



GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 6385/1
File Number: DER2014/002989
Duration of Permit: 23 January 2016 – 31 July 2017

PERMIT HOLDER

Travis Paul Luzny
Chantelle Ann Luzny
Peter Eliseo Lucchesi
Edith Ann Lucchesi

LAND ON WHICH CLEARING IS TO BE DONE

Lot 13944 on Deposited Plan 41623, Glenoran

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 7 hectares of native vegetation within the area cross hatched yellow on attached Plan 6385/1.

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;
- (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.

James Widenbar
A/SENIOR MANAGER
CLEARING REGULATION

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

24 December 2015

Plan 6385/1



Legend

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



1:14,072

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

Geocentric Datum of Australia 1994

J Widenbar
J Widenbar Date *24/12/2015*

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



GOVERNMENT OF
WESTERN AUSTRALIA
WA Crown Copyright 2015



1. Application details

1.1. Permit application details

Permit application No.: 6385/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Travis and Chantelle Luzny and Peter and Edith Lucchesi

1.3. Property details

Property: LOT 13944 ON PLAN 41623, GLENORAN
Colloquial name:
Local Government Authority: Shire of Manjimup

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
7		Mechanical	Dam construction or maintenance

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 24 December 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
Mapped Beard vegetation association 1144 is described as tall forest; karri & marri (<i>Corymbia calophylla</i>) (Shepherd et al 2001).	The clearing of seven hectares of native vegetation within Lot 13944 on Plan 41623, Glenoran is for the purpose of dam expansion and irrigation.	Degraded; Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).	The vegetation condition and description has been determined via aerial imagery and a targeted threatened flora and fauna survey undertaken by Bio Diverse Solutions (2014).
Mattiske vegetation complex YN1 is described as: mixture of tall open forest of <i>Eucalyptus diversicolor</i> and tall open forest of <i>Corymbia calophylla</i> - <i>Eucalyptus patens</i> - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> over <i>Agonis flexuosa</i> and <i>Agonis juniperina</i> on valleys in perhumid and humid zones (Mattiske and Havel 1998).		To	The vegetation within the application area consists of tall <i>Eucalyptus diversicolor</i> and <i>Corymbia calophylla</i> forest with a well-developed mid storey of <i>Trymalium floribundum</i> , <i>Allocasuarina decussata</i> , some <i>Banksia grandis</i> on upper slopes and <i>Callistachys lanceolata</i> on the edges of the creek. The understorey was dominated by <i>Chorilaena quercifolia</i> , <i>Trymalium floribundum</i> , <i>Bossiaea aquifolium</i> subsp. <i>laidlawiana</i> , <i>Hovea elliptica</i> , <i>Hardenbergia comptoniana</i> , <i>Pteridium esculentum</i> and <i>Leucopogon verticillatus</i> with some <i>Lepidosperma effusum</i> , <i>Lepidosperma tetraquetrum</i> , <i>Thomasia paniculata</i> and <i>Taxandria linearifolia</i> on the creek edges (Bio Diverse Solutions 2014).
Mattiske vegetation complex CRb is described as: tall open forest of <i>Corymbia calophylla</i> - <i>Eucalyptus diversicolor</i> on upper slopes with <i>Allocasuarina decussata</i> - <i>Banksia grandis</i> on upper slopes in hyperhumid and perhumid zones (Mattiske and Havel 1998).		Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	

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 clearing of seven hectares within a footprint area of 12.2 hectares of native vegetation within Lot 13944 on Plan 41623 (State Forest 36), Glenoran is for the purpose of dam expansion and irrigation. The applicant proposes to increase the dam capacity of the dam located on the adjacent property increasing the flooded area of the dam by approximately seven hectares, onto Lot 13944.

The vegetation within the application area consists of tall *Eucalyptus diversicolor* and *Corymbia calophylla* forest with a well-developed mid storey of *Trymalium floribundum*, *Allocasuarina decussata*, some *Banksia grandis* on upper slopes and *Callistachys lanceolata* on the edges of the creek. The understorey is dominated by *Chorilaena quercifolia*, *Trymalium floribundum*, *Bossiaea aquifolium* subsp. *laidlawiana*, *Hovea elliptica*, *Hardenbergia comptoniana*, *Pteridium esculentum* and *Leucopogon verticillatus* with some *Lepidosperma effusum*, *Lepidosperma tetraquetrum*, *Thomasia paniculata* and *Taxandria linearifolia* on the creek edges (Bio Diverse Solutions 2014).

Three priority flora species have been recorded within the local area (10 kilometre radius). A targeted threatened flora and fauna survey of the area under application undertaken on 23 September 2014 did not identify any rare or priority flora species (Bio Diverse Solutions 2014).

Several fauna species of conservation significance have been mapped within the local area (10 kilometre radius), and based on the habitat on site, the application area provides suitable habitat for the water-rat (*Hydromys chrysogaster*), quokka (*Setonix brachyurus*), western brush wallaby (*Macropus irma*), Carnaby's cockatoo (*Calyptorhynchus latirostris*) forest red-tailed black-cockatoo (*Calyptorhynchus banksii* subsp. *naso*) and Baudin's cockatoo (*Calyptorhynchus baudinii*) (DEC 2007-). However, given the extent of native vegetation remaining within the local area (80 per cent), it is not likely that the seven hectares under application constitutes significant habitat for fauna.

There were no trees on site identified as having hollows suitable to be utilised by black cockatoos for breeding (Bio Diverse Solutions 2014).

The application area is located within Donnelly State Forest. The proposed clearing will increase the risk of weeds and dieback spreading into the adjacent vegetation located within the State Forest. Weed and dieback mitigation measures will assist in minimising this risk.

The area under application contains vegetation in very good (Keighery 1994) condition, however it is not likely to contain rare or priority flora or significant habitat for fauna.

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

Methodology

References:

Bio Diverse Solutions (2014)

DEC (2007 -)

Keighery (1994)

GIS Databases:

- SAC Bio Datasets (Accessed December 2015)

- NLWRA, Current Extent of Native Vegetation

(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

Several fauna species of conservation significance have been recorded within the local area (10 kilometre radius) including the water-rat (*Hydromys chrysogaster*), quokka (*Setonix brachyurus*), western brush wallaby (*Macropus irma*), Carnaby's cockatoo (*Calyptorhynchus latirostris*) forest red-tailed black-cockatoo (*Calyptorhynchus banksii* subsp. *naso*), Baudin's cockatoo (*Calyptorhynchus baudinii*), western ringtail possum (*Pseudocheirus occidentalis*), southern brush-tailed phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*) and western mud minnow (*Galaxiella munda*) (Parks and Wildlife, 2007-).

The application area provides suitable habitat for the water-rat (*Hydromys chrysogaster*), quokka (*Setonix brachyurus*) and western brush wallaby (*Macropus irma*), and suitable foraging habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*), forest red-tailed black-cockatoo (*Calyptorhynchus banksii* subsp. *naso*) and Baudin's cockatoo (*Calyptorhynchus baudinii*). The quokka and three species of black cockatoo are all classified as rare or likely to become extinct and declared to be in need of special protection under the Wildlife Conservation (Specially Protected Fauna) Notice 2014. The water-rat and western brush wallaby are classified as Priority 4 species by the Department of Parks and Wildlife.

A targeted flora and fauna survey undertaken within the application area identified potential roosting and foraging habitat for the black cockatoo species. No evidence that the black cockatoos are using the area under application was identified, however evidence of foraging by the Baudin's cockatoo has been observed within a

nearby orchard (Bio Diverse Solutions 2014).

No hollows suitable for breeding by black cockatoos or southern brush-tailed phascogale were identified within the application area (Bio Diverse Solutions 2014).

The application area is currently unsuitable for the quokka due to the heavy leaf litter and trash levels particularly in the southern portion of the application area. Some old collapsed and overgrown quokka runnels were identified however there is no evidence of faecal material, diggings or recent runnels to suggest that this species utilises the site (Bio Diverse Solutions 2014).

The applicant has observed the presence of the water rat within the existing dam approximately three years ago. This species has not been observed since and no evidence that this species still occupies the area under application was identified during the fauna survey undertaken within the application area (Bio Diverse Solutions 2014). If this species does currently exist within the area under application, the clearing proposed by the method of flooding is not likely to have a negative impact on this species given its habitat and feeding preferences (Bio Diverse Solutions 2014).

Suitable habitat for the western mud minnow maybe located within the minor watercourse located within the application area. The fauna survey undertaken within the application area did not identify evidence of the species being present within the application area (Bio Diverse Solutions 2014). The clearing proposed is not likely to have a significant impact on this species as habitat in better condition is located within the local area (Bio Diverse Solutions 2014).

There were no peppermint trees identified on site, which are the preferred habitat for western ringtail possums, therefore the application area is not likely to provide significant habitat for this species.

Although the application area provides suitable habitat for fauna species, it is not considered to be significant, particularly given the presence of extensive vegetation within nearby conservation areas surrounding the application area. The Shire of Manjimup retains approximately 84 per cent of its pre-European vegetation extent of which 94 per cent of this is within the Department of Parks and Wildlife estate (Government of Western Australia 2014), and the local area retains approximately 80 per cent native vegetation.

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

Methodology References:
Bio Diverse Solutions (2014)
Parks and Wildlife (2007 -)
Government of Western Australia (2014)

GIS Databases:
- SAC Bio Datasets (Accessed January 2015)
- NLWRA, Current Extent of Native Vegetation

(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**
There is no rare flora mapped within the local area of the application (10 kilometre radius). A targeted threatened flora and fauna survey within the area under application undertaken on 23 September 2014 did not identify any rare flora species (Bio Diverse Solutions 2014).

Given the above, the vegetation under application is not likely to include, or be necessary for the continued existence of rare flora.

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

Methodology References:
Bio Diverse Solutions (2014)

GIS Databases:
- SAC Bio Datasets (Accessed December 2015)

(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), therefore the vegetation under application is not likely to comprise the whole or part of a TEC.

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

Methodology GIS Databases:
- SAC Bio Datasets (Accessed December 2015)

(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 at variance to this Principle**
 The local area surrounding the application (10 kilometre radius) is extensively vegetated with approximately 80 per cent native vegetation remaining.

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).

The Warren Bioregion, Shire of Manjimup, mapped Beard vegetation association (1144) and Mattiske vegetation complexes YN1 and CRb retain approximately 79, 84, 80, 81 and 86 per cent of their pre-European vegetation extent respectively (Government of Western Australia, 2014 and Parks and Wildlife, 2015). These values are all considerably greater than the abovementioned 30 per cent threshold.

The application area contains vegetation in a very good (Keighery 1994) condition, however the area under application is not within an area that has been extensively cleared.

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

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed Lands (%)
IBRA Bioregion*				
Warren	833,985	660,315	79	84
Shire*				
Shire of Manjimup	697,368	586,852	84	93
Beard vegetation association in Bioregion*				
1144	159,668	128,191	80	92
Mattiske vegetation complex**				
YN1	22,494	19,248	81	77
CRb	52,753	45,392	86	81

Methodology **References:**
 -Government of Western Australia (2014)*
 -Commonwealth of Australia (2001)
 -Keighery (1994)
 - Parks and Wildlife (2015)**

GIS Databases:
 -NLWRA, Current Extent of Native 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 is at variance to this Principle**
 A minor watercourse intersects the area under application. A dam is mapped approximately 35 metres from the area under application. Therefore the vegetation under application is considered to be growing in association with a watercourse.

The clearing as proposed is for the purpose of dam expansion and irrigation where by the area under application will be impacted by the inundation as a result of the proposed dam extension. The clearing as proposed as a result of expanding the existing nearby dam is not likely to have a significant impact on the environmental values of this watercourse.

Given the above the clearing as proposed is at variance to this principle.

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

Two soil types have been mapped within the area under application being:

Tc6: Dissected lateritic plateau of hilly relief at moderate elevation: chief soils of the dissected hilly areas are hard acidic yellow mottled soils with some hard acidic red mottled soils and brown earths, all containing ironstone gravels; some soils on major stream terraces (Northcote et al 1960 - 1968).

Uc1: Steep hilly to hilly dissected lateritic plateau with steep valley side slopes: chief soils are hard, and also sandy, neutral, and also acidic, yellow and yellow mottled soils, with conspicuous but relatively smaller areas of red earths (Northcote et al 1960 - 1968).

The proposed dam expansion within Lot 9807 will result in the flooding and/or waterlogging of the application area, however this will be maintained within the confines of the application area and will not encroach into surrounding areas of native vegetation.

The proposed clearing of seven hectares of native vegetation within a largely vegetated landscape by the method of flooding is not likely to cause appreciable land degradation.

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

Methodology References:
- Northcote et al (1960 – 1968)

GIS Databases:
- Soils, statewide

(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 may be at variance to this Principle

The application area is mapped within Donnelly State Forest. Parks and Wildlife (2014) has advised that there are no known threatened flora or fauna populations present within the application area that will be negatively affected by the dam site extension. The clearing as proposed is not likely to have a significant impact on the environmental values of this conservation area.

The clearing as proposed may indirectly impact the Donnelly State Forest through the spread of weeds and dieback. Weed and dieback management practices will help mitigate this risk.

Given the above the clearing as proposed may be at variance to this principle.

Methodology References:
- Parks and Wildlife (2014)

GIS Databases:
-DPaW 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

A minor watercourse intersects the area under application. A dam is mapped approximately 35 metres from the area under application. The clearing proposed by method of flooding as result of expanding the nearby existing dam may cause a minor increase in sedimentation of the watercourse however it is not likely to cause a significant deterioration in the quality of the surface water within this watercourse.

Groundwater salinity mapped within the application area is between 500 and 1000 milligrams per litre (marginal). Given this low salinity level, it is considered that the proposed clearing will not lead to a perceptible rise in the watertable and thus an increase in groundwater salinity levels.

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

Methodology 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 proposed dam expansion within Lot 9807 will result in the flooding of the application area, however this will be maintained within the confines of the application area and will not encroach into surrounding areas of native vegetation. The proposed clearing is not likely to cause or exacerbate flooding within vegetation adjacent to the application area or within the local area (10 kilometre radius).

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

Methodology GIS Databases:
-Hydrography, linear

Planning instruments and other relevant matters.

Comments The Shire of Manjimup (2015) has advised that the property is zoned by Local Planning Scheme No. 4 as 'State Forest' and planning approval for clearing of vegetation is not required in this zone. If the expanded edge of the dam and/or dam wall is to be less than 20 metres from any lot boundary, Shire planning approval for dam works will be required. The dam wall is currently located approximately 30 metres from the boundary of Lot 9807, the applicant intends to increase the height of the wall by three metres only.

The Department of Water (DoW 2014a) has advised that the proposed clearing site lies within the 1 September 1978 Country Areas Water Supply Act 1947 (CAWS Act) gazetted Warren River Water Reserve. The reserve is not currently located in a Public Drinking Water Source Area hence no priority source protection has been assigned or is proposed. The catchment has however been subject to CAWS Act native vegetation clearing controls since December 1978 to prevent salinisation of water resources.

DoW records show no clearing history for Lot 13944. However, CAWS Act Licences to Clear LCR259 and LCR596 for three hectares and 52 hectares respectively were issued for a neighbouring portion of the applicant's holdings, which includes Lots 5187, Lot 9533 and Lot 9807.

The proposed clearing is located within Zone D of the catchment. This is a low salinity risk area where DoW Policy and Guideline for the "Granting of Licences to Clear Indigenous Vegetation" provide for the grant of a licence to clear subject to the statutory requirement that 10 per cent of the land in question remains uncleared. Analysis of aerial imagery indicates that 96.2 per cent of native vegetation would remain on Lot 13944 post clearing. It is therefore advised that DoW has no objection to the proposed clearing (DoW 2015).

DoW (2014b) has advised that the proposed clearing occurs within the Warren River and Tributaries Surface Water Area as proclaimed under the Rights in Water and Irrigation Act 1914. Any interference with the watercourse will require a permit to interfere with bed or banks from DoW. A permit to interfere with bed or banks has been applied for and is currently being processing by DoW. The applicant has a current surface water licence.

DoW (2014c) has advised the applicant that it undertakes to grant a permit to allow an amendment to the existing dam by increasing the capacity by up to 350, 000 kilolitres, from the current 250, 000 kilolitres to a maximum 600, 000 kilolitres under Regulation 8(2) of the Rights in Water and Irrigation Regulations 2000. The Permit is subject to the following information being provided to the Department:

- Evidence of a valid lease for all areas in Lot 13944 on Plan 41623 that will be affected by the proposed dam enlargement.
- Evidence that the proposed dam enlargement is a permissible activity within the area of the lease.

The South West Aboriginal Land and Sea Council (2014) has advised the applicant that it is satisfied that all issued regarding native title and indigenous heritage have been considered and the project will not impact on these values.

The area under application is zoned 'State Forest and other Forest Reserves' under the local town planning scheme. The applicant has a lease (1974/97) issued by the Conservation Commission of Western Australia that includes the area under application. The lease expires on the 31 July 2017.

Methodology References:
DoW (2014a)
DoW (2014b)
DoW (2014c)
Shire of Manjimup (2015)
South West Aboriginal Land and Sea Council (2014)

4. References

- Bio Diverse Solutions (2014) Targeted threatened flora and fauna survey of flood back area associated with a proposed dam development on Lot 9807 Seven Day Road, Manjimup. DER Ref: A840759
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DoW (2014a) Advice for Clearing Permit Application Clearing Permit CPS 6385/1. DER Ref: A859799
- DoW (2014b) Advice for Clearing Permit Application CPS 6385/1. Department of Water. DER Ref: A853832
- DoW (2014c) Application for a 11/17/21A Permit to Interfere with Bed and Banks. Department of Water. DER Ref: A840759.
- 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.
- Parks and Wildlife (2014) Proposed Increase In Lease Area & Commercial Dam site Lease 1974/97 & Approvals Process. DER Ref: A840759.
- 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.
- 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.
- Parks and Wildlife (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed December 2015
- 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 Manjimup (2015) Advice for Clearing Permit Application 6385/1. Western Australia. DER Ref: A851667
- South West Aboriginal Land and Sea Council (2014) Dam Extension & DpaW Land & South West Boojarah (SWB) Working Party. Western Australia. DER Ref: A840759.