GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS
Area Permit Number: 3439/1
File Number: DEC13728
Duration of Permit: From 28 February 2010 to 28 February 2012

PERMIT HOLDER
Angelina Elizabeth Falcinella
Paul Lawrence Falcinella
Raymond Anthony Falcinella

LAND ON WHICH CLEARING IS TO BE DONE
Lot 464 on Deposited Plan 225699

AUTHORISED ACTIVITY
The Permit Holder shall not clear more than 2 hectares of native vegetation, within the hatched yellow on attached Plan 3439/1.

CONDITIONS
1. 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*:
   (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
   (b) ensure that no *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:

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*.

Keith Claymore
A/ ASSISTANT DIRECTOR
NATURE CONSERVATION DIVISION

Officer delegated under Section 20
of the Environmental Protection Act 1986

28 January 2010

Plan 3439/1

LEGEND

Clearing Instruments

- Areas Approved to Clear
- Road Centrelines
- Cadastre

Donnelly 50cm Orthomosaic - Landgate 2004

Cadastre for labelling

N

0 ~150 m

Scale 1:5652
(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.

Keil Claymore ..... Date 28/1/10

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

Our environment, our future

Department of
Environment and Conservation
Our environment, our future

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 3439/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Angelina Elizabeth, Paul Lawrence, Raymond Anthony Falcinella

1.3. Property details

Property: LOT 464 ON PLAN 225699 (YANMAH 6258)
LOT 464 ON PLAN 225699 (YANMAH 6258)
LOT 464 ON PLAN 225699 (YANMAH 6258)

Local Government Area:

Colloquial name:

1.4. Application

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

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
1144 Beard Vegetation Association: (Shepherd, 2007) Wh1 Mattiske Vegetation Association:	The application is to clear 2ha of riparian vegetation for the purpose of constructing a dam for horticulture and potato irrigated farming. The vegetation consists of an open midstorey of Agonis parviceps with a ground cover of sedges and introduced grasses (DEC, 2009). The application area is within a creekline which has been heavily grazed by stock. No fire has occurred in the creek system for many years (DEC, 2009).	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Vegetation condition has been assessed through aerial photography (Donnelly 50cm ORTHOMOSAIC - DLI 04) and a site visit (DEC, 2009).

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

This application to clear native vegetation for the purpose of constructing a dam for horticulture and potato irrigated farming. The original application was for 4.7ha, which subsequently was reduced to 2ha.

The area proposed for clearing is considered riparian vegetation which is considered to be in good (Keighery, 1994) condition.

The vegetation consists of open midstorey of Agonis parviceps with a ground cover of sedges and introduced grasses (DEC, 2009). The application area is within a creekline which has been heavily grazed by stock. No fire has occurred in the creek system for many years (DEC, 2009).

The vegetation under application is located in a valley comprised of Beard Vegetation Association 1144 of which there is 81.97% (Shepherd et al. 2007) of the pre-1750 extent remaining. The local area (10 km radius) is

approximately 85% vegetated, with approximately 95% of that vegetation in DEC-managed tenure. Despite the application area containing vegetation that is of good (Keighery, 1994) condition; it is unlikely that the vegetation represents an area of higher biological diversity than other, larger areas of remnant vegetation in the local area.

Based on the small scale of the vegetation under application and the above information, it is unlikely the proposal is at variance to this Principle.

Methodology Keighery (1994);
Shepherd et al. (2007);
GIS Databases:
- CALM Managed Lands and Waters - CALM 1/06/04;
- Donnelly 50cm ORTHOMOSAIC - DLI 04

(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**
There are several records of fauna within the local area (10km radius), including the Western Ringtail Possum (VU), Forest Red-tailed Black Cockatoo (VU) and Quenda (P5), Brush-tailed Phascogale (Vu), Water Rat (P4) and Pouched Lamprey (P1).

The local area (10km radius) is over 85% vegetated and the property is surrounded by DEC-managed forest, which is likely to offer equal or better habitat than that within the application area.

No quokka runnels were seen in the creek as the creek system is open to stock movement, as such the creek is unlikely to be suitable habitat for threatened and endangered fauna (DEC, 2009).

Given the close proximity to several large state forests, the area under application is not considered to contain significant habitat values for local fauna.

Therefore, the proposal is not likely to be at variance to this Principle.

Methodology DEC (2009)
GIS Database:
- CALM Managed Lands and Waters - CALM 1/06/04
- SAC Bio datasets 29/05/07

(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**
There are 2 known records of the rare flora species Caladenia harringtoniae occurring in the local area, (10km radius).

Habitat descriptions on the DEC's Florabase indicate that this species usually inhabits paperbark and flooded gum swamps and flats which are inundated for several months of the year; but may also be found along creeklines in jarrah and karri forest. Given this suitable habitat for this species is likely to be present within the applied area (WA Herbarium, 2007).

However, the habitat is significantly modified as stock have access to the application area (DEC, 2009) and therefore it would be highly unlikely for Caladenia harringtoniae to be present.

Therefore, the proposal is not likely to be at variance to this Principle.

Methodology DEC (2009)
WA Herbarium (2007);
GIS databases:
- DEFL SAC Bio Datasets 10/05/07

(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**
There are no known records of Threatened Ecological Communities (TEC) within a 10km radius of the proposed clearing. It is therefore unlikely that the proposed clearing is part of or necessary for the maintenance of a TEC.

The proposal is not likely to be at variance to this Principle.

Methodology GIS Databases:
- Threatened Ecological Communities - CALM 12/04/05;
- SAC Bio datasets 29/05/07

(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 proposed clearing is located in the Shire of Manjimup and within the Warren Bioregion. The extent of native vegetation remaining within these areas is 85.4% and 80.85% of the pre-1970's extent respectively.

The vegetation is a component of the Beard Vegetation Association 1144 of which 82.15% (Shepherd et al. 2007) of the pre-1750 extent is remaining within the Warren bioregion. The area is also mapped as the Wheatley (WH1) vegetation complex (Mattiske 1998), of which there is 78% remaining statewide.

Given the extent of vegetation remaining in the local and bioregional areas, the area under application is not considered to be a significant remnant of native vegetation in an area that has been extensively cleared; and therefore not likely to be at variance to this Principle.

Methodology Shepherd et al. (2001);
Mattiske (1998);
GIS Databases:
- Pre-European Vegetation - DA 01/01;
- Mattiske Vegetation - CALM 24/03/98;
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00

(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 may be at variance to this Principle

The area consists of riparian vegetation and is growing in association with an unnamed minor perennial watercourse. A part from a few paddock trees, vegetation within the watercourse is the only vegetation remaining on the property. Given the application consist of riparian vegetation; the proposed clearing may be at variance with this principle.

Methodology GIS Databases:
- Hydrography, linear - DOE 01/02/04;
- EPP, Areas - DEP 06/95;
- EPP, Lakes - DEP 28/07/03;
- EPP, Wetlands - DEP 21/07/04;
- Anca Wetlands - CALM 08/01;
- Geomorphic Wetlands, Augusta to Walpole - DOE 18/6/03

(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

The area has low to no known mapped salinity risk and a ground water salinity level of 500-1000 mg/L. The soils on the property range from greyish brown, gravelly sandy loam which merges at 40 to 50cm to a brownish red or light clay on the slopes flanking creeklines to swamp terraces generally of grey-brown to yellow-brown sands to sandy loams (DAFWA, 2009).

Given the size of the area under application, soil type consisting of low permeability, with medium relief, the proposed clearing is unlikely to cause appreciable land degradation.

Therefore, the proposal is not likely to be at variance to this Principle.

Methodology DAFWA (2009)
GIS Databases:
- Acid Sulfate Soil Risk Map, Swan Coastal Plain - DEC;
- Groundwater Salinity, Statewide - DOW;
- Hydrogeology, Statewide - DOW;
- Soils, Statewide - DA 11/99

(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 numerous conservation areas within a 10km radius of the application area including Donnelly, North Donnelly and South East Nannup state forests (DEC-managed). The Donnelly River Nature Reserve is located 3.3km southwest of the area under application.

Given the small scale of clearing proposed, it is unlikely to impact on the values of nearby conservation reserves, however as the application area is adjacent to the North Donnelly state forest, a weed condition will be placed on the permit.

Methodology

GIS Database:
- CALM Managed Lands and Waters - CALM 1/06/04

(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 may be at variance to this Principle

The application area is located within the Donnelly River System. The area proposed for clearing has a low salinity risk and a groundwater salinity of 500-1000mg/L.

Clearing of riparian vegetation is likely to cause deterioration of water quality in the unnamed minor perennial watercourse of which it is acting as a buffer to, therefore if the clearing is granted, revegetation conditions will be placed on the permit.

Methodology

GIS Databases:
- Public Drinking Water Source Areas (PDWSAs) - DOW;
- Hydrographic Catchments - Subcatchments - DOW;
- RIWI Act, Surface Water Areas - DOW;
- RIWI Act, Rivers - DOW;
- RIWI Act, Irrigation Districts - DOW;
- RIWI Act, Groundwater Areas - DOW;
- RIWI Act, Areas - DOW;
- Topography Contours, Statewide - DOLA 12/09/02;
- Evaporation Isopleths - BOM 09/98;
- Mean Annual Rainfall Isohyets (1975-2003)

(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

The area under application has a medium relief, the same rainfall and evaporation rates and soils with low permeability. Given the size of the area under application is unlikely to cause or exacerbate the incidence of flooding.

Methodology

GIS Databases:
- Topography Contours, Statewide - DOLA 12/09/02;
- Evaporation Isopleths - BOM 09/98;
- Mean Annual Rainfall Isohyets (1975-2003) - DOW

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

Comments

The application to clear native vegetation is to construct a dam for horticulture and potato irrigated farming. The original application was for 4.7ha, which subsequently was reduced to 2ha.

The proposed clearing is within the Donnelly surface water catchment area gazetted for surface water management under the RIWI Act. A Section 17 Permit to Obstruct or Interfere with the bed and banks of a watercourse was issued to the applicant by the Department of Water on 12 January 2010.

The applicant advised that no council approval is required for the proposed horticultural and potato farming activities (DEC TRIM Ref: DOC113296).

Methodology

DEC TRIM Ref: DOC113296

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 may be at variance to Principle (f) and (i) and is not likely to be at variance to the remaining clearing Principles.

5. References

DAFWA (2009). Department of Agriculture and Food Western Australia Advice DEC TRIM Ref: DOC113602

DEC (2009) Site Inspection Report for Clearing Permit Application CPS 3439/1, Lot 464 on Plan 225699, Yanmah. Site inspection undertaken 11/12/2009. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC112620).

DoW Advice (2009). Department of Water, Manjimup. TRIM Ref: DOC111266

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 Consulting (1998) Mapping of vegetation complexes in the South West forest region of Western Australia, CALM.

WA Herbarium (2007). Department of Environment and Conservation. Site accessed 3/7/07.

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 (now DEC)
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)