



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 6684/1

File Number: 2015/00178-1

Duration of Permit: From 7 November 2015 to 7 November 2017

PERMIT HOLDER

Mr Denis William Luef

LAND ON WHICH CLEARING IS TO BE DONE

LOT 7303 ON DEPOSITED PLAN 120502, TALBOT

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 100 native trees within the area hatched yellow on attached Plan 6684/1.

CONDITIONS

1. Vegetation management

The Permit Holder shall not clear native vegetation within 50 metres of the *riparian vegetation* of any *watercourse* or *wetland* within and/or adjacent to the area cross-hatched yellow on Plan 6684/1.

DEFINITIONS

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

riparian vegetation has the meaning given to it in Regulation 3 of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*;

watercourse has the meaning given to it in section 3 of the *Rights in Water and Irrigation Act 1914*;

wetland/s means an area of seasonally, intermittently or permanently waterlogged or inundated land, whether natural or otherwise, and includes a lake, swamp, marsh, spring, dampland, tidal flat or estuary.

A handwritten signature in black ink, appearing to read "M Warnock", written over a horizontal line.

M Warnock
SENIOR MANAGER
CLEARING REGULATION

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

8 October 2015

Plan 6684/1



Legend

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



1:6,000
(Approximate when reproduced at A4)
GDA 94 (Lat/Long)
Geocentric Datum of Australia 1994

M Warnock Date *8/10/15*

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



1. Application details

1.1. Permit application details

Permit application No.: 6684/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Mr Denis William Luelf

1.3. Property details

Property: LOT 7303 ON DEPOSITED PLAN 120502, TALBOT
Colloquial name:
Local Government Authority: YORK, SHIRE OF
DER Region: Greater Swan
DPaW District: PERTH HILLS
LCDC: YORK
Localities: TALBOT

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
-	100	Mechanical Removal	Cropping and grazing

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 8 October 2015

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: <ul style="list-style-type: none"> Beard vegetation association 4. Described as medium forest; jarrah-marri (Shepherd et al, 2001). Mattiske vegetation association Ck. Described as woodland of Eucalyptus wandoo with mixtures of Eucalyptus patens, Eucalyptus marginata subsp. thalassica and Corymbia calophylla on the valley slopes in arid and perarid zones (Mattiske and Havel, 1998). 	Area Permit to clear 100 trees within Lot 7303 on Deposited Plan 120502, Talbot, for the purposes of cropping and grazing. This application was received on 31 July 2015.	Completely Degraded; No longer intact, completely/almost completely without native species (Keighery, 1994).	Vegetation condition was determined by a site inspection undertaken by Department of Environment Regulation (DER) officers on 4 September 2015.

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 area consists of 100 trees within Lot 7303 on Deposited Plan 120502, Talbot, for the purpose of cropping and grazing. The area is located within the Jarrah Forest Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. The vegetation is mapped as jarrah-marri (Shepherd et al, 2001) and woodland of Eucalyptus wandoo with mixtures of Eucalyptus patens, Eucalyptus marginata subsp. thalassica and Corymbia calophylla (Mattiske and Havel, 1998).

A site inspection of the application area undertaken by Department of Environment Regulation (DER) (2015) identified that the vegetation proposed for clearing is in a completely degraded (Keighery, 1994) condition. This vegetation has been subjected to historical and ongoing grazing, resulting with little to no understorey.

One rare flora species and 29 priority flora species have been recorded within 10 kilometres of the application area. Given the condition of the vegetation with no understorey present due to past and current grazing (DER, 2015), clearing the vegetation under application is not likely to impact on any of these species.

Several 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-). Given the completely degraded (Keighery, 1994) condition of the vegetation, its sparse nature and as no hollow bearing trees suitable for Black cockatoo breeding have been observed (DER 2015), the proposed clearing is not likely to impact significant habitat for these species.

The closest Priority Ecological Community (PEC) or Threatened Ecological Community (TEC) to the application area is located 40 kilometres north east of the application area and is associated with wetlands of the Wheatbelt. Given the distance to the closest TEC or PEC and the condition of the vegetation, clearing vegetation under application is not likely to impact on these communities.

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

Methodology

References:

DER (2015) (Site Inspection Report)
Keighery, B.J. (1994)
Mattiske, E.M. and Havel, J.J. (1998)
Parks and Wildlife (2007-)
Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001)

GIS Databases:

- SAC Biodatasets (Accessed August 2015)
- Parks and Wildlife tenure
- Imagery

(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

The following fauna species listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 have been recorded in the local area (10 kilometre radius). These are *Calyptorhynchus baudinii* (Baudin's cockatoo), *Calyptorhynchus latirostris* (Carnaby's cockatoo), *Leipoa ocellata* (Malleefowl), *Merops ornatus* (rainbow bee-eater) and *Flaco peregrinus* (peregrine falcon) (Parks and Wildlife, 2007 -).

The vegetation under application has been mapped as woodland of *Eucalyptus wandoo* with mixtures of *Eucalyptus patens*, *Eucalyptus marginata* subsp. *thalassica* and *Corymbia calophylla* (Mattiske and Havel 1998) and jarrah-marri (Shepherd et al, 2001). A site inspection (DER, 2015) of the application area found the vegetation to be in a completely degraded (Keighery 1994) condition with little to no understorey or midstorey.

Black cockatoos nest in large hollows of eucalyptus trees and forage on the seeds, nuts and flowers of a large variety of plants including Eucalypts and Banksia's (Shah, 2006). The vegetation was dominated by mature *Eucalyptus wandoo* (wandoo) with the occasional *Eucalyptus camaldulensis* (river red gum). Although the trees were large enough to be potentially suitable as habitat trees for black cockatoos, no hollows were noted (DER, 2015).

Given the condition of the vegetation *Leipoa ocellata* (Malleefowl), *Merops ornatus* (Rainbow bee-eater) and *Flaco peregrinus* (Peregrine Falcon) are not likely to be impacted by the proposed clearing.

Given the location of the application area in close proximity to the Wandoo National Park conservation area (300 metre north and two kilometres west from the application area) that has similar native vegetation and fauna habitat in a better condition, the proposed clearing is not likely to impact significant habitat for fauna on a local or regional scale.

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

Methodology

References:

DER (2015) (Site Inspection Report)
Government of Western Australia (2014)
Keighery, B.J. (1994)
Mattiske, E.M. and Havel, J.J. (1998)
Parks and Wildlife, (2007 -)
Shah, B. (2006)
Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001)

GIS Databases:

- Carnaby Cockatoo feeding
- Threatened fauna
- SAC Biodatasets (Accessed August 2015)

(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**
One species of rare flora has been recorded with the local area (10 kilometre radius) located 8.8 kilometres west of the application area. This species occurs in white grey sand in seasonally waterlogged plains (Parks and Wildlife, 2007-).

A site inspection of the application area found the vegetation in a completely degraded (Keighery, 1994) condition and did not observe this species (DER, 2015).

The applicant has amended the application area to remove a majority of identified riparian vegetation. A buffer of 50 metres from any watercourse would ensure that potential impacts to riparian vegetation and therefore potential habitat for this species is minimised.

Given the above and the condition of the vegetation under application, this species is not likely to be impacted by the proposed clearing.

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

Methodology **References:**
DER (2015) (Site Inspection Report)
Parks and Wildlife (2007-)

GIS Databases:
-SAC Bio Datasets (Accessed August 2015)
-Soils statewide

(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 at variance to this Principle**
No Threatened Ecological Communities (TEC) have been mapped within the local area (10 kilometre radius). The closest TEC is located approximately 40 kilometres from the application area and is associated with wetlands of the Wheatbelt.

Given the above, the application is not at variance to this Principle.

Methodology **GIS Database:**
Threatened and Priority Ecological Communities (TEC / PEC) - Buffers

(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 area under application is located within the Jarrah Forest Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion retains approximately 54 percent pre-European vegetation (Government of Western Australia, 2014).

The area under application is located within the Shire of York, within which there is approximately 36 percent pre-European extent remaining (Government of Western Australia, 2014).

The vegetation under application is mapped as Beard vegetation association 4 of which there is approximately 28 percent pre-European extent remaining within the Jarrah forest bioregion (Government of Western Australia, 2014). Given the condition of the vegetation it is not likely to be representative of this vegetation association.

The application area is mapped as Mattiske vegetation associations Ck within which there is approximately 42 percent pre-European extent remaining (Parks and Wildlife, 2015).

The application area falls on the border of two land uses with extensive conservation areas to the west and agricultural land that has been largely cleared of native vegetation to the east. The local area surrounding the application area therefore retains approximately 50 percent native vegetation.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 percent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

Given the above, 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*				
Jarrah Forest	4,506,660	2,425,551	54	69
Shire*				
York, Shire of	213,260	76,101	36	66
Beard Vegetation Association in Bioregion*				
4:	1,022,713	286,905	28	23
Mattiske Vegetation Complex **				
Ck:	133,889	56,169	42	24

Methodology References:
Commonwealth of Australia (2001)
*Government of Western Australia (2014)
**Parks and Wildlife (2015)

GIS Databases:
- SAC Bio Datasets – (accessed August 2015)
- NLWRA, Current Extent of Native Vegetation
- 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 **Proposed clearing may be at variance to this Principle**
Talbot Brook, classified as a significant stream runs within Lot 7303 on Deposited Plan 120502 which flows south eventually to the Avon River via Dale River.

The original application did not include vegetation to the south of Talbot Brook, the application has been amended to remove vegetation on the north of Talbot Brook therefore riparian vegetation will not be included within the application area.

Advice received from the Department of Water (DoW, 2015) stated they did not support the clearing of waterways to ensure the protection of stream bank stability.

Given the above, the clearing may be at variance with this Principle. A buffer of 50 metres from any watercourse would ensure that potential impacts to the remainder of the riparian vegetation is minimised.

Methodology GIS Databases:
- Hydrography linear

(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**
Soils within the application area are mapped as steep ranges on dolomites and sandstones, dissected by narrow valley plains and with some stony pediments; rock outcrop frequent. Soils are all shallow; chief soils are probably loams with clays and on more basic rocks. Some red earths occur in valleys and also recent sands along creeks (Northcote et al., 1960-68).

The Department of Agriculture and Food Western Australia undertook a site inspection of the initial application area on 19 August 2015 (Commissioner of Soil and Land Conservation, 2015). The corresponding land degradation assessment report noted that the land proposed to be cleared is located on the lower and mid-slope position of the landscape and has been mapped as two soil types; Michibin Subsystem Map Unit 253CcMN and Williams Subsystem Map Unit 253CcWL. The Michibin Subsystem is described as gentle to moderate hill slopes of freshly weathered red and yellowish brown loams and clays with gravelly and rocky areas and lateritic crests. The William Subsystem is the valley floors of the major tributary streams.

These soils generally support Wandoo on the higher slopes and Casuarinas on the rocks and gravels. Drainage from the area flows south into Dale River via the Horons and Talbot Brooks.

The Commissioner of Soil and Land Conservation (2015) reported that the area to be cleared has moderate capability for the intended agricultural land use on the soils of the Michibin Subsystem and that if cleared, the risk of land degradation is low. However, there is a high risk of water erosion and waterlogging should clearing occur along the waterways and valley floors of the Williams Subsystem.

The application area was therefore amended and the Williams Subsystem soil type was removed from the application area (Luelf, 2015).

The Commissioner of Soil and Land Conservation (2015) reported that for the clearing of 50 to 60 trees within the application area, in soil type Map unit 253CcMN only, the risk of salinity, wind erosion, eutrophication, water erosion or flooding causing land degradation is low.

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

Methodology **References:**
Commissioner of Soil and Land Conservation (2015)
Northcote, K. H. et al. (1960-68)
Luelf (2015)

GIS Datasbases:
- Hydrography linear

(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**
The application area is approximately 300 metres south and two kilometres east of Wandoo National Park, an approximately 44,000 hectare A class reserve.

The vegetation is in a completely degraded (Keighery, 1994) condition and is currently being used for grazing sheep.

The Commissioner of Soil and Land Conservation 2015 reported that for the proposed clearing of 50 to 60 trees within the application area, in soil type Map unit 253CcMN only, the risk of salinity, wind erosion, eutrophication, water erosion or flooding causing land degradation is low.

Given the above, impacts to adjacent vegetation as a result of the proposed clearing are likely to be minimal, are not likely to impact on the environmental values of a conservation area and the proposed clearing is not likely to be at variance to this Principle.

Methodology **References:**
Commissioner of Soil and Land Conservation (2015)
Keighery, B.J. (1994)

GIS Datasbases:
- Parks and Wildlife Tenure
- Soils, Statewide
- Topography, Statewide

(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**
The area under application is within the Avon River Catchment area and surface water areas and irrigation districts.

The vegetation is in a completely degraded (Keighery, 1994) condition and is currently being used for grazing sheep.

The closest surface water body, Talbot Brook, classified as a significant stream runs within Lot 7303 on Deposited Plan 120502 which flows south eventually to the Avon River via Dale River. The applicant has amended the application area to remove a majority of identified riparian vegetation. An additional buffer of 50 metres from any watercourse would ensure that potential impacts to riparian vegetation are minimised. Therefore any potential impacts to the quality of surface water will be minimised.

Groundwater salinity within the area under application is estimated to be between 7,000 – 14,000 milligrams/Litre Total Dissolved Solids. The proposed clearing activity is not likely to significantly alter salinity levels within or outside the application area.

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

Methodology References:
Keighery, B.J. (1994)

GIS Databases:
- Groundwater Salinity, Statewide
- Hydrography, linear

(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 application area falls within the catchment of the Avon River. The Commissioner of Soil and Land Conservation (2015) advised that clearing of significant areas of native vegetation in the area may cause an increase in surface water runoff during high rainfall events which could contribute to stream flows. However, significant change in the risk of flooding is unlikely.

Given the condition of the vegetation and its dispersed nature, clearing the vegetation under application is not likely to be at variance to this Principle.

Methodology References:
Commissioner of Soil and Land Conservation (2015)

GIS Database:
Evapotranspiration, Area Actual

Planning instruments and other relevant matters.

Comments An Aboriginal site of Significance is mapped within the application area. The applicant is advised to contact the Department of Aboriginal Affairs in relation to their requirements under the Aboriginal Heritage Act 1972.

The Department of Water (2015) has advised that a watercourse is present within the application area and therefore clearing is not supported. The applicant has amended the application area to remove the majority of the riparian vegetation from the application area. Additionally a 50 metre buffer from the watercourse would ensure that potential impacts to riparian vegetation are minimised.

The applied area is located within the agricultural area defined in the Environmental Protection Authority's (EPA) Position Statement No.2. EPA Position Statement No. 2 states that significant clearing of native vegetation has already occurred on agricultural land, leading to a reduction in biodiversity and increase in land salinisation and therefore any further reduction in native vegetation through clearing for agriculture cannot be supported (EPA, 2000).

The application area is located within the Shire of York and zoned as "General Agriculture".

The clearing permit application was advertised on 10 August 2015 by the Department of Environment Regulation inviting submissions from the public. There were no submissions received.

Methodology References:
Commissioner of Soil and Land Conservation (2015)
DER (2015) (Site Inspection Report)
EPA (2000)

GIS Databases:
-Aboriginal Sites of Significance
-Town Planning Scheme Zones

4. References

- Commissioner of Soil and Land Conservation (2015); Land Degradation Advice and Assessment Report for clearing permit application CPS 6684/1 received 4 September 2015; Department of Agriculture and Food Western Australia (Ref. A964606).
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DER (2015) Site Inspection Report for Clearing Permit Application CPS 6684/1. Site inspection undertaken 4 September 2015. Department of Environment Regulation, Western Australia (Ref. A973158).
- EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. 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.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

- Luelf (2015). Email correspondence from applicant Mr Denis Luelf (DER Ref: A967422)
- 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.
- Parks and Wildlife (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed August 2015
- 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.
- Shah, B. (2006) Conservation of Carnaby's Black-Cockatoo on the Swan Coastal Plain, Western Australia. December 2006. Carnaby's Black-Cockatoo Recovery Project. Birds Australia, Western Australia.
- 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.