



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 6032/1
File Number: DER 2014/000657-1
Duration of Permit: From 14 March 2015 to 14 March 2017

PERMIT HOLDER

Marlisloc Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 2653 on Deposited Plan 203049, Kaloorup

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 1.04 hectares of native vegetation within the area hatched yellow on attached Plan 6032/1.

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 clearing 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.

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.

A handwritten signature in cursive script, 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*

12 February 2015

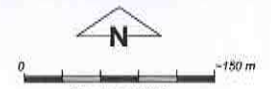
Plan 6032/1



LEGEND

- Road Centrelines
- Clearing Instruments
- Areas Approved to Clear
- Cadastre

- Local Government Authorities
- Busseton 50cm Orthomosaic - Landgate 2007



Scale 1:6000
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

M Warnock Date 12/2/15
M Warnock

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

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



Government of Western Australia
Department of Environment Regulation



Clearing Permit Decision Report

Government of Western Australia
Department of Environment Regulation

1. Application details

1.1. Permit application details

Permit application No.: 6032/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Marlisloc Pty Ltd

1.3. Property details

Property: LOT 2653 ON PLAN 203049 (House No. 995 GALE KALLOORUP 6280)

Local Government Area: City of Busselton

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 12 February 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: Beard vegetation association 1181 which is described as medium woodland, jarrah and Eucalyptus haematoxylon (Whicher Range) (Shepherd et al, 2001). Matisse Vegetation association Yelverton which is described as Allocasuarina fraseriana - Nuytsia floribunda - Agonis flexuosa - Banksia attenuata on slopes and open forest of Corymbia Calophylla - Eucalyptus patens - Eucalyptus marginata subsp. marginata on the lower slopes and woodland of Eucalyptus rudis - Melaleuca raphiophylla on valley floors in the humid zone (Matisse and Havel, 1998).	To clear up to 1.04 hectares of native vegetation within Lot 2653 on Deposited Plan 203049, Kaloorup, for the purpose of constructing a dam.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994) to Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994).	The condition of the vegetation under application was determined via a Department of Environment Regulation site inspection undertaken on 11 April 2014.

3. Assessment of application against clearing principles

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

Comments

Proposal is not likely to be at variance to this Principle

The application is to clear up to 1.04 hectares of native vegetation within Lot 2653 on Deposited Plan 203049, Kaloorup, for the purpose of constructing a dam.

The application area is mapped within Matisse vegetation association Yw which retains approximately 24 percent native vegetation. The local area surrounding the application (10 kilometre radius) retains approximately 20 percent native vegetation.

A Department of Environment Regulation site inspection (DER, 2014) described the vegetation as an open forest of Eucalyptus marginata and Corymbia calophylla in a predominantly degraded condition (Keighery, 1994). The structure of a majority of the understorey is highly modified through past grazing and its proximity to the homestead. Approximately 0.01 hectares was observed in a very good condition (DER, 2014).

Given the vegetation condition, and as a site inspection did not identify trees of an age or size suitable to contain hollows (DER, 2014), the area under application is unlikely to provide core habitat for ground dwelling, aquatic or avian fauna.

Given that contiguous native vegetation will be retained to the north of the application area, the proposed clearing is not likely to be significant in the movement of fauna through the landscape.

A federally listed threatened ecological community (TEC) falls within one kilometre of the application area. The site inspection did not reveal any species indicative of this community, given this and the degraded (Keighery, 1994) condition of a majority of the vegetation, the proposed clearing is not likely to impact upon this TEC.

Given the degraded (Keighery, 1994) condition of the vegetation and past history of grazing (DER, 2014), the application area is not likely to contain rare or priority flora or be representative of a priority ecological community.

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

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

Methodology References:
DER (2014)
Keighery (1994)

GIS Datasets:
- SacBiodataSets - accessed May 2014

(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 **Proposal is not likely to be at variance to this Principle**

Numerous 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) (DEC, 2007-).

A Department of Environment Regulation site inspection (DER, 2014) identified the vegetation as an open forest of *Eucalyptus marginata* and *Corymbia calophylla* with a predominantly degraded (Keighery, 1994) understorey. The structure of the understorey is highly modified through past grazing and its proximity to the homestead.

Given the condition of the understorey, the area under application is unlikely to provide core habitat for ground dwelling or aquatic fauna. No trees of an age or size suitable to contain hollows will be removed, therefore the application area is not likely to contain core habitat for avian fauna species.

The local area has predominantly been cleared for agriculture retaining approximately 20 percent native vegetation. The application area is mapped within Matiske vegetation association Yw which retains approximately 24 percent native vegetation. Given this the application area falls within a highly cleared landscape, however given the small degraded (Keighery, 1994) area under application, it is not likely that the vegetation constitutes a significant remnant.

The application area falls approximately one kilometre from a mapped South West Regional Ecological Linkage (Molloy et al, 2009). The area is classified as 1C as there is no greater than a 100 metre gap of continuous native vegetation between the application area and the mapped linkage line (with a maximum of two gaps). As contiguous native vegetation will remain in close proximity to the application area, clearing the vegetation under application will not remove the linkage value of the remnant.

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

Methodology References:
DER (2014)
DEC (2007-)
Molloy et al (2009)
Keighery (1994)

GIS Datasets:
- Busselton 50cm Orthomosaic ? Landgate 2007
- SacBiodataSets - accessed May 2014

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

Comments **Proposal is not likely to be at variance to this Principle**

Four rare flora species have been recorded within the local area (10 kilometre radius). Given the degraded (Keighery, 1994) condition of the vegetation and past history of grazing (DER, 2014), they are not likely to be

present within the application area.

The Department of Parks and Wildlife (2014) has advised that the application area is not likely to contain rare flora.

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

Methodology Reference:
DER (2014)
Department of Parks and Wildlife (2014)
Keighery (1994)

GIS Databases:
- SAC Biodatasets - accessed May 2014

(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 Proposal is not likely to be at variance to this Principle

The threatened ecological community (TEC), Shrublands on Southern Swan Coastal Plain Ironstones (Busselton Area), is located within 1.5 kilometres west and east of the application area. This TEC is described as a species rich plant community located on seasonal wetlands on ironstone and heavy clay soils on the Swan Coastal Plain near Busselton (DotE, 2005).

A Department of Environment Regulation site inspection (DER, 2014) did not identify the presence of any species indicative of this TEC. The application area was also noted to be in a degraded (Keighery, 1994) condition due to past grazing.

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

Methodology Reference:
DER (2014)
DotE (2005)
Keighery (1994)

GIS Databases:
- SAC Biodatasets - accessed May 2014

(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 Proposal is not likely to be at variance to this Principle

The area under application is located within the Jarrah Forest Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 54 percent of its pre-European vegetation extent remaining (Government of Western Australia, 2013).

The area under application is located within the City of Busselton, within which there is approximately 41 percent of pre-European extent remaining (Government of Western Australia, 2013).

The vegetation under application is mapped as Beard vegetation association 1181 of which there is approximately 53 percent of its pre-European extent remaining within the Jarrah Forest bioregion (Government of Western Australia, 2013).

The application falls within Mattiske vegetation association Yelverton which retained approximately 24 percent native vegetation in 2008 (Mattiske and Havel, 1998). Given the degraded condition of the area under application, the vegetation may no longer be representative of this complex.

The local area (10 kilometre radius) is highly cleared with approximately 20 percent 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 percent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

The local area (10 kilometre radius) and Yelverton complex retain less than the recommended threshold level, however given the degraded (Keighery, 1994) condition of the vegetation, lack of core fauna habitat, conservation significant flora and as contiguous native vegetation will be retained to the north of the application area, it is not likely to be a significant remnant within the local area.

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

	Pre-European (ha)	Current Extent Remaining (ha)	(%)	Extent in DEC Managed Lands (%)
IBRA Bioregion* Jarrah Forest	4,506,660	2,457,731	54	68
Shire City of Busselton*	146,478	60,765	41	67
Beard Vegetation Association in Bioregion* 1181	9,978	5,343	53	68
Mattiske Vegetation Association Yw (Yelverton)	3,841	926	24	5

Methodology References:
Commonwealth of Australia (2001)
DER (2014)
*Government of Western Australia (2013)
Keighery (1994)

GIS Databases:
- SacBiodataSets - accessed May 2014
- Hydrography Linear

(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 **Proposal is at variance to this Principle**
The application area falls along a minor perennial watercourse and is for the purpose of constructing a dam.

A Department of Environment Regulation site inspection (DER, 2014) identified wetland vegetation within the application area.

Given the above the application is at variance to this clearing principle.

Although riparian vegetation will be removed, the proposed clearing is not likely to significantly impact upon the environmental values of this watercourse.

Methodology References:
DER (2014)

GIS Datasets:
- Hydrography linear

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

Comments **Proposal is not likely to be at variance to this Principle**
Salinity within the application area is mapped as 0-500 total dissolved solids milligrams per litre. Given this the application is not likely to cause primary or secondary salinity.

As the application area will be maintained as a dam it is not likely to cause wind erosion, water erosion or eutrophication.

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

Methodology GIS Datasets:
- Hydrography linear
- Groundwater salinity 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 **Proposal is not likely to be at variance to this Principle**
Two nature reserves are located within the local area (10 kilometre radius). The Blackwood State Forest is

located approximately one kilometre south and an unnamed nature reserve is located approximately 1.5 kilometres west.

Given the condition of the vegetation, the small size of the application area in relation to the conservation reserves and the land uses in-between, it is not likely to impact the environmental values of these reserves.

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

Methodology GIS Datasets:
- Albany townsite January 2011 mosaic
- DEC Tenure
- SacBiodataSets - accessed October 2013

(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 **Proposal is not likely to be at variance to this Principle**
Salinity within the application area is mapped as 0-500 total dissolved solids milligrams per litre. Given this, the proposed clearing is not likely to deteriorate the quality of groundwater.

The application is to construct a dam, given this there may be short term sedimentation of the watercourse during the construction phase of the project. Impacts are likely to be minimal and of a short term duration.

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

Methodology GIS Databases:
- Groundwater Salinity Statewide
- Hydrography linear
- Topographic Contours, Statewide

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

Comments **Proposal is not likely to be at variance to this Principle**
Given the small size of the proposed clearing, it is not likely to be at variance to this clearing principle.

Methodology GIS Datasets:
- Hydrography linear

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments
The City of Busselton (2014) has advised that it discourages the construction of dams in riparian zones. It also recommends that if granted, native vegetation should be planted around the edge of the dam to reconnect vegetation up and down stream.
The Department of Water (2014) has advised that as the application area falls within a Rights in Water and Irrigation Act 1914 area, licences from the Department will be required. If granted, a water licence would contain conditions that are binding upon the landowner. The Department of Water (2015) has advised that a permit to construct the dam and a licence to take surface water will be issued subject to clearing approval by the Department of Environment Regulation.

No aboriginal sites of significance are mapped within the application area.

No submissions from the public were received in relation to this application.

Methodology References:
City of Busselton (2014)
Department of Water (2015)
Department of Water (2014)

4. References

- City of Busselton (2014) Advice received in relation to clearing permit application CPS 6032/1. Lot 2653 Gale Road, Kaloorup (DER Ref: A743844).
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed March 2012.
- Department of Parks and Wildlife (2014) Advice received in relation to clearing permit application CPS 6032/1. Lot 2653 Gale Road, Kaloorup (DER Ref: A744834).
- Department of Water (2014) Advice received in relation to clearing permit application CPS 6032/1. Lot 2653 Gale Road, Kaloorup (DER Ref: A742943).
- Department of Water (2015) Advice received in relation to clearing permit application CPS 6032/1. Lot 2653 Gale Road, Kaloorup (DER Ref: A862059).
- DER (2014) Site Inspection Report for Clearing Permit Application CPS 6032/1, Lot 2653 Gale Road, Kaloorup. Site inspection undertaken 11 April 2014. Department of Environment Regulation, Western Australia (DER Ref: A766068).
- DotE (2005) Shrublands on Southern Swan Coastal Plain Ironstones (Busselton Area). March 2005
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, 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.
- 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 Linkages Technical Report, Western Australian Local Government Association and Department of Environment and Conservation, Perth.
- 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.