infrastructure and leased to the Commonwealth of Australia for Public Purposes (special uses).

Methodology

4. References

- DEC (2007) Site Inspection, Department of Environment and Conservation, Western Australia, TRIM Ref DOC41686.
- Eco Logical Australia (2013) Lancelin Defence Training Area - Firing Point Alpha and Movement Box Rapid Flora Survey. Prepared for Spotless Facilities and the Department of Defence.
- Ecoscape (2004) Lancelin Defence Training Area Environmental Management Plan Draft Environmental Review. Unpublished report prepared for the Department of Defence.
- Government of Western Australia. (2013). 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.
- 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.
- SMEC Australia (2007) Defence Metro WA9911093- Lancekin Defence Training Area Firing Point Report, Prepared for the Department of Defence; SMEC Australia Ltd

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)