



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 6991/1
File Number: 2016/000456-1
Duration of Permit: 26 November 2016 to 26 November 2018

PERMIT HOLDER

Mr Diederick Naude
Ms Amy Elkington

LAND ON WHICH CLEARING IS TO BE DONE

Lot 495 on Diagram 87420, Oakford

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.374 hectares of native vegetation within the area cross hatched yellow on attached Plan 6991/1.

CONDITIONS

1. 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) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (c) 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;

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 any plant -

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

Anne Mathews

Dr Anne Mathews
SENIOR MANAGER
CLEARING REGULATION

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

27 October 2016

Plan 6991/1

32.181305°S

32.181305°S

115.915993°E

115.923922°E



32.186493°S

32.186493°S

115.915993°E

115.923922°E

Legend

-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority
-  Cadastre
-  Roads - Local and Others
-  Roads - Main Road



0 200m

1:3,961

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

Anne Mathews Date *27/10/2016*
ANNE MATHEWS

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986



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1. Application details

1.1. Permit application details

Permit application No.: 6991/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Mr Diederick Petrus Naude
Ms Amy Patricia Elkington

1.3. Property details

Property: LOT 495 ON DIAGRAM 87420, OAKFORD
Colloquial name:
Local Government Authority: SERPENTINE-JARRAHDAL, SHIRE OF
DER Region: Greater Swan
DPaW District: SWAN COASTAL
LCDC:
Localities: OAKFORD

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.374		Mechanical Removal	House and driveway construction

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 27 October 2016
Reasons for Decision: The clearing application was received on 1 March 2016 and has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the *Environmental Protection Act 1986*, and it has been concluded that the proposed clearing may be at variance to principle (f) and is not likely to be at variance to any of the remaining clearing principles.

The vegetation under application may impact the condition of the adjacent vegetation through the introduction or spread of weeds and dieback. Weed and dieback management measures will minimise impacts to the adjacent vegetation.

Through assessment the Delegated Officer has determined that the clearing is unlikely to have any significant environmental impacts. State policies and other relevant policies have been taken into consideration in the decision to grant a clearing permit.

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
Beard vegetation association 968: Medium woodland; jarrah, marri & wandoo (Shepherd et al., 2001).	The application is to clear 0.374 hectares of native vegetation within Lot 495 on Diagram 87420, Oakford, Shire of Serpentine-Jarrahdale, for the purposes of constructing a house and driveway.	Good; Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).	The condition and structure of the vegetation under application was determined by a site inspection of the application area undertaken by the Department of Environment Regulation on 8 April 2016.
Beard vegetation association 1001: Medium very sparse woodland; jarrah, with low woodland; <i>banksia</i> & <i>casuarina</i> (Shepherd et al., 2001).			
Hedde vegetation complex Bassendean complex-central and south: Vegetation ranges from woodland of <i>Eucalyptus marginata</i>			

(Jarrah) - *Allocasuarina fraseriana* (Sheoak) - Banksia species to low woodland of *Melaleuca* species, and sedgelands on the moister sites. This area includes the transition of *Eucalyptus marginata* (Jarrah) to *Eucalyptus totiana* (Pricklybark) in the vicinity of Perth (Heddl et al., 1980).

3. Assessment of application against clearing principles

Comments

The application is to clear 0.374 hectares of native vegetation for the purpose of constructing a house and driveway. The application area is very open, consisting predominately of sedges with some banksia and sheoak trees (DER, 2016). The vegetation under application is considered to be in a good (Keighery, 1994) condition (DER, 2016).

Four rare and 17 priority flora have been recorded within the local area (five kilometre radius). It is considered that the area under application may provide suitable habitat for two rare flora species based on the commonality of the soil and vegetation types between the rare flora species and application area (Department of Parks and Wildlife, 2016a).

The first rare flora species is a tuberous, perennial, herb growing to approximately 0.25 to 0.6 metres in height, consisting of green, cream and red flowers (WA Herbarium, 1998-).

The second species is a tuberous, perennial, herb growing to approximately 0.12 to 0.3 metres in height, consisting of red, green and yellow flowers (WA Herbarium, 1998-).

A survey was undertaken on the 17 June and 3 September 2016 over the subject property with a specific focus on the clearing envelope and entry road (Elkington, 2016). The flora survey identified 56 flora species of which none were threatened or priority flora species (Elkington, 2016). The survey undertaken was appropriate in the timing and intensity to detect the two rare flora species that have been identified as possibly being within the application area (Department of Parks and Wildlife, 2016b)

Eight fauna species listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* have been recorded within the local area including Carnaby's cockatoo (*Calyptorhynchus latirostris*), forest red-tailed black cockatoo (*Calyptorhynchus banksii subsp. naso*), chuditch (*Dasyurus geoffroii*) and Australasian bittern (*Botaurus poiciloptilus*) (Parks and Wildlife 2007-).

A site inspection determined the application area to be very open, consisting predominately of sedges with some banksia and sheoak trees, approximately ten trees in total, none considered to be habitat trees (DER, 2016). The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) referral guidelines (SEWPaC 2012) defines breeding habitat for black cockatoos as trees of species known to support breeding within the range of the species which either have a suitable nest hollow or are of suitable diameter at breast height (DBH) to develop a nest hollow. For most trees, suitable DBH is 500 millimetres. Considering this and the relatively small size of the application area it is unlikely to provide significant habitat for conservation significant fauna.

Four priority and two threatened ecological communities have been recorded within the local area. The vegetation identified on site is not representative of the recorded priority or threatened ecological communities (DER, 2016).

The local area retains approximately 35 per cent native vegetation cover. The vegetation in the application area is mapped as Beard vegetation associations 1001 and 968 which retain approximately 23 and 7 per cent of their pre-European vegetation extents within the Swan Coastal Plain respectively (Government of Western Australia 2014). The vegetation in the application area is also mapped as Heddl vegetation Bassendean Complex-Central And\South which retains approximately 26 per cent of its pre-European vegetation extent (Parks and Wildlife, 2015). A site inspection of the application area identified that Beard vegetation association 968 (medium woodland; jarrah, marri and wandoo) was not represented within the application area (DER, 2016).

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 defined constrained areas on the Swan Coastal Plain, the Environmental Protection Authority has set a threshold for retention of 10 per cent of the pre-clearing extent of each native vegetation complex (EPA 2008). The area in the application area has been classified as a constrained area. The vegetation in the application area may be considered as a significant remnant as it may contain suitable habitat for rare flora, however the application does not occur within an extensively cleared landscape.

The closest conservation area to the application area is Forrestdale Lake Nature Reserve which is located approximately 2.2 kilometres north east. Given the distance and lack of vegetative connectivity between the application area and this reserve, the proposed clearing is not likely to impact on its environmental values.

The soils within the area under application are leached sands on low dunes (Northcote et al. 1960-68). Sandy soils are highly susceptible to wind erosion, however given the relatively small size of the application area it is unlikely that appreciable land degradation will occur as a result of wind erosion.

The application area is mapped within an ANCA wetland referred to as the Gibbs Road Swamp System. A site inspection of the property identified that the area was covered by sedges which are indicative of a wetland. However, no water or watercourses were observed within the application area (DER, 2016). Considering this along with the relatively small size of the application area, the proposed clearing is not likely to cause or exacerbate water erosion or flooding, or impact on surface or ground water quality.

The disturbance caused by the proposed clearing is likely to increase the risk of weeds and dieback being introduced into adjacent areas of remnant vegetation. Weed and dieback management practices will assist in mitigating this risk.

The proposed clearing may be at variance to (f) as it is indicative of wetland vegetation. The remaining principles are not likely to be at variance.

Methodology

References:

Commonwealth of Australia (2001)
Department of Environment Regulation (2016)
Department Parks and Wildlife (2007-)
Department Parks and Wildlife (2015)
Department Parks and Wildlife (2016a)
Department Parks and Wildlife (2016b)
Environmental Protection Authority (2008)
Government of Western Australia (2014)
Keighery (1994)
Northcote et al. (1960-68)
Western Australian Herbarium (1998-)

GIS Databases:

SAC Bio Datasets (Accessed October 2016)
Hydrography, linear
Hydrography, hierarchy
Geomorphic Wetlands, Swan Coastal Plain
Parks and Wildlife Tenure

Planning instruments and other relevant matters.

Comments

The applicant was sent a letter on 30 May 2016 informing that it is possible the proposed clearing area may contain rare flora. In order to address this concern the applicant was requested to undertake a target flora survey. In an email dated 10 June 2016, the applicant confirmed that a targeted survey would be undertaken. The survey was received from the applicant on 19 September 2016, the issues regarding the rare flora have now been addressed.

The applicant has received planning approval from the Shire of Serpentine-Jarrahdale for the proposed development, subject to conditions (Shire of Serpentine-Jarrahdale, 2016a).

The Shire of Serpentine-Jarrahdale (2016b) the clearing application which is consistent with the Shire's local town planning scheme.

The application is within an ANCA wetland referred to as the Gibbs Road Swamp System. The wetland system is gazetted as an environmental sensitive area.

The application was advertised in *The West Australian* newspaper on 4 April 2016 for a seven day submission period. No public submissions have been received.

Methodology

References:

Shire of Serpentine-Jarrahdale (2016a)
Shire of Serpentine-Jarrahdale (2016b)

4. References

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
Department of Environment Regulation (2016) Site Inspection Report for Clearing Permit Application CPS 6991/1, Cradon Rd, Oakford. Site inspection undertaken 8 April 2016 Department of Environment Regulation, Western Australia (DER Ref:A1100625).

Department Parks and Wildlife (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed April 2016

Department Parks and Wildlife (2015) 2015 South West Forest and Swan Coastal Plain Vegetation Complex Statistics: a report prepared for the Department of Environment Regulation. Current as of March 2015. Department of Parks and Wildlife, Perth, Western Australia.

Department Parks and Wildlife (2016a) Advice received in relation to Clearing Permit Application CPS 6991-1. Received 6 May 2016 (DER Ref:A1100637)

Department Parks and Wildlife (2016b) Advice received in relation to Clearing Permit Application CPS 6991-1. Received 13 October 2016 (DER Ref:A1181596)

Elkington (2016) Rare Flora Survey, Lot 495 Cradon Road, Oakford. Survey provided in relation to Clearing Permit Application CPS 6991/1 (DER Ref:A1181617).

Environmental Protection Authority (2008) Environmental Guidance for Planning and Development. Guidance Statement No. 33. Environmental Protection Authority. Western Australia.

Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. WA Department of Parks and Wildlife, 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.

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, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Shire of Serpentine-Jarrahdale (2016a) Planning approval granted in relation to Clearing Permit Application CPS 6991-1. Received 3 May 2016 (DER Ref:A1100634)

Shire of Serpentine-Jarrahdale (2016b) Advice received in relation to Clearing Permit Application CPS 6991-1. Received 12 April 2016 (DER Ref:A1100628)

Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <http://florabase.dpaw.wa.gov.au/> (Accessed April 2016).