



GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 4643/1

File Number: 2011/005808-1

Duration of Permit: From 28 November 2011 to 28 November 2013

PERMIT HOLDER

Shire of Kalamunda

LAND ON WHICH CLEARING IS TO BE DONE

Lot 3000 on Deposited Plan 4436 – Reserve 17098 (Hartfield Park), Forrestfield

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.2 hectares of native vegetation within the area hatched yellow on attached Plan 4643/1.

CONDITIONS

1. Dieback and weed control

- (a) 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.
- (b) At least once in each 12 month period for the term of this Permit, the Permit Holder must remove or kill any *weeds* growing within areas cleared under this Permit.

DEFINITIONS

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

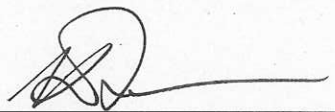
dieback means the effect of *Phytophthora* species on native vegetation

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*

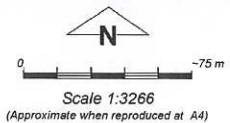
10 November 2011

Plan 4643/1



LEGEND

- Road Centrelines
- Clearing Instruments
- Areas Applied to Clear
- Areas Subject to Conditions
- Areas Approved to Clear
- Cadastre for labelling
- Swan Coastal Plain Central
20cm Orthomosaic - Landgate
2009



Geocentric Datum Australia 1994

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

Date 10/11/10
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.: 4643/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Kalamunda

1.3. Property details

Property: LOT 3000 ON PLAN 44636 (House No. 199 HALE FORRESTFIELD 6058)
LOT 3000 ON PLAN 44636 (House No. 199 HALE FORRESTFIELD 6058)
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Local Government Area: Shire of Kalamunda

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.2		Mechanical Removal	Hazard reduction or fire control

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 10 November 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 is mapped as:	The application is for the proposed clearing of 0.2 ha on Lot 3000 on DP 44636, Forrestfield, Shire of Kalamunda. The purpose of clearing is to construct a fire break.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The condition of the vegetation was determined via digital imagery (Swan Coastal Plain Central 20cm Orthomosaic Landgate 2009.)
Beard vegetation association: 968 medium woodland; jarrah, marri & wandoo (Shepherd 2009).			
Hedde vegetation complex: Southern River open woodland of <i>Corymbia calophylla</i> , <i>Eucalyptus marginata</i> , <i>Banksia</i> species with fringing woodland of <i>Eucalyptus rudis</i> , <i>Melaleuca raphiophylla</i> along creek beds (Hedde et al. 1980).	The vegetation consists predominately of waist high <i>Watsonia</i> with some native species. The vegetation adjacent to the creek line is mostly <i>Trymalium odoratissimum</i> and <i>Hakea trifurcata</i> (Shire of Kalamunda, 2011).		

3. Assessment of application against clearing principles

Proposal is not likely to be at variance to this Principle

The application proposes to clear 0.2 ha of native vegetation within Lot 3000 on Deposited Plan 44636 ? Reserve 17098 (Hartfield Park), Forrestfield for the purpose of constructing a fire break.

There are numerous priority flora recorded within the local area (5 km). The closest priority flora being *Verticordia lindleyi* subsp. *lindleyi* (P4) recorded approximately 700 m north west of the application area and *Isopogon drummondii* (P4) recorded approximately 400 m north east of the application area.

Conospermum undulatum (DRF) and Banksia mimic (DRF) are both mapped in the local area (5km) and within Hartfield Park. In addition to this Conospermum undulatum (DRF) was also found within Lot 3000 and in the adjacent Lot 3001 on DP 4436 (DEC 2011). This population of Conospermum undulatum was observed during the site investigation within the eastern and western fenceline application areas for application CPS 4458/1 (DEC 2011a). The Shire of Kalamunda's, Environmental Reserves Officer advised that she has not observed any rare flora within the application area. (Shire of Kalamunda 2011) Given the vegetation is in a degraded condition and predominately consists of watsonia it is unlikely that this area will support rare flora. In addition the construction of the fire break is considered to be overall beneficial to protect the vegetation of Hartfield Park. Therefore, the proposed clearing is not likely to be at variance to principle (c).

The area under application is mapped as Beard Vegetation Association 968 (Shepherd, 2009). This vegetation association has approximately 7.2 per cent of its pre-European extent remaining within the Swan Coastal Plain bioregion (Shepherd 2009). The local area (5km radius) has been highly cleared (approximately 15% vegetation remaining). Calculations of the pre-European extent remaining within the Swan Coastal Plain if the proposed clearing is undertaken indicates that 7.2 per cent of this vegetation association will remain. This indicates that the proposed clearing has a minimal affect on the vegetation associations representativeness on the Swan Coastal Plain.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001). Within constrained areas (i.e. areas of urban development in cities and major towns) on the Swan Coastal Plain the target for representation of the pre-clearing extent of a particular native vegetation complex is 10 per cent (EPA 2006).

Vegetation association 968 retains less than the national recommended levels however, given the small size of the application and that it occurs in an area that is significantly degraded, it is not likely to be a significant remnant.

The western edge of the application area is adjacent to a Conservation Management category wetland. A creekline also runs through the north west and north east sections of the application area. The applicant has advised that the vegetation surrounding this creek line comprises mainly of *Trymalium odoratissimum* and *Hakea trifurcata*. The removal of this vegetation is likely to increase sedimentation levels in this watercourse, however given the size of clearing this is unlikely to have a significant or longterm impact..

The application area is located in Bush Forever site 320. Weed and dieback management practices will assist in mitigating the risk of weeds and dieback being spread into this reserve.

Considering the above, the application is at variance to principle (f), may be at variance to principle (i) and not likely to be at variance to the remaining clearing principles.

Methodology

References:

Commonwealth of Australia (2001)
DEC (2011a)
DEC (2011b)
EPA (2006)
Keighery (1994)
Shire of Kalamunda (2011)
Shepherd (2009)

GIS databases:

-Pre-European vegetation
-Geomorphic Wetlands Swan Coastal Plain dataset
-SAC Biodatasets (Accessed October 2011).

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

Comments

Lot 3000 on Deposited Plan 44636 is zoned as parks and recreation under the Local Town Planning Scheme and Metropolitan Regional Scheme.

Lot 3000 on Deposited Plan 44636 is also known as Reserve 17089

The Department of Planning (DoP 2011) provided advice for Lot 3000 on DP 44636 and adjacent block Lot 3001 on DP 44636 from previous application 4458/1, regarding clearing for a fence line which is part of an offset project for Hartfield Park to help protect DRF and other vegetation within Hartfield Park. Similarly this proposed clearing for a fire break will also be beneficial in protecting the vegetation in Hartfield Park.

Methodology

References:

-DoP (2011)

GIS databases
-Cadastre
-Town Planning Scheme Zones

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2011a) Site Inspection Report for Clearing Permit Application CPS 4458/1, Lot 3000 and 3001, Hale Road, Wattle Grove and Forrestfield. Site inspection undertaken 26/07/2011. Department of Environment and Conservation, Western Australia.
- DEC (2011b) Email advice for Native Vegetation Conservation Branch CPS 4643/1. Dated 19/10/2011. Perth Hills District, Department of Environment and Conservation, Western Australia. (DEC Ref A44407)
- DoP (2011) Advice for Native Vegetation Conservation Branch, CPS 4458/1. Department of Planning Reference 805/2/1/40P320. Received 24/08/2011.
- 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. (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.
- Shire of Kalamunda (2011) Advice on Declared Rare Flora for CPS 4643/1. Dated 27/10/2011. Shire of Kalamunda, Western Australia (DEC Ref A445122)

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)