



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 6113/1
Permit Holder:	Dean Rodney Ryan Glen James Ryan
Duration of Permit:	24 October 2015 to 24 October 2020

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of horticulture and grazing.

2. Land on which clearing is to be done

Lot 107 on Deposited Plan 48202, Quinninup
Unnamed Road reserve (PIN 11534977), Quinninup

3. Area of Clearing

The Permit Holder must not clear more than 5.035 hectares of native vegetation and 51 native trees within the area hatched yellow on attached Plan 6113/1.

4. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

PART II – MANAGEMENT CONDITIONS

5. Avoid, minimise etc clearing

In determining the amount of native vegetation to be cleared for the purposes of horticulture and grazing, the Permit holder must have regard to the following principles, set out in order of preference:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

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



M Warnock
SENIOR MANAGER
CLEARING REGULATION

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

24 September 2015



1. Application details

1.1. Permit application details

Permit application No.: 6113/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Dean and Glen Ryan

1.3. Property details

Property: ROAD RESERVE - 11534977, QUINNINUP
LOT 107 ON PLAN 48202, QUINNINUP
Local Government Authority: Shire of Manjimup
DER Region: Warren

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
5.035	51	Mechanical Removal	Horticulture and grazing

1.5. Decision on application

Decision on Permit: **Granted**
Application:
Decision Date: 24 September 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 application area is mapped as Beard Vegetation Association 1144 which is described as tall forest; karri and marri (<i>Corymbia calophylla</i>) (Shepherd et al, 2001).	The applicant proposes to clear 5.035 hectares of native vegetation and 51 native trees for the purposes of horticulture and grazing.	Completely Degraded; No longer intact, completely/almost completely without native species (Keighery, 1994).	The vegetation condition was assessed through a site inspection conducted by Department of Environment Regulation (DER) officers (DER, 2014).
The application area is mapped as Mattiske Vegetation Complex's (Mattiske and Havel, 1998):		To	The site inspection determined that the majority of the vegetation under application is in a completely degraded condition (Keighery, 1994).
Wheatley WH1: Tall open forest of <i>Eucalyptus diversicolor</i> - <i>Corymbia calophylla</i> on slopes and tall open forest of <i>Eucalyptus patens</i> on valley floor in perhumid and humid zones.		Degraded; Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994)	
Crowea CRy: Tall open forest of <i>Corymbia calophylla</i> with mixture of <i>Eucalyptus marginata</i> subsp. <i>marginata</i> and <i>Eucalyptus diversicolor</i> on uplands in hyperhumid and perhumid zones.			

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 original application was to clear 20.51 hectares of native vegetation within Lot 107 on Deposited Plan 48202, Quinninup, for the purposes of horticulture, grazing and dam construction. The applicant has amended the application and reduced the size of the proposed clearing area to 5.035 hectares and 51 native trees to comply with the pro-rata allowance of 5.6 hectares total clearing for the property under the Country Areas Water Supply Act 1947.

A site inspection of the application area undertaken by the Department of Environment Regulation identified that the majority of vegetation proposed for clearing has been subject to previous disturbance and is in a degraded to completely degraded (Keighery, 1994) condition (DER, 2014). The large remnant of vegetation proposed for clearing, is largely comprised of regrowth of karri and marri trees. The mid-storey and understorey are in a completely degraded (Keighery, 1994) condition, consisting predominantly of bracken fern, weeds and introduced grasses (DER, 2014).

Thirty priority flora and six rare flora species have been recorded within the local area (20 kilometre radius). Given the history of grazing and the completely degraded (Keighery, 1994) condition of the understorey, it is unlikely rare or priority flora occur within the area under application. Therefore, the clearing proposed is unlikely to have an impact on the conservation status 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. Given that the site has undergone significant disturbance and that the fauna habitats within the application area are well represented elsewhere within the local and regional area, it is unlikely that the vegetation under application provides significant habitat for fauna indigenous to Western Australia.

There are no threatened ecological communities mapped within the local area.

The local area surrounding the application area is extensively vegetated with approximately 80 per cent of its pre-European vegetation remaining.

The proposed clearing will increase the risk of weeds spreading into adjacent vegetated areas. Weed management practices will assist in mitigating this risk.

Given that the majority of the vegetation proposed for clearing has been subject to significant disturbance and the application area is within an area well represented by National Parks, State Forest and Natures Reserves, the proposed clearing is not likely to hold a high level of biological diversity and is not likely to be at variance to this principle.

Methodology

References:

- DER (2014)

GIS Databases:

- NLWRA, Current Extent of Native Vegetation
- SAC Bio Datasets (Accessed September 2015)
- Parks and Wildlife Tenure

(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

Seven fauna species listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 have been recorded within a 10 kilometre radius and may occur in the application area. These species include the forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*), Baudin's cockatoo (*Calyptorhynchus baudinii*), Carnaby's cockatoo (*Calyptorhynchus latirostris*), chuditch (*Dasyurus geoffroii*), southern brush-tailed phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*), western ringtail possum (*Pseudocheirus occidentalis*) and brush-tailed bettong (*Bettongia penicillata* subsp. *Ogilbyi*) (Parks and Wildlife, 2007-).

The preferred foraging habitat for forest red-tailed black cockatoo, Baudin's cockatoo and Carnaby's cockatoo includes jarrah and marri woodlands and forest heathland and woodland dominated by proteaceous plant species such as *Banksia* sp. *Hakea* sp. and *Grevillea* sp (Commonwealth of Australia, 2012). The vegetation under application contains foraging habitat suitable for these species. However, given that the local area retains approximately 80 per cent vegetation in better condition than the application area, it is unlikely that the area under application provides significant foraging habitat.

Potential habitat trees for the three black cockatoo species have a diameter at average adult human chest height of greater than 50 centimetres. Suitable habitat trees are generally healthy but with dead limbs and broken crowns that are likely to contain hollows and roosts suitable for native fauna. A site inspection determined that the majority of the trees under application do not fit this description as they are too young to contain hollows (DER, 2014). A few trees with a diameter greater than 50 centimetres were identified, however they did not contain any visible hollows. Given the juvenile nature of the majority of trees under application, and the extensive nearby remnant vegetation surrounding the application area, significant habitat is not likely to be found within the area proposed for clearing.

The chuditch has a preference for jarrah (*Eucalyptus marginata*) forests, woodlands, mallee shrublands and heaths. They require adequate den resources and large natural areas and home sizes that are not fragmented in order for survival (Parks and Wildlife, 2012a). Given the degraded understorey of the vegetation under application, it is unlikely the area proposed for clearing will provide suitable habitat for ground dwelling fauna.

The Southern brush-tailed phascogale's (*Phascogale tapoatafa* subsp. *Tapoatafa*) preferred habitat is dry sclerophyll forests and open woodlands that contain hollow-bearing trees (Parks and Wildlife, 2012b). Given that there is no suitable habitat trees present on site, the vegetation under application is unlikely to provide significant habitat for this species.

The Western ringtail possum (WRP) is usually associated with stands of myrtaceous trees growing near swamps, water courses or floodplains (Parks and Wildlife, 2014). The western portion of vegetation proposed for clearing may provide suitable habitat for Western ringtail possums given it consists of plant species suitable for this species. However, given the small size of suitable vegetation proposed for clearing within the application area, it is unlikely to provide significant habitat for this species.

The brush-tailed bettong has a preference for open forest and woodland with a low understorey of tussock grasses or woody scrub (Parks and Wildlife, 2012c). Given the degraded understorey of the vegetation under application, it is unlikely the application area will provide suitable habitat for ground dwelling fauna.

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

- Methodology** References:
- Commonwealth of Australia (2012)
 - DER (2014)
 - Parks and Wildlife (2012a)
 - Parks and Wildlife (2012b)
 - Parks and Wildlife (2012c)
 - Parks and Wildlife (2014)
- GIS Databases:
- NLWRA, Current Extent of Native Vegetation
 - SAC Bio Datasets (Accessed September 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**
- Six records of rare flora species have been recorded within the local area (20 kilometre radius), with the closest species recorded approximately eight kilometres south east of the application area. This species inhabits granite outcrops associated with sandy soils (Western Australian Herbarium, 1998-). It is unlikely that rare flora will be present within the application area given the different soil type identified during a site inspection, the distance from the site and the largely degraded nature of the vegetation under application (DER, 2014). The proposed clearing is not likely to be at variance to this principle.

- Methodology** References:
- DER (2014)
 - Western Australian Herbarium (1998-)
- GIS Databases:
- SAC Bio Datasets (Accessed September 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 mapped within the local area (10 kilometre radius). The proposed clearing is therefore, not likely to be at variance to this principle.

- Methodology** GIS Databases:
- SAC Bio Datasets (Accessed September 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 likely to be at variance to this Principle**
- The vegetation under application has been identified as Beard vegetation association 1144 of which there is 79 per cent of its pre-European extent remaining within the Warren Interim Biogeographic Regionalisation of Australia (IBRA) Bioregion (Government of Western Australia, 2014).
- The application area is also mapped as Matiske Vegetation Complex's, Wheatley and Crowley of which 80 and 73 per cent of their pre-European extent are remaining respectively (Parks and Wildlife, 2015).
- The area under application is located within the Shire of Manjimup, within which there is approximately 84 per cent pre-European extent remaining (Government of Western Australia, 2014). Approximately 94 per cent of this vegetation falls within Department of Parks and Wildlife managed land.

The local area has approximately 80 per cent of native vegetation remaining, with the majority of this vegetation located within state forests.

Given the well represented vegetation types under application the area under application is not considered to be a significant remnant in an extensively cleared area.

Therefore, 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*				
Shire of Manjimup	697,368	586,852	84	94
Beard Vegetation Complex in Bioregion*				
1144	159,668	128,191	79	92
Mattiske Vegetation Complex in Bioregion**				
WH1	20,321	16,363	80	73
CRy	33,764	24,498	73	66

- Methodology** References:
- *Government of Western Australia (2014)
 - **Parks and Wildlife (2015)
- GIS Databases:
- 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 is not likely to be at variance to this Principle**
 A minor perennial watercourse that is a tributary of the Warren River is located 85 metres west of the application area. There are no geomorphic wetlands mapped with the area under application.

Given the distance to this watercourse, and the closest vegetation proposed for clearing are individual paddock trees, the application area is not likely to contain riparian vegetation associated to this watercourse.

Therefore the proposed clearing is not likely to be 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 may be at variance to this Principle**
 The application area is mapped within soil types Tc6 (eastern portion, 20 per cent) and Uc1 (western portion, 80 per cent). Tc6 is described as 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 (Northcote et al, 1960 - 1968). Uc1 is described as 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. Associated are areas of block laterite, gravelly and bouldery soils on tops of rises and their colluvial slopes (Northcote et al. 1960 - 1968).

The Commissioner of Soil and Land Conservation (2014) has advised that the proposed clearing may result in land degradation in the form of water erosion, given the soil types and steep land slopes present. The Department of Water (DoW, 2014a) has advised that best management practices should be employed to manage the risk of erosion including contour farming over the steep areas within the application area as well as fencing of the watercourse to protect against impacts from livestock.

Ground water salinity levels in the local area have been mapped as at 500 - 1000 milligrams per litre total dissolved solids. The Commissioner of Soil and Land Conservation (2014) has advised that no salinity was observed on site and that the risk of salinity causing land degradation is low.
 Given the above, the proposed clearing may be at variance to this principle.

The applicants have provided additional information outlining a number of management measures they propose to implement in order to minimise the risk of water erosion, soil erosion and the leaching of fertilisers from the proposed land use into surrounding water bodies.

In addition, the applicants have provided three letters of support from Agronomica Ltd, the Department of Agriculture and Food of Western Australia (DAFWA) and the Potato Marketing Corporation of Western Australia, which all advise that the applicants are actively engaged in adopting best practice soil management techniques for improving soil condition and structure as well as undertaking soil testing bi-annually to ensure fertiliser applications do not exceed crop requirements.

Methodology References:
- DoW (2014a)
- Northcote et al (1960 – 1968)
- Commissioner of Soil and Land Conservation (2014)

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 is not likely to be at variance to this Principle

The closest conservation reserve, Warren State Forest, is located 550 metres north of the application area. Given the current land use practices that already occur between the application area and the reserve it is unlikely that the proposed clearing will impact upon the environmental values of the conservation area.

Therefore the proposed clearing 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

A minor perennial watercourse that is a tributary of the Warren River is located 85 metres west of the application area. There are no geomorphic wetlands mapped with the area under application.

Ground water salinity levels in the local area have been mapped as marginal at 500 - 1000 milligrams per litre total dissolved solids. The proposed clearing is not likely to increase groundwater salinity.

Given the proposed clearing occurs 85 metres west of the minor perennial watercourse and there is a vegetated buffer protecting this watercourse, it is not likely the proposed clearing will impact surface water or groundwater quality.

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

(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 removal of remnant vegetation is not expected to contribute to flooding and the risk of the proposed clearing causing flooding is low (Commissioner of Soil and Land Conservation, 2014). Therefore, this proposal is not likely to be at variance to this principle.

Methodology References:
- Commissioner of Soil and Land Conservation (2014)

Planning instruments and other relevant matters.

Comments The original application was to clear 20.51 hectares of native vegetation within Lot 107 on Deposited Plan 48202, Quininnup, for the purposes of horticulture, grazing and dam construction. The applicant has amended the application and reduced the size of the proposed clearing area to 5.035 hectares and 51 native trees to comply with the pro-rata allowance of 5.6 hectares total clearing for the property under the Country Areas Water Supply Act 1947.

A 'licence to take water, Licence No. SWL60340(6) and a permit to 'obstruct or interfere with bed and banks', Licence No. PMB179536(1), was issued to the applicant on 12 February 2015. A permit to 'interfere with bed and banks' is no longer required, given the application was amended and no longer includes dam construction.

The Department of Water (DoW) (2014a) has advised that the proposed clearing lies within the Country Areas Water Supply (CAWS Act) gazetted Warren River Reserve. The property is located in Zone C a moderate salinity risk part of the Warren River Catchment, where DoW Policy and Guidelines for the 'Granting of Licences to Clear Indigenous vegetation' provide for the grant of a licence for constructing a dam if the subject vegetation hasn't been subject to compensation and for broad acre clearing outside riparian areas and buffers cumulative to 50 hectares on the holding. This is subject to the retention of native vegetation on at least 10 per cent of the holding area (DoW, 2014a).

DoW records show that no CAWS Act compensation payment has been made to retain native vegetation on Lot 107 (DoW, 2014a).

DoW records show that a licence (LBR715) was granted in June 1989 to clear 50 hectares of native vegetation on the original holding, which consisted of 12 properties, including Lot 107, totalling 494.5 hectares. Therefore, a pro-rata allowance of 4.17 hectares per property, outside of riparian zones is allowed. This licence was not enacted upon.

The Department of Water (2014a) had advised that they do not support the clearing of 20.51 hectares, however they had no objection to the allowable clearing of 4.17 hectares.

Since receiving this advice, the applicant has been liaising with the Department of Water regarding their clearing options and offset areas under the CAWS Act and CAWS Act Policy and Guidelines. An agreement was made after several months of negotiation and a CAWS Act Licence to Clear, Licence No. LMR1032, was issued to the applicant by the DoW on the 5 August 2015 (DoW, 2015). This CAWS Act Licence allows for the clearing of up to 17.73 hectares within three properties owned by the proponent, namely Lot 107 on Deposited Plan 48202 (5.6 hectares) and Lots 1 and 2 on Diagram 67333, Quinninup (12.13 hectares) (DoW, 2014b). The licence was granted subject to the condition that a planting offset of local native species of 4.8 hectares be undertaken within Lot 2 on Diagram 67333, (0.9 hectares), Lot 961 on Plan 44726 (2 hectares) and Lot 107 Deposited Plan 48202, Quinninup (1.9 hectares).

The Shire of Manjimup (2014) has advised that the land is zoned by Local Planning Scheme No.4 as 'Priority Agriculture' and planning approval is not required for clearing in this zone. The Shire of Manjimup (2014) has no objection to the proposed clearing.

No Aboriginal Sites of Significance have been mapped over the application area.

No submissions from the public have been received for the proposed clearing.

Methodology

References:

- DoW (2014a)
- DoW (2014b)
- Shire of Manjimup (2014)

4. References

- Commissioner of Soil and Land Conservation (2014); Land Degradation Advice and Assessment Report for clearing permit application CPS 6113/1 received 1 July 2014; Department of Agriculture and Food Western Australia (DER ref: A776588).
- Commonwealth of Australia (2012) EPBC Act referral guidelines for three threatened black cockatoo species, Canberra.
- DER (2014) Site Inspection Report for CPS 6113/1. Department of Environment Regulation, Western Australia. (A767944).
- DoW (2014a) CAWSA advice for Clearing Permit CPS 6113/1. Department of Water, Western Australia (DER Ref: A778738).
- DoW (2014b) Further CAWSA advice for Clearing Permit CPS 6113/1. Department of Water, Western Australia (DER Ref: A963013).
- 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.
- 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 (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed 21/09/2015
- Parks and Wildlife (2012a) Chuditch (*Dasyurus geoffroii*). Department of Environment and Conservation, Perth, Western Australia.
- Parks and Wildlife (2012b) Brush-tailed Phascogale *Phascogale tapoatafa* (Meyer, 1793). Department of Environment and Conservation, Perth, Western Australia.
- Parks and Wildlife (2012c) National Recovery Plan for the Woylie Bettongia *penicillata ogilbyi*. Department of Environment and Conservation, Perth, Western Australia.
- Parks and Wildlife (2014). Western Ringtail Possum (*Pseudocheirus occidentalis*) Recovery Plan. Department of Parks and Wildlife, Perth, Western Australia.
- 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.

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 (2014) Advice for Clearing Permit CPS 6082/1. Western Australia. (DER Ref: A757110).

Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <http://florabase.dpaw.wa.gov.au/> (Accessed 21/09/2015).