



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 5104/1
File Number: 2012/004095-1
Duration of Permit: From 31 August 2012 to 31 August 2014

PERMIT HOLDER

Jennepher Anne Stockwell

LAND ON WHICH CLEARING IS TO BE DONE

Lot 15 on Plan 22875 Bayview Rise, Shadforth 6333

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.5 hectares of native vegetation within the area shaded yellow on attached Plan 5104/1.

CONDITIONS

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;

weeds/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*.

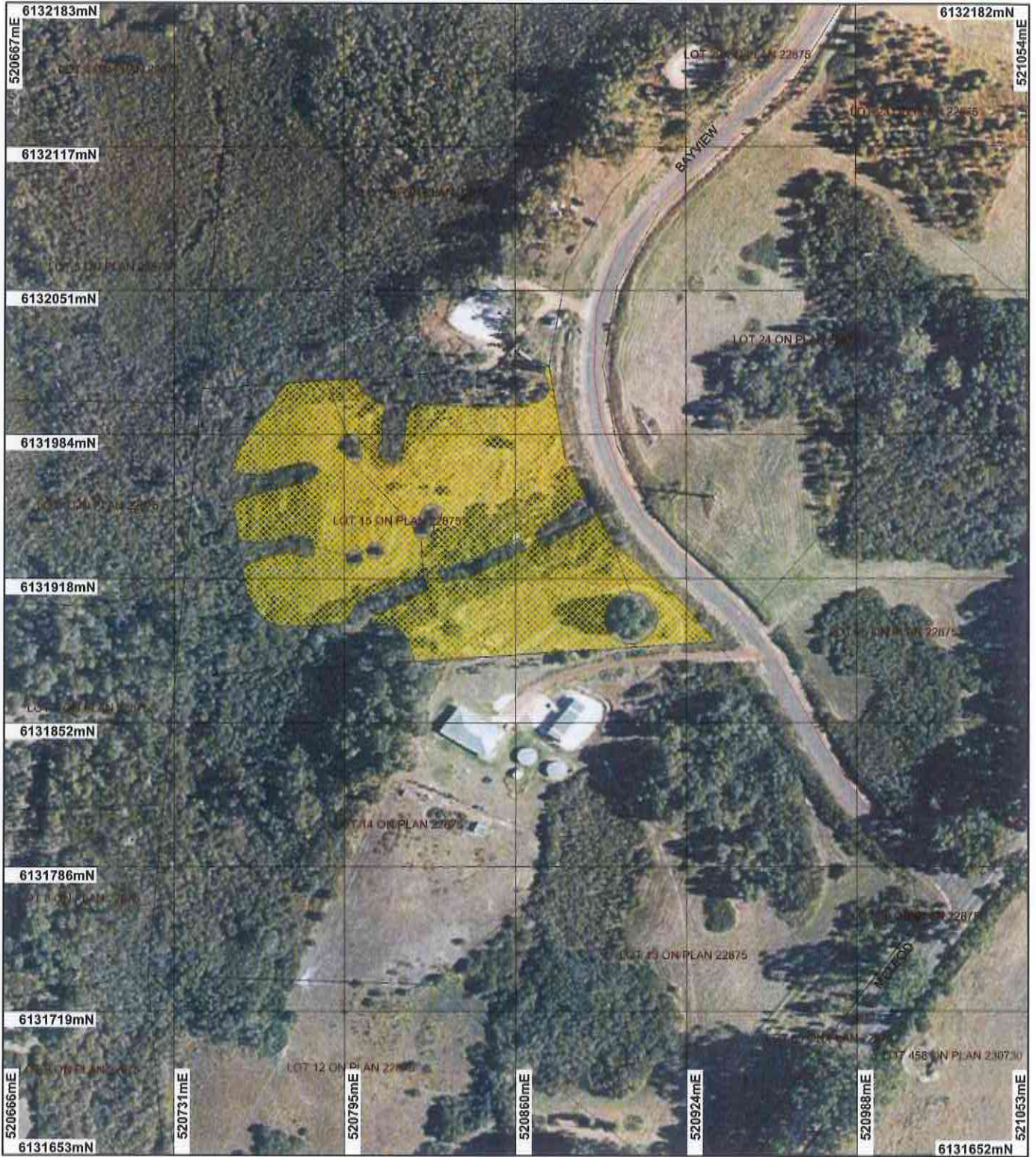
A handwritten signature in black ink, appearing to read "M Warnock".

M Warnock
A/MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

9 August 2012

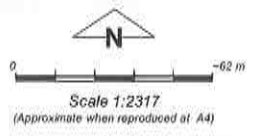
Plan 5104/1



LEGEND

- Road Centrelines
- Cadastre for labelling
- Freehold
- Crown Reserve
- State Forest / Timber Reserve
- Marine Park (cont)
- Crown Lease
- Lease / Reserve
- Lease on State Forest / Timber Reserve
- Public Roads
- Unallocated Crown Land
- Water

- ### Clearing Instruments
- Areas Applied to Clear
 - Areas Subject to Conditions
 - Areas Approved to Clear
- Denmark 50cm Orthomosaic - Landgate 2007



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 9/8/12
 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.



1. Application details

1.1. Permit application details

Permit application No.: 5104/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Jennepher Anne Stockwell

1.3. Property details

Property: LOT 15 ON PLAN 22875 (BAYVIEW RISE, SHADFORTH 6333)
Local Government Area: SHIRE OF DENMARK

1.4. Application

Clearing Area (ha)	Method of Clearing	For the purpose of:
0.5	Mechanical Removal	Landscaping and Hazard reduction or fire control

1.5. Decision on application

Decision on Permit Application: GRANT
Decision Date: 9 AUGUST 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
<p>Beard vegetation associations: 969 - Mosaic; Medium forest; jarrah-marri / Low forest; jarrah and 1 - Tall forest; karri (Eucalyptus diversicolor) (Shepherd et al, 2001).</p> <p>Mattiske vegetation complexes: Kb (Keystone) - Mosaic of tall open forest of Eucalyptus guilfoylei - Eucalyptus jacksonii-Eucalyptus diversicolor on slopes of major hills rising above coastal plain with Allocasuarina decussata-Banksia grandis-Agnois flexuosa on slopes in hyperhumid and perhumid zones and tall open forest of Eucalyptus brevistylis-Eucalyptus marginata subsp. marginata-Corymbia calophylla and the occasional Eucalyptus megacarpa near rock outcrops in hyperhumid and perhumid zones (Mattiske and Havel, 1998).</p> <p>Ks (Keystone) - Woodland of Eucalyptus marginata subsp. marginata -Allocasuarine fraseriana on lower slopes in hyperhumid and perhumid zones (Mattiske and Havel, 1998).</p>	<p>The vegetation is consistent with the Beard and Mattiske vegetation types and has been described as Open heath with dominant species being Taxandria linearifolia, Eucalyptus megacarpa, Melaleuca thymoides and Corymbia calophylla over low heath of Taxandria parviceps and Evandra aristata (DEC, 2012).</p>	<p>Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)</p> <p>To</p> <p>Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)</p>	<p>The vegetation condition and description was confirmed during a Department of Environment and Conservation (DEC) site inspection undertaken on the 25 July 2012 and through aerial imagery (Denmark 50cm Orthomosaic - Landgate 2007).</p>

3. Assessment of application against clearing principles

Comments

The applied clearing area contains 0.5ha of native vegetation in 'very good' to 'completely degraded' condition, comprising Corymbia calophylla, Eucalyptus megacarpa, Melaleuca thymoides over open heath of Taxandria linearifolia and low heath of Taxandria parviceps and Evandra aristata (DEC, 2012). There are existing cleared areas on the property attributed to historic clearing and house construction.

The proposed clearing for the purposes of landscaping and fire hazard reduction will be predominantly of the ground and mid storeys and some smaller trees with larger Eucalyptus trees to be retained (DEC, 2012).

The vegetation under application is not likely to comprise habitat suitable for fauna of conservation significance, rare or priority flora nor does the vegetation have affinities with threatened ecological communities within the local area (10km radius).

The area under application lies within the Shire of Denmark within the Warren IBRA Region of which there is 77.8% and 79.6% of their pre-European extents remaining respectively (Government of Western Australia, 2011). The mapped Beard and Mattiske vegetation complexes have above 40% of their pre-European extents remaining (Government of Western Australia, 2011 & Mattiske and Havel, 1998). The vegetation falls within Strategic Zone A of the South Coast Macro Corridor Network (areas containing woody vegetation and form potentially the most strategic link between protected areas) and is part of a currently un-named corridor (Wilkins et al, 2006). However, given the small scale (0.5ha) of clearing proposed, and the protection of native vegetation on the property, the area under application is not likely to be considered significant as a remnant in an extensively cleared landscape.

The vegetation comprises riparian vegetation and is growing in association with two minor, perennial watercourses, one extending through Lot 15 and one running north-south just west of the property. As some clearing is proposed in order to install access from one side of the watercourse to the other on the property, the clearing may result in short term sedimentation, however the clearing of 0.5ha on this property is unlikely to result in long term deterioration in the quality of water resources in the local area. Given the clearing of riparian vegetation and the possible impacts to the watercourse running through the property, the proposed clearing is considered at variance to principle (f) and may be at variance to principle (i).

The chief soils in the applied clearing area comprise leached sands (Northcote et al., 1960-68) and as such the site has a high risk of wind erosion. However, given the main purpose of the clearing is for landscaping, including the planting of other endemic flora species, the area is not intended to be left cleared and as such the risk is low. A high level of water shedding was observed on the property (DEC, 2012) and there is the potential for water erosion to occur as a result of clearing riparian vegetation along the watercourse which runs through the property. Therefore the proposed clearing may be at variance to principle (g).

There is a Landscape Protection Area over the western portion of Lot 15 and a Strategic Planting Area at the northern boundary of the property which have been designated within the subdivision guide plan for the McLeod Road (West) Special Zone (Shire of Denmark, 2012). Native vegetation cannot be disturbed or cleared within these areas (Shire of Denmark, 2012). Given the scale of the clearing proposed and protection of these vegetated areas on Lot 15, the proposed clearing is not likely to directly impact the environmental values of these conservation areas. However, these areas could be indirectly impacted through the introduction and/or spread of weeds and/or dieback and as such the clearing process is considered to be may be at variance to principle (h). The implementation of appropriate weed and dieback hygiene measures will assist in reducing this risk.

It is therefore concluded that the proposed clearing is at variance to principle (f), may be at variance to principles (g), (h) and (i) and not likely to be at variance to the remaining clearing principles.

Methodology

References:

- DEC (2012)
 - Government of Western Australia (2011)
 - Keighery (1994)
 - Mattiske & Havel (1998)
 - Northcote et al (1960-68)
 - Shepherd (2007)
 - Wilkins et al (2006)
- ##### GIS Databases:
- DEC Tenure, DEC
 - Hydrography, linear - DoW
 - Hydrography, linear (hierarchy) - DoW
 - NatureMap, DEC - Accessed 17 July 2012
 - SAC Biodatasets, DEC - Accessed 22 June 2012
 - Soils, Statewide - DA
 - Systems 1-5 & 7-12 Conservation Reserves

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

Comments

The property under application is zoned 'Special Rural' under the Town Planning Scheme and the subdivision guide plan for the McLeod Road (West) Special Zone, for which Lot 15 is a part, defines landscape protection areas where native vegetation is not allowed to be cleared or disturbed (Shire of Denmark, 2012).

The Shire of Denmark (2012) have advised, in correspondence to the applicant's consultant, they approve the request to clear vegetation and landscape the property as per the landscape plan subject to conditions and/or modifications. The conditions and modifications include clearing is only to be undertaken outside the designated Landscape Protection Area, landscaping in Strategic Planting Areas is limited to endemic species only, restrictions on type of plants planted so as not to impede views from McLeod Road and consultation with

DEC to ascertain if a clearing permit is required (Shire of Denmark, 2012).

Methodology **References:**
- Shire of Denmark (2012)

4. References

- DEC (2012) Site Inspection Report for Clearing Permit Application CPS 5104/1, Lot 15 on Plan 22875 Bayview Rise, Shadforth. Site inspection undertaken 25/07/2012. Department of Environment and Conservation, Western Australia (DEC ref. A529492).
- Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). 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.
- 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.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- 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 Denmark (2012) Response to Direct Interest Letter for Clearing Application for Lot 15 on Plan 22875 Bayview Rise, Shadforth. Shire of Denmark, Western Australia. DEC ref A523187.
- Wilkins, P., Gilfillan, S., Watson, J. and Sanders, A. (ed), 2006. The Western Australian South Coast Macro Corridor Network - a bioregional strategy for nature conservation, Department of Conservation and Land Management (CALM) and South Coast Regional Initiative Planning Team (SCRIPT), Albany, Western Australia.

5. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management (now DEC)
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 DoW)