

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number:7990/1File Number:DER2018/000289-1-1Duration of Permit:From 7 November 2018 to 7 November 2020

PERMIT HOLDER

Eugene Peter Henningheim Gail Henningheim

LAND ON WHICH CLEARING IS TO BE DONE

Lot 9083 on Deposited Plan 201677, Channybearup

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 3.4 hectares of native vegetation within the area hatched yellow on attached Plan 7990/1.

CONDITIONS

1. Avoid, minimise and reduce the impacts and extent of clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

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

2. Dieback and weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds* and *dieback*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

3. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit, in relation to the clearing of native vegetation authorised under this Permit:

- (a) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
- (b) the date that the area was cleared;
- (c) the size of the area cleared (in hectares); and
- (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 1 of this Permit.
- (e) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 2 of this permit

4. Reporting

The Permit Holder must provide to the *CEO* the records required under condition 3 of this Permit, when requested by the *CEO* or delegated officer

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

CEO means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;

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; and

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 Biodiversity, Conservation and Attractions Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

Digitally signed by Abbie Crawford Abbie Clawford Date: 2018.10.09 12:24:37 +08'00'

Abbie Crawford MANAGER NATIVE VEGETATION REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

9 October 2018

Plan 7990/1



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34.423466°S 34.4 ✓ Imagery ✓ Icearing Instruments Activities ✓ Roads ✓ Local Government Authority ✓ Local Government Authority ✓ Officer with delegated authority under Section 20 of the Environmental Protection Act 1986 ✓ Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

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 Application details Permit application de Permit application No.: Permit type: Applicant details Applicant's name: Property details Property: 	7990/1 Area Permit Eugene Henr Gail Henning LOT 9083 ON	neim I DEPOSITED PLAN 201677, C					
Permit application No.: Permit type: 1.2. Applicant details Applicant's name: 1.3. Property details	7990/1 Area Permit Eugene Henr Gail Henning LOT 9083 ON MANJIMUP, South Coast	neim I DEPOSITED PLAN 201677, C					
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1.3. Property details	Gail Henning LOT 9083 ON MANJIMUP, South Coast	neim I DEPOSITED PLAN 201677, C					
• •	: MANJIMUP, South Coast						
Local Government Authority DWER Region: DBCA District: Localities:	CHANNYBER						
1.4. Application Clearing Area (ha) 3.4	No. Trees	Method of Clearing Mechanical Removal	For the purpose of: Fire mitigation and horticulture				
1.5. Decision on applicati Decision on Permit Applica Decision Date:	tion: Granted	Granted 9 October 2018					
Reasons for Decision:	assessed a accordance concluded t	The clearing permit application was received on 12 March 2018 and has been assessed against the clearing principles, planning instruments and other matters in accordance with section 510 of the <i>Environmental Protection Act 1986</i> . It has been concluded that the proposed is at variacne to principle (f), may be at variance to clearing principle (h) and is not likely to be at variance to the remaining clearing principles.					
	and dieback	The Delegated Officer noted that the proposed clearing may increase the risk of weeds and dieback being introduced or spread into Donnelly State Forest. Weed and dieback management measures will minimise impacts to adjacent areas.					
2. Site Information							
Clearing Description:	The application is to clear up to 3.4 hectares of native vegetation within Lot 9083 on Deposited Plan 201677, Channybearup, for the purpose of fire mitigation and horticulture.						
F	PM1, described as t on valley slopes and	application area is mapped as two Mattiske vegetation complexes: described as tall open forest of <i>Eucalyptus diversicolor</i> with mixtures of <i>Corymbia calophylla</i> alley slopes and low forest of <i>Agonis juniperina-Banksia seminuda-Callistachys lanceolata</i> on a floors in the perhumid zone; and					
A	CRb dscribed as tall open forest of <i>Corymbia calophylla-Eucalyptus diversicolor</i> on upper slopes with <i>Allocasuarina decussata-Banksia grandis</i> on upper slopes in hyperhumid and perhumid zones. (Mattiske and Havel, 1998)						
1	o Degraded; Basic veg	Good; Vegetation structure altered; obvious signs of disturbance (Keighery, 1994). Ided; Basic vegetation structure severely impacted by disturbance. Scope for regeneration of to a state approaching good condition without intensive management (Keighery, 1994).					
	Bases upon aerial imagery and a previous site inspection, the majority of the application area is in a degraded (Keighery, 1994) condition.						
Soil and Landform Type:	 The application area is mapped within two land subsystems: Pemberton Subsystem (Pimelia) (Map Unit 254PvPM) is described as 20 to 30 metres deep flat gently sloping floors, few channels (3 to 10 degrees), smooth slopes with red or yellow gradational soils, not calcareous with some red duples soils (mapped over approximately 85 per cent of the application area); Crowea (Pimelia), brown duplex phase Subsystem (Map Unit 254Pv) is described as brown gravelly duplex soils and red earths; karri-marri forest (mapped over approximately 15 per cent of the application area). (Schoknecht et al., 2004). 						

Comment:

The local area referred to in this assessment is defined as the area within a 10 kilometre radius of the application area. Aerial imagery indicates that the local area retains approximately 60 per cent native vegetation cover.

Figure 1: Map of application area



Figure 2: Photographs of vegetation within the application area



Photo 1: An example of the vegetation within the application area.



Photo 2: An example of the vegetation within the application area.

3. Assessment of application against clearing principles

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

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

The application is to clear up to 3.4 hectares of native vegetation within four areas. As indicated within Figure 1, the application areas reside alongside existing dams and as discussed in Section 2, the majority of which is in a degraded (Keighery, 1994) condition.

According to available databases, 14 terrestrial conservation significant fauna species that have been recorded within the local area. Of the recorded 14 fauna species, forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*), Baudin's cockatoo (*Calyptorhynchus baudinii*) and Carnaby's cockatoo (*Calyptorhynchus latirostris*) may use habitat within the application area for foraging, shelter or breeding. Fauna habitat and conservation significant fauna species are discussed under Principle (b).

According to available databases, four priority flora species and three rare flora species have been recorded within the local area. All four priority flora have been recorded from different soil and vegetation types as mapped within the application area, at a distance of over nine kilometres from the application area. Rare flora are discussed under Principle (c).

Noting that the majority of the application area has suffered edge effects from the previous dam construction, the distance of the priority flora to the application area and the vegetation being in a predominately degraded (Keighery, 1994) condition, it is unlikely the application area will support priority flora species.

According to available databases, no threatened ecological communities (TECs) or priority ecological communities (PEC) have been recorded within the local area. TECs are discussed further under Principle (d).

Noting, the condition of the application area, that the area is unlikely to provide habitat for rare or priority flora and does not resemble a TEC or PEC, the application area is unlikely to comprise a high level of biological diversity. The proposed clearing is not likely to be at variance to this Principle.

(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.

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

According to available databases, there are 14 terrestrial conservation significant fauna species that have been recorded within the local area. Of these fauna species, seven are listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* being woylie/brush-tailed bettong (*Bettongia penicillata* subsp. *ogilbyi*), forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*), Baudin's cockatoo (*Calyptorhynchus baudinii*), Carnaby's cockatoo (*Calyptorhynchus latirostris*), southern brush-tailed phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*), western ringtail possum (*Pseudocheirus occidentalis*) and quokka (*Setonix brachyurus*) (DBCA, 2007-).

Of the threatened fauna species listed under the *Wildlife Conservation Act 1950,* forest red-tailed black cockatoo, Baudin's cockatoo and Carnaby's cockatoo, may use habitat within the application area for foraging, shelter or breeding.

Black cockatoos breed in large hollow-bearing trees, generally within woodlands or forests or in isolated trees (Commonwealth of Australia, 2012). These species nest in hollows in live or dead trees of karri, marri, wandoo, tuart, salmon gum, jarrah, flooded gum, York gum, powder bark, bullich and blackbutt (Commonwealth of Australia, 2012). Based upon the photos provided, the application area is unlikely to contain suitable breeding habitat for black cockatoos as the karri trees are not of an appropriate size.

Black cockatoos forage on the seeds, nuts and flowers of a large variety of plants including proteaceous species (*Banksia, Hakea, Grevillea*), as well as *Allocasuarina* and *Eucalyptus* species, *Corymbia calophylla* and a range of introduced species (Valentine and Stock, 2008). Based upon the photos provided by the Commissioner of Soil and Land Conservation, the application area largely comprises of karri open woodland and is not likely to provide significant foraging habitat for black cockatoos. Considering this and that the local area retains approximately 60 per cent native vegetation cover (19,035 hectares), of which the application areas comprises 0.017 per cent of this area, and is adjacent to the Donnelly State Forest and several other conservation areas within the local area (Big Brook State Forest, Warren Stare Forest, Greater Beedelup National Park and Gloucester National Park) which comprise 1,000's of hectares of native vegetation, that is likely to be of equal or higher quality than the application area, it is considered that the application area is unlikely to comprise significant foraging habitat for black cockatoos.

The application area forms part of the South West Regional Ecological Linkage area which has a proximity value of 1a: a patch with an edge touching or <100 metres from a linkage (Molloy et al, 2009). Given that the surrounding landscape is extensively vegetated with high quality remnant vegetation within the nearby conservation areas, the application area is unlikely to be significant for the movement of fauna species.

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

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

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

According to available databases, three rare flora species have been recorded within the local area (10 kilometre radius), located approximately 2.4 kilometres, 9.3 kilometres and 9.5 kilometres from the application area. None of these species are known to occur within the habitat represented within the application area as shown below.

- Commersonia apella is likely to occur within vegetation that comprises of a dense mallee (Eucalyptus angulosa, E. conferruminata and E. cornuta) and tall shrubs (Melaleuca globifera, Hakea drupacea (burnt), Acacia myrtifolia and Haloragodendron racemosum), over moderately dense mixed shrub/herb layer of Acacia nigricans, Olax phyllanthi, Phyllanthus scaber, Thysanotus dichotomus and Muehlenbeckia adpressa close to creek lines or river banks (WA Herbarium, 1998).
- Caladenia christineae is generally associated with Meleleuca thickets on sandy, clayey loam, laterite on margins of winterwet flats, swamps and freshwater lakes (WA Herbarium, 1998).
- *Caladenia harringtoniae* is generally associated with *Meleleuca* thickets and swamps on sandy loam, winter-wet flats, and margins of lakes, creeklines and granite outcrops (WA Herbarium, 1998).

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

(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.

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

According to available databases, no TECs have been mapped within the local area. The closest TEC is located approximately 45 kilometres north west of the application area and is associated with the Scott River Ironstone Association.

Noting the distance of the nearest TEC and the mapped vegetation type within the application area, the application area is unlikely to comprise the whole or part of, or be necessary for the maintenance of a TEC.

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

(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.

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

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).

As indicated in Table 1, the remaining extents of native vegetation within the bioregion, local government authority and mapped vegetation complexes are above the 30 per cent threshold.

Aerial imagery indicates that the local area retains approximately 60 per cent native vegetation cover, with a large proportion of this vegetation occurring within conservation areas.

Noting the vegetation extents, the application area is unlikely to be significant as a remnant within an extensively cleared area. The proposed clearing is not likely to be at variance to this Principle.

Table 1: Vegetation extents (*Government of Western Australia, 2018)

	Pre-European	Current Extent	Remaining	Current Extent in DCBA Managed Lands				
	(ha)	(ha)	(%)	(ha)	(%)			
IBRA Bioregion*								
Warren	833 985	659 438	79	557 850	84.5			
Local government authority*								
Shire of Manjimup	697 368	586 344	84	550 219	94			
Mattiske vegetation complex*								
PM1 (Pemberton)	28 801	16 743	65	14 902	58			
CRb (Crowea)	52 735	45 325	85	42 940	81.5			

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Proposed clearing is at variance to this Principle

According to available databases, two watercourses are mapped as intersecting the application area. The watercourses are tributaries of the Treen Brook, a minor perennial watercourse. There are no geomorphic wetlands mapped within the local area.

Noting the presence of watercourses, the vegetation proposed to be cleared is growing in association with these watercourses. The extent of the proposed clearing in the vicinity of these watercourses is considered to be minor. Noting this and that the majority of the application is in a degraded (Keighery, 1994) condition, the proposed clearing is not likely to have a significant impact on the environmental values of these watercourses.

Given the above, the clearing is at variance to this Principle.

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

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

As discussed in Section 2, the application area is located within the Pemberton Subsystem and Crowea Subsystem (Schoknecht et al., 2004).

The Commissioner of Soil and Land Conservation advised that these map units have a low risk of land degradation in the form of wind erosion, waterlogging, water erosion, flooding, eutrophication and salinity as a result of the proposed clearing (Commissioner of Soil and Land Conservation, 2018).

Given the above, the proposed clearing is unlikely to cause appreciable land degradation. The proposed clearing is not likely to be at variance to this Principle.

(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.

Proposed clearing may be at variance to this Principle

The application area is surrounded by the Donnelly State Forest, which at its closest point is located approximately 68 metres south west of the application area and Big Brook State Forest is located 350 metres north of the application area.

The application area forms part of the South West Regional Ecological Linkage area which has a proximity value of 1a: a patch with an edge touching or < 100 metres from a linkage (Molloy et al, 2009). However, given that the surrounding landscape is extensively vegetated with high quality remnant vegetation within the nearby Donnelly State Forest and Big Brook State Forest, the application area is unlikely to be significant for the movement of fauna species between these conservation areas.

Soil disturbance and removal of native vegetation increases the risk of weeds and pathogens, such as dieback (*Phytophthora* species), being introduced or spread. The management of weeds and dieback is of particular importance, as the proposed clearing is within a high rainfall (1300 millimetres per annum) area. Weed and dieback management practices assist in mitigating the risk of introduction or spread of pathogens and invasive species into adjacent remnant vegetation and the neighbouring State Forest.

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

(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.

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

As discussed under Principle (f), two watercourses intersect the application area.

The Commissioner of Soil and Land Conservation advised that the proposed clearing is unlikely to contribute to nutrient enrichment of surface and/or groundwater bodies given the soil types present within the application area (Commissioner of Soil and Land Conservation, 2018).

Groundwater salinity within the application area has been mapped as marginal with between 500 and 1000 milligrams per litre total dissolved solids. Therefore, clearing within the application area is not likely to lead to the deterioration in groundwater quality due to salinity.

Given the above, the proposed clearing is unlikely to cause deterioration in the quality of surface or underground water. 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.

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

The Commissioner of Soil and Land Conservation advised that the proposed clearing is unlikely to cause, or exacerbate, the incidence or intensity of flooding given the soil types present within the application area (Commissioner of Soil and Land Conservation, 2018).

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

4. Planning instruments and other relevant matters.

The Department of Water and Environmental Regulation advised that the proposed clearing area lies within the *Country Areas Water Supply Act 1947* (CAWS Act) gazetted Warren River Water Reserve. The proposed clearing is located in Zone D, a low salinity risk area of the catchment, where Policy and Guidelines for the "Granting of Licences to Clear Native Vegetation" allow for the granting of a licence if the subject vegetation hasn't been subject to compensation payment and that at least one-tenth of the holding remains under native vegetation. Analysis of 2014 imagery indicates that the current level of native vegetation on the proposed holdings is around 20.6 per cent (8.6 hectares). If a permit were granted for the proposed clearing the remaining area of native vegetation over the property would be 12.4 per cent (5.2 hectares), as such, there is no objection to the proposed clearing under the CAWS Act (DWER, 2018).

The application was advertised on the Department of Water and Environmental Regulation's website on 12 March 2018 for a 21 day public submission period. No submissions were received during this period.

The Shire of Manjimup advises that the land in zoned 'Priority Agriculture' under Local Planning Scheme No.4 and planning approval for the clearing of native vegetation is not required in this zone (Shire of Manjimup, 2018).

During the assessment the applicant amended the purpose of the application from dam expansion to fire hazard reduction and horticulture. The change in purpose was due to the financial cost of the dam and the creation of the Southern Forest irrigation scheme of which the applicant was successful to secure a water entitlement.

No registered Aboriginal Sites of Significance occur within the application area.

5. References

- Commissioner of Soil and Land Conservation (2018) Advice received in relation to Clearing Permit Application CPS 7990/1. Department of Primary Industries and Regional Development (DWER Ref:A1658435).
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Commonwealth of Australia (2012) EPBC Act referral guidelines for three threatened black cockatoo species. Department of Sustainability, Environment, Water, Populations and Communities, Canberra.
- Department of Biodiversity Conservation and Attractions (DBCA) (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: http://naturemap.dpaw.wa.gov.au/. Accessed November 2017
- Department of the Environment (2015). Approved Conservation Advice (including listing advice) for the Eucalypt Woodlands of the Western Australian Wheatbelt. Canberra: Department of the Environment and Energy. Available from: http://www.environment.gov.au/biodiversity/threatened/communities/pubs/128-conservation-advice.pdf. In effect under the EPBC Act from 4 December 2015.
- Department of Water and Environmental Regulation (2018) *Country Areas Water Supply Act 1947* advice in relation to Clearing Permit Application CPS 7990/1 (DWER Ref:A1638823)
- Government of Western Australia. (2018). 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of December 2017. WA Department of Biodiversity, Conservation and Attractions. https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics.
- 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.
- Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whisson, G. (2009) South West Regional Ecological Linkages Technical Report, Western Australian Local Government Association and Department of Environment and Conservation, Perth.
- Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia Overview of Methodology and outputs' Resource Management Technical Report No. 280. Department of Agriculture.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Shire of Manjimup (2018) Planning advice received for Clearing Permit Application CPS 7990/1 (DWER Ref:A1636805).

Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <u>http://florabase.dpaw.wa.gov.au/</u> (Accessed June 2018).

GIS Databases: Aboriginal Sites of Significance DBCA Estate Groundwater salinity Hydrography, linear Remnant vegetation SAC bio datasets (accessed March 2018) Soils, Statewide Topographic contours Wheatbelt Wetlands