GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 3010 / 1
File Number: DEC10700
Duration of Permit: From 2 May 2009 to 2 May 2011

PERMIT HOLDER

Shire of Busselton

LAND ON WHICH CLEARING IS TO BE DONE

LOT 4979 ON PLAN 19038 (Lot No. 102 CAVES DUNSBOROUGH 6281)
LOT 3003 ON PLAN 19111 (DUNSBOROUGH 6281)

AUTHORISED ACTIVITY

Clearing of up to 0.95 hectares of native vegetation within the area crosshatched yellow on attached Plan 3010/1.

CONDITIONS

1. Fauna management

(a) Prior to undertaking any clearing authorised under this Permit, the area(s) shall be inspected by a *fauna specialist* who shall identify habitat suitable to be utilised by Western Ringtail Possum (*Pseudocheirus occidentalis*);

(b) Prior to clearing, any habitat identified by condition 1(a) shall be inspected by a *fauna specialist* for the presence of fauna listed in condition 1(a); and

(c) Prior to clearing, the Permit Holder shall ensure that any fauna identified by condition 1(b) shall be removed and relocated by a *fauna clearing person*, in accordance with a license issued by the Department.

2. Records to be kept

The Permit Holder must maintain the following records in relation to fauna management pursuant to condition 1 of this Permit:

(a) the location of each habitat identified recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
(b) the species of fauna reasonably likely to utilise, or that have been observed utilising, the habitat(s); and
(c) the location and date where relocated fauna was released, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings.

3. Reporting

(a) The Permit Holder must provide to the CEO, on or before 30 June of each year, a written report of records required under condition 2 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.

(b) Prior to 2 February 2011, the Permit Holder must provide to the CEO a written report of records required under condition 2 of this Permit where these records have not already been provided under condition 3(a) of this Permit.

Definitions

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

fauna clearing person means a person who has obtained a licence from the *Department*, issued pursuant to the *Wildlife Conservation Regulations 1970* authorising them to take fauna;

fauna specialist means a person with training and specific work experience in fauna identification or faunal assemblage surveys of Western Australian fauna;

Keith Claymore
A/ ASSISTANT DIRECTOR
NATURE CONSERVATION DIVISION

Officer delegated under Section 20
of the Environmental Protection Act 1986

2 April 2009

Plan 3010/1

LEGEND

- Clearing Instrument Cadastre
- Busselton Townsite Landgate 2001
- Busselton 50cm Ort 2004

N

0 — 62 m

Scale 1:2357
(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.

Keith Claymore Date 2/4/09
K Claymore
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 acknowleged by the agency acronym in the legend.

Department of Environment and Conservation

Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 3010/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Shire of Busselton**

1.3. Property details

Property: LOT 4979 ON PLAN 19038 (Lot No. 102 CAVES DUNSBOROUGH 6281)
LOT 3003 ON PLAN 19111 (DUNSBOROUGH 6281)
Local Government Area: Shire Of Busselton
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.95		Mechanical Removal	Building or Structure

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
Beard Vegetation Association: 27 - Low woodland; paperbark (Melaleuca sp.) 973 - Low forest; paperbark (Melaleuca rhaphiophylla) Mattiske Vegetation Complex: Ludlow - Open woodland of Melaleuca rhaphiophylla and sedgelands of Cyperaceae-Restionaceae spp. on broad depressions in the subhumid zone.	The application is for the clearing of 0.95ha of native vegetation for recreational infrastructure. The vegetation is in degraded (Keighery 1994) condition with no understorey remaining.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The vegetation condition was determined from regional advice (DOC80179) and aerial imagery Busselton 50cm Orthomosaic (Landgate 2003).

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 0.95ha of native vegetation for construction of recreational infrastructure. The vegetation under application is in degraded (Keighery 1994) condition, with no understorey present.

The application area neighbours an area of better condition ludlow vegetation, which is likely to be more significant as a remnant for biological diversity.

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

Methodology

GIS database:
- CALM Managed Lands and Waters - CALM 01/06/05
- SAC Biodatasets - accessed 5 March 2009
- Mattiske Vegetation (01/03/1998)
- Declared Rare and Priority Flora List - CALM 13/08/03
- Pre European Vegetation - DA 01/01
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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 may be at variance to this Principle

Three rare and 3 priority fauna species have been recorded within the local (10km radius) area of the vegetation under application. However, given the degraded (Keighery 1994) condition of the vegetation, with no

understorey present, the vegetation is unlikely to be valuable habitat for most of these species.

The area is, however, likely to be providing habitat to Pseudocheirus occidentalis (Western Ringtail Possum - vulnerable), and individuals have been recorded within a 1km radius of the applied area. Whilst the vegetation is degraded and contains trees with no understorey, the presence of peppermint trees (Agonis flexuosa) and the neighbouring remnant vegetation increases the likelihood of Western Ringtail Possums occuring within the application area.

Therefore, the clearing may be at variance to this principle. In order to mitigate the possible impacts to this rare fauna species, fauna management conditions will be placed on the permit.

Methodology Keighery (1994)
DEC (2009)

GIS database:
- CALM Managed Lands and Waters - CALM 01/06/05
- Mattiske Vegetation (01/03/1998)
- SAC Biodatasets - accessed 5 March 2009

(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

Whilst 6 rare and 15 priority flora species have been recorded within a 10km radius of the application area, none of these occur within the same vegetation and soil types. Additionally, the degraded nature of the vegetation under application further reduces the likelihood of rare or priority flora species existing within the application area. The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology GIS database:
- Declared Rare and Priority Flora List - CALM 13/08/03
- Mattiske Vegetation (01/03/1998)
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 5 March 09
- Soils, Statewide DA 11/99

(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

Whilst 3 threathened and 2 priority ecological communities have been recorded within the local (10km radius) area, none of these exist within the same vegetation and soil types as the area under application. The vegetation proposed for clearing is therefore not likely to be necessary for the maintenance of a threatened ecological community, and as such the clearing is not likely to be at variance to this principle.

Methodology GIS Database:
- SAC Biodatasets - accessed 5 March 2009
- Mattiske Vegetation (01/03/1998)
- Pre European Vegetation - DA 01/01
- Soils, Statewide DA 11/99

(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 at variance to this Principle

The application lies within the Shire of Busselton and the Swan Coastal Plain IBRA Bioregion, which retain 42.15% and 38.84% of the pre-European native vegetation respectively (Shepherd 2007). Orthomosaic imagery suggests the local (10km radius) area is approximately 50% vegetated.

The vegetated under application is of Beard Vegetation Associations 27 and 973, both of which retain less than the recommended threshold level of native vegetation for biological diversity (30%). Only 13.84% of vegetation association 973 remains within the Swan Coastal Plain bioregion (Shepherd 2007), whilst 29.59% of vegetation association 27 remains.

Additionally, the vegetation is also a component of Mattiske Vegetation Complex Ludlow which is considered endangered with 2.2% of the pre-European extent remaining (Mattiske 1998). The vegetation under application is in degraded (Keighery 1994) condition, with no intact understorey.

The clearing as proposed is therefore at variance to this principle.

Methodology EPA (2000)

Mattiske Consulting (1998)
Shepherd (2007)

GIS Databases:
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Local Government Authorities - DLI 8/07/04
- Mattiske Vegetation - CALM 1/03/1998
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 5 March 2009
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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 not likely to be at variance to this Principle

A minor perennial watercourse runs through the application area, however it is in degraded condition and a man made drain, and as such the vegetation along it is not considered significant riparian vegetation.

There is an artificial lake 10m from the application area and vegetation between the proposed clearing and the watercourse should provide adequate buffering.

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

Methodology

GIS Databases:
- Hydrography linear - DOW 13/7/06
- Hydrography linear (hierarchy) - DoW 13/7/06

(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

As the application area is small (0.9ha) and the vegetation under application is in degraded condition, the clearing as proposed is not likely to cause appreciable land degradation.

Methodology

GIS database:
- Acid Sulfate Soil Risk Map, Swan coastal Plain - DEC 07/08/06
- Average Annual Rainfall Isohyets - WRC 29/09/98
- Annual Evaporation Contours (Isopleths) - WRC 29/09/98
- Hydrogeology, statewide - DOW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Salinity Risk LM 25m - DOLA 00
- Soils, Statewide DA 11/99
- Topographic contours statewide - DOLA and ARMY 12/09/02

(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

There are two conservation areas within the local (10km radius) area, Leeuwin Naturaliste National Park 5km west and Yelverton National Park 10km south.

The vegetation under application does not appear to be providing ecological linkages between conservation areas, and the proposed clearing is not likely to significantly impact conservation areas.

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

Methodology

GIS Databases:
- CALM Managed Lands and Waters - CALM 01/06/05
- Hydrography, linear - DOW 13/7/06
- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02
- System 1 to 5 and 7 to 12 areas - DEC 11/7/06

(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

The area to be cleared is small (0.95ha) and in degraded (Keighery 1994) condition. The acid sulfate soils risk

is moderate to low, and the salinity risk is low. The clearing as proposed is therefore not likely to cause a deterioration of water quality and as such is not likely to be at variance to this principle.

Methodology Keighery (1994)

GIS database:
- Evapotransporation Isopleths - WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Salinity Risk LM 25m - DOLA 00
- Topographic Contours, Statewide - DOLA 12/09/02

(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 application area is small (less then 1 ha), the proposed clearing is not likely to cause or exacerbate the incidence or intesnity of flooding. The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology GIS database:
- Evaporation Isopleths - WRC 29/09/98
- Hydrography, linear - DoW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

No submissions were received for this application.

The land is zoned Reserve for the purpose of recreation park, community centre and drainage.

Methodology GIS database:
- Cadastre - Landgate Dec 07
- Town Planning Scheme Zones - MFP 31/08/98

4. Assessor's comments

Comment
The 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 proposed clearing is at variance to Principle (e), may be at variance to Principle (b), and is not likely to be at variance to the remaining clearing Principles.

5. References

DEC (2009) Fauna Species Profile; Pseudocheirus occidentalis. Department of Environment and Conservation viewed electronically via http://www.dec.wa.gov.au/animals/fauna-management/fauna-species-profiles.html accessed on 23/03/2009.

EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority, Western Australia.

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.

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. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

6. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment

DoIR	Department of Industry and Resources
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)