



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 6862/1

File Number: DER2015/002818-1

Duration of Permit: From 26 March 2016 to 26 March 2018

PERMIT HOLDER

James Allison Allan

Patricia Joan Allan

LAND ON WHICH CLEARING IS TO BE DONE

Lot 18 on Plan 85, Little Grove.

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.8 hectares of native vegetation within the area cross hatched yellow on attached Plan 6862/1.

CONDITIONS

Nil.

A handwritten signature in black ink that reads "S. Weighell".

Simon Weighell
A/MANAGER
CLEARING REGULATION

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

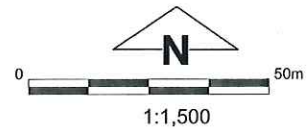
25 February 2016

Plan 6862/1



Legend

-  Imagery
-  Clearing Instruments Activities
-  Roads
-  Local Government Authority
-  Cadastre



(Approximate when reproduced at A4)
GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

S. Weighell Date *25/2/16*
Simon Weighell

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



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WESTERN AUSTRALIA
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1. Application details

1.1. Permit application details

Permit application No.: 6862/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Mrs Patricia Joan Allan
Mr James Allison Allan

1.3. Property details

Property: LOT 18 ON PLAN 85, LITTLE GROVE
Local Government Authority: ALBANY, CITY OF
DER Region: SOUTH COAST
DPaW District: ALBANY
Localities: LITTLE GROVE

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 25 February 2016
Reasons for Decision: The clearing application 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 is not likely to be at variance to any of the clearing principles.

Through assessment it has been 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 423 is described as shrublands; <i>Acacia</i> scrub-heath (unknown spp.) (Shepherd et al. 2001).	The application is to clear 0.8 hectares of native vegetation within Lot 18 on Plan 85, Little Grove, for the purpose of fire hazard reduction and landscaping.	Completely Degraded; No longer intact, completely/almost completely without native species (Keighery 1994). To Very Good; Vegetation structure altered; obvious signs of disturbance (Keighery 1994).	The condition of the vegetation under application was determined via aerial imagery and photos provided by the applicant (Vasilii 2016).

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

Proposed clearing is not likely to be at variance to this Principle

The application is to clear 0.8 hectares of native vegetation within Lot 18 on Plan 85, Little Grove, for the purpose of fire hazard reduction and landscaping. The vegetation under application consists of regenerated coastal heath, which was previously parkland cleared (Vasilii 2016), in very good (Keighery 1994) to completely degraded (Keighery 1994) condition. There are areas in completely degraded (Keighery 1994) condition where the vegetation is predominately planted blue gums (*Eucalyptus globulus*) with minimal native understorey. There are several cleared tracks intersecting the application area.

Seventeen terrestrial fauna species listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* have been recorded within the local area (10 kilometre radius) (Parks and Wildlife 2007-). The area under application may provide suitable habitat for fauna species, including the endangered western ringtail possum (*Pseudocheirus occidentalis*), however the local area retains approximately 60 per cent native vegetation and the application area is located within close proximity to large remnants of vegetation in better condition than the application area, which are likely to provide significant habitat for these species.

Forty eight priority flora species have been recorded within the local area (10 kilometre radius), of which ten are mapped on the same soil and vegetation type as the application area. Of these ten species, seven are listed as priority 3 and priority 4 flora species. Priority 3 species are known from several locations, and do not appear to be under imminent threat. Priority 4 species are considered to have been adequately surveyed, and are considered not currently threatened or in need of special protection, but could be if present circumstances change. Given the proposed clearing will not remove the entire extent of native vegetation on the property, if any Priority 3 or Priority 4 flora species were present, it is likely that individuals would persist. Therefore the clearing as proposed is not likely to have a significant impact on the conservation status of any Priority 3 or Priority 4 flora species.

Three Priority 2 flora species have been recorded within the local area (10 kilometre radius) on the same mapped soil and vegetation type as the application area. Given the vegetation under application was previously parkland cleared, and the priority flora species under consideration do not favour disturbed areas (Western Australian Herbarium 1998-), the application area is not likely to provide habitat to these species.

Given the presence of large remnants of higher quality vegetation within the local area, and the previously disturbed vegetation under application, the vegetation proposed to be cleared is not likely to contain a high level of biodiversity and therefore the proposed clearing is not likely to be at variance to this principle.

Methodology References:
Keighery (1994)
Parks and Wildlife (2007-)
Vasiliu (2016)
Western Australian Herbarium (1998-)

GIS Databases:
- SAC bio datasets accessed January 2016
- Virtual Mosaic

(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 **Proposed clearing is not likely to be at variance to this Principle**
Seventeen terrestrial fauna species listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* have been recorded with the local area (10 kilometre radius). These species are; burrowing bettong (*Bettongia lesueur*), forest red-tailed black-cockatoo (*Calyptorhynchus banksii* subsp. *naso*), Baudin's cockatoo (*Calyptorhynchus baudinii*), Carnaby's cockatoo (*Calyptorhynchus latirostris*), western bristlebird (*Dasyornis longirostris*), chuditch (*Dasyurus geoffroii*), malleefowl (*Leipoa ocellata*), bilby (*Macrotis lagotis*), dibbler (*Parantechinus apicalis*), western ground parrot (*Pezoporus flaviventris*), ground parrot (*Pezoporus wallicus*), red-tailed phascogale (*Phascogale calura*), southern brush-tailed phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*), Gilbert's potoroo (*Potorous gilbertii*), western ringtail possum (*Pseudocheirus occidentalis*), quokka (*Setonix brachyurus*), and Western Archaeid Spider (*Zephyrarchaea mainae*) (Parks and Wildlife 2007-).

The area under application may provide habitat for western ringtail possum (Parks and Wildlife 2016). Western ringtail possums are most common in coastal or near coastal forest that includes *Agonis flexuosa* (DotE 2016a). Although *Agonis flexuosa* is present within the application area, given the presence of large remnants of higher quality vegetation within close proximity to the application, the vegetation proposed to be cleared is not likely to provide significant habitat for this species.

In addition, corridors of vegetation in similar condition to the vegetation proposed to be cleared will be retained within the property which will allow fauna species utilising the application area to continue to move through the area.

The proposed clearing of 0.8 hectares of vegetation within a highly vegetated landscape is unlikely to significantly impact on fauna. The clearing as proposed is not likely to be at variance to this principle.

Methodology References:
DotE (2016a)
Parks and Wildlife (2007-)
Parks and Wildlife (2016)

GIS Databases:
- Virtual Mosaic

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments **Proposed clearing is not likely to be at variance to this Principle**
Ten rare flora species have been recorded within the local area (10 kilometres), of which three occur on the same mapped soil and vegetation type as the application area.

The closest species was recorded approximately 2.5 kilometres from the application area. This species grows on or beside granite outcrops (Western Australian Herbarium 1998-).

The second rare flora species is found on white, grey or yellow sand and gravel in association with *Agonis flexuosa*, *Allocasuarina fraseriana*, *Banksia sessilis*, *Phyllanthus calycinus*, *Adenanthos sericeus*, *Allocasuarina humilis*, *Amperea ericoides*, *Anarthria prolifera*, and *Hibbertia racemose* (Western Australian Herbarium 1998-). This species is known from only one locality within Torndirrup Nation Park.

The third rare flora species grows in seasonally damp, shallow sandy-clay over granite soils or in gravelly soils from decomposed laterite over granite (DotE 2016b). This species occurs in saddles between summit rocks in association with heath vegetation (DotE 2016b)

Given the vegetation under application was previously parkland cleared, the rare flora species under consideration do not favour disturbed areas, and the lack of granite or other rock outcrops within the application area, there is not likely to be suitable habitat for any of these species within the application area. Therefore the proposed clearing is not likely to be at variance to this principle.

Methodology References:
DotE (2016b)
Western Australian Herbarium (1998-)

GIS Databases:
- SAC bio datasets accessed January 2016

(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 **Proposed clearing is not likely to be at variance to this Principle**
There are no threatened ecological communities (TEC) mapped within the local area (10 kilometre radius).

Given the above, the vegetation under application is not likely to comprise of a TEC or be necessary for the maintenance of a TEC.

The clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Databases:
- SAC bio datasets accessed January 2016

(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 **Proposed clearing is not likely to be at variance to this Principle**
The local area (10 kilometre radius) is relatively highly vegetated with approximately 60 per cent vegetation remaining.

The area under application is located within the Warren Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 79 per cent of its pre-European vegetation extent remaining (Government of Western Australia 2014).

The vegetation under application is mapped as Beard vegetation association 423 of which there is approximately 80 per cent of pre-European extent remaining within the Warren bioregion (Government of Western Australia 2014).

The area under application is located within the City of Albany, which retains approximately 36 per cent pre-European extent (Government of Western Australia 2014).

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).

Given the local area, IBRA bioregion, local government authority and mapped Beard vegetation association all retain over the 30 per cent threshold, the application area does not occur in an area that has been extensively cleared. The proposed clearing is not likely to be at variance to this principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed Lands (%)
IBRA Bioregion				
Warren	833 986	660 315	79	85
Shire				
City of Albany	431 369	156 398	36	26
Beard Vegetation Association in Bioregion*				
423	15 176	12 165	80	37

Methodology References:
Commonwealth of Australia (2001)
*Government of Western Australia (2014)

GIS Databases:
- IBRA Australia
- NLWRA, Current Extent of Native Vegetation
- Pre-European Vegetation
- Virtual Mosaic

(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 Proposed clearing is not likely to be at variance to this Principle

There are no watercourses or wetlands mapped within the application area. The nearest watercourse or wetland is a swamp, which is located approximately 800 metres southwest of the application area.

Given the distance to the nearest watercourse or wetland, the vegetation under application is not likely to be growing in association with a watercourse or wetland. Therefore, the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Databases:
- Hydrography, linear
- Hydrography, hierarchy

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments Proposed clearing is not likely to be at variance to this Principle

The soil within the application area is mapped as Ca20, which Northcote et al. (1960 - 1968) describes as coastal dunes and plains: chief soils are leached sands of the inland dunes where there are swampy interdune flats of leached sands. Associated are unconsolidated dunes of calcareous sands and a plain also of calcareous sands with small freshwater swamps fronting the coast. The dunes of leached sands are underlain by calcareous sandy materials at depths of 3-7 feet.

The Department of Agriculture and Food Western Australia has mapped the associated land degradation risk for the majority of the application area as:

- 30 - 50 per cent of the map unit has a high to extreme water erosion risk (third highest risk rating out of six risk categories); and
- 30 - 50 per cent of the map unit has a high to extreme salinity risk (third highest risk rating out of six risk categories); and
- Less than three per cent of the map unit has a moderate to very high waterlogging risk (lowest risk rating out of six risk categories); and
- Greater than 70 per cent of the map unit has a high to extreme wind erosion risk (highest risk rating out of six risk categories).

The groundwater salinity within the application area is 500-1000 milligrams per litre of total dissolved solids. This level of groundwater salinity is considered to be marginal.

Given the presence of sandy soils within the application area and mapped high level of wind erosion risk, there is the potential for wind erosion to occur post clearing. However, given the relatively small area to be cleared and vegetation to be retained surrounding the cleared area, there is not likely to be significant wind erosion.

Therefore the application is not likely to be at variance to this principle.

Methodology References:
Northcote et al. (1960-68)

GIS Databases:
- Groundwater Salinity, Statewide
- Soils, Statewide
- Water Erosion
- Waterlogging
- Wind Erosion

(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 Proposed clearing is not likely to be at variance to this Principle

A number of conservation areas occur within the local area (10 kilometre radius), the closest being Torndirrup National Park located approximately 530 metres from the area under application.

Given the local area is relatively highly vegetated with approximately 60 per cent vegetation remaining, it is not likely that the proposed clearing will impact on the environmental values of any conservation area.

The clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Databases:
Parks and Wildlife 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 Proposed clearing is not likely to be at variance to this Principle

There are no watercourses or wetlands mapped within the application area. The nearest watercourse or wetland is a swamp, which is located approximately 800 metres southwest of the application area.

The groundwater salinity within the application area is 500-1000 milligrams per litre of total dissolved solids. This level of groundwater salinity is considered to be marginal.

Given the distance to the nearest watercourse or wetland, and the relatively small size of clearing proposed considering the extent of vegetation remaining in the local area (10 kilometre radius) (approximately 60 per cent remaining), the proposed clearing is unlikely to cause deterioration in the quality of surface or underground water.

The application area does not occur within a *Country Area Water Supply Act 1914* area or a Public Drinking Water Source Area.

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

Methodology GIS Databases:
- Country Area Water Supply Act (Part IIA) – Clearing Control Catchments
- Groundwater Salinity, Statewide
- Hydrography, Linear
- Hydrography, Hierarchy
- Public Drinking Water Source Areas

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments Proposed clearing is not likely to be at variance to this Principle

The soil within the application area is mapped as Ca20, which Northcote et al. (1960 - 1968) describes as coastal dunes and plains: chief soils are leached sands of the inland dunes where there are swampy interdune flats of leached sands. Associated are unconsolidated dunes of calcareous sands and a plain also of calcareous sands with small freshwater swamps fronting the coast. The dunes of leached sands are underlain by calcareous sandy materials at depths of 3-7 feet.

The Department of Agriculture and Food Western Australia has mapped the flood risk for the application area as less than three per cent of the map unit with a moderate to high flood risk, the lowest risk category.

Given the porous nature of the sandy soils of the application area, the proposed clearing is unlikely to cause or exacerbate flooding and is therefore not likely to be at variance to this principle.

Methodology References:
Northcote et al. (1960-68)

GIS Databases:
- Flood Risk
- Soils, Statewide

Planning instruments and other relevant matters.

Comments The clearing of 0.8 hectares of native vegetation within Lot 18 on Plan 85, Little Grove, is for the purpose of fire hazard reduction and landscaping. The applicants have advised that the application area has been previously parkland cleared (Vasiliu 2016).

The application area is zoned residential development under the town planning scheme.

There are no Aboriginal Sites of Significance mapped within the application area.

The application was advertised on 28 December 2015 for a 21 day public submission period. The application was readvertised on 15 February 2016 to include the additional clearing purpose of landscaping. No public submissions have been received in relation to this application.

Methodology GIS Databases:
- Aboriginal Sites Register System
- Town Planning Scheme Zones

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of the Environment (2016a) *Pseudocheirus occidentalis* in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: <http://www.environment.gov.au/sprat>
- Department of the Environment (2016b) Rare Flora species in Species Profile and Threats Database, Department of the Environment, Canberra. Available from: <http://www.environment.gov.au/sprat>.
- 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.
- 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.
- Parks and Wildlife (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>.
- Parks and Wildlife (2016) Advice received in relation to Clearing Permit application CPS 6862/1. Advice received 25 January 2016. DER REF: A1041059.
- 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.
- Vasiliu (2016) Supporting documentation provided for Clearing Permit CPS 6862/1. DER REF: A1046173 and A1041297.
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <http://florabase.dpaw.wa.gov.au/>