



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 3688/1

File Number: 2010/002248-1

Duration of Permit: From 20 June 2010 to 20 June 2012

PERMIT HOLDER

Shire of Busselton

LAND ON WHICH CLEARING IS TO BE DONE

LOT 5528 ON PLAN 36824 (CYRILLEAN WAY, DUNSBOROUGH 6281)

LOT 4958 ON PLAN 13907 (CAPE NATURALISTE ROAD, DUNSBOROUGH 6281)

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.002 hectares of native vegetation and 10 native trees or shrubs within the area hatched yellow on attached Plan 3688/1.

CONDITIONS

1. Avoid, minimise etc 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. 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*:
 - (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (ii) ensure that no *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.

3. Seedlings

The Permit Holder shall plant and maintain 20 seedlings within the area hatched yellow on attached Plan 3688/1. Seedlings shall be native tree species that are indigenous to within a 10 km radius of the site.

Definitions

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

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 a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.



Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

20 May 2010

Plan 3688/1



LEGEND

Busseton 50cm Orthomosaic -

Landgate 2007

Clearing Instruments

Areas Subject to Conditions

Areas Approved to Clear

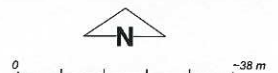
Cadastre for labelling

(cont)

- ☐ Freehold
- ☐ Crown Reserve
- ☐ State Forest / Timber Reserve
- ☐ Marine Park
- ☐ Crown Lease
- ☐ Lease / Reserve
- ☐ Lease on State Forest / Timber Reserve (cont)

- ☐ Public Roads
- ☐ Unallocated Crown Land
- ☐ Water
- Road Centrelines**
- ☐ FW
- ☐ HY
- ☐ LRO (cont)

- ☐ LRS
- ☐ MR
- ☐ N
- ☐ TR



Scale 1:1278

(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.

[Signature] Date 20/5/10
K Faulkner

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.



Department of Environment and Conservation

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1. Application details

1.1. Permit application details

Permit application No.: 3688/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Busselton

1.3. Property details

Property: LOT 5528 ON PLAN 36824 (House No. 12 CYRILLEAN DUNSBOROUGH 6281)
LOT 4958 ON PLAN 13907 (Lot No. 4958 CAPE NATURALISTE DUNSBOROUGH 6281)

Local Government Area:

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.002	10	Mechanical Removal	Landscaping

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 within the applied area is mapped as Ludlow (Lw) 'open woodland of Melaleuca raphiophylla and sedgelands of Cyperaceae-Restionaceae species on broad depressions in the subhumid zone' (Mattiske and Havel 1998) and additionally mapped by Beard (Shepherd 2007) as unit 973 'low forest; paperbark (Melaleuca raphiophylla) and 1136 'medium woodland; marri with some jarrah, wandoo, river gum and casuarina'.	0.002 ha of sedges and 10 shrubs or trees.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Vegetation condition confirmed through aerial photography (Busselton 50 cm ecw Landgate 2007) and described within the Dugalup Brook Management Plan (Irvine and Elscot 2008).

3. Assessment of application against clearing principles

Comments

The proposal to clear up to 10 shrubs or trees and 20 square metres of sedges (which will be translocated) of native vegetation for the purpose of landscape (river) restoration is unlikely to have any significant environmental impacts. The vegetation is considered to be in a 'good' to 'degraded' (Keighery 1994) condition.

There are numerous declared rare flora species records within the local area (10 km radius) but given that the proposed clearing is to selectively remove 10 shrubs/trees and a clump of sedges, there is not likely to be any impacts on any threatened flora. There are four threatened ecological communities (TEC) in the local area but none are mapped within the applied area. Furthermore, the limited selective removal of trees/shrubs and sedges is not likely to have any impact on any of these TEC.

The vegetation to be cleared is not well represented in the local area and is riparian vegetation. Therefore a revegetation condition will be placed on the permit to offset the loss of the 10 trees/shrubs removed. The applied area is within the mapped Western Ringtail Possum habitat area and the Shire of Busselton has indicated that large mature trees which may provide habitat for possums will be retained to ensure there are no impacts on this species. Given the location of the reserve in a town centre, the 'degraded' to 'good' (Keighery 1994) condition of the vegetation, and the limited amount of clearing proposed, it is not expected to have a significant detrimental impact on fauna.

The proposed clearing is within very close proximity to a mapped watercourse, the Dugalup Brook and the vegetation proposed to be cleared are components of riverine vegetation. However the purpose of the clearing is within the actions described for the Dugalup Brook Management Plan (Irvine and Elscot 2008). Given the proposed timing for the clearing (prior to winter rainfall) and the limited amount of clearing proposed, there is not likely to be any significant impact to surface or groundwater as a result of the proposed clearing. The Dugalup Brook has been assessed as an erosion prone stream (White 2006) but it is expected that the removal of vegetation outside of the winter period and the continued management of the reserve by the Shire of Busselton should reduce the potential for erosion. There may be some potential to introduce or spread dieback and weeds through the proposed works and as such permit conditions to manage these potential impacts will be placed on the permit.

It is considered that the proposed clearing is at variance to Principle (f), may be at variance to Principle (b) and is not likely to be at variance with any of the remaining clearing principles.

Methodology References:
 Irvine and Elscot (2008)
 Keighery (1994)
 White (2006)

GIS Layers:
 - Busselton 50cm ecw - Landgate 2007
 - DEC Tenure - DEC 2010
 - Clearing Regulations - Environmentally Sensitive Areas - May 2005
 - Groundwater Salinity, statewide - DoW 2006
 - Hydrogeographic Catchments - DoW 2007
 - Hydrogeology, statewide - DOW 2006
 - Hydrography, linear - DOW 2006
 - Matiske Vegetation Complexes (1998)
 - Pre-European vegetation - DA 2001
 - Mean Annual Rainfall Isohytes - DEC 2005
 - SAC Biodatasets - Accessed April 2010
 - Ringtailed Possum Areas - DEWHA 2008

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

Comments

No submissions from the public have been received.

A permit to interfere with bed or banks of a watercourse is not required as this section of the Dugalup Brook is not a proclaimed surface water area under the Rights in Water and Irrigation Act 1914.

The clearing is for up to 0.002 hectares and 10 shrubs or trees to undertake river restoration within the Dugalup Brook reserve. The proposed works are consistent with actions detailed in the Dugalup Brook Management Plan which was adopted by the Shire of Busselton in 2008.

Methodology References:
 Irvine and Elscot (2008)

4. Assessor's comments

Comment

The clearing application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the assessment recommendation is that the clearing is at variance to Principle (f), may be at variance to Principle (b) and is not likely to be at variance with any of the remaining clearing principles.

It is recommended that should a clearing permit be granted that revegetation, and weed management are conditions of the permit to mitigate the loss of riparian vegetation and to protect the remaining vegetation and fauna, specifically Western Ringtail Possums, which may utilise the site.

5. References

- Irvine, F and Elscot, S (2008) Management Plan for Dugalup Brook. Unpublished report to the Shire of Busselton and Geocatch.
- 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.
- Shepherd, D.P. (2007) Adapted from: 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.
- White, K. (2006) River action plan for the Cape Naturaliste streams: Jingarmup Brook, Meelup Brook, Dolugup Brook, Dandatup Brook and Dugalup Brook. Unpublished report prepared for Geograph Catchment Council.

6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management (now DEC)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment (now DEC)
DoW	Department of Water
DMP	Department of Mines and Petroleum (ex DoIR)
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DEC)