



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 3240/1

File Number: DEC12299

Duration of Permit: From 11 October 2009 to 11 October 2014

PERMIT HOLDER

Shire of Busselton

LAND ON WHICH CLEARING IS TO BE DONE

LOT 73 ON PLAN 49894

LOT 474 ON PLAN 39698

AUTHORISED ACTIVITY

Clearing of up to 0.21 hectares of native vegetation within the area hatched yellow on attached Plan 3240/1.

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. Revegetation and rehabilitation

- (a) The Permit Holder shall retain the vegetative material and topsoil removed by clearing authorised under this Permit:
 - (i) vegetative material and topsoil must be stockpiled in an area that has already been cleared; and
 - (ii) at an *optimal time* during the first winter following clearing authorised under this Permit, the Permit Holder shall lay the vegetative material and topsoil on the cleared area.
- (b) Prior to 11 September 2011, the Permit Holder must *revegetate* and *rehabilitate* the area hatched yellow on attached Plan 3240/1.
- (c) The *revegetation* and *rehabilitation* of an area pursuant to condition 2 of this Permit must utilise indigenous flora species found within 20 kilometres of the areas cleared under this Permit.
- (d) The *revegetation* and *rehabilitation* of an area pursuant to condition 2 of this Permit:
 - (i) must be carried out before or immediately following the maximum period of 2 years in accordance with condition 2(b) of this Permit; and
 - (ii) must be undertaken according to a *Revegetation Plan* that the Permit Holder must provide to the CEO, for their approval, prior to clearing native vegetation for the area that is to be *revegetated* and *rehabilitated*.



- (e) A *Revegetation Plan* must be developed and must involve the following steps:
 - (i) *site preparation*;
 - (ii) *weed control*;
 - (iii) *regeneration, direct seeding or planting, at an optimal time*;
 - (iv) *a vegetation establishment period*; and
 - (v) Ongoing maintenance and monitoring.

3. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
 - (i) The species composition, structure and density of the cleared area;
 - (ii) 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;
 - (iii) the date that the area was cleared; and
 - (iv) the size of the area cleared (in hectares).
- (b) In relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 2 of this Permit:
 - (i) the location of any areas *revegetated* and *rehabilitated*, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
 - (ii) a description of the *revegetation* and *rehabilitation* activities undertaken;
 - (iii) the size of the area *revegetated* and *rehabilitated* (in hectares); and
 - (iv) the species composition, structure and density of *revegetation* and *rehabilitation*.

4. 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 3 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 11 July 2014, the permit holder must provide to the CEO a written report of records required under condition 3 of this Permit where these records have not already been provided under condition 4(a) of this Permit.

Definitions

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

direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

optimal time means the period from April to June for undertaking *direct seeding*, and the period from May to June for undertaking *planting*;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

regeneration means *revegetation* that can be established from in situ seed banks contained either within the topsoil or seed-bearing *mulch*;

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;




revegetate/ed/ion means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as *regeneration, direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area;

revegetation plan means a plan developed by the Permit Holder for the *revegetation* and *rehabilitation* of a site in accordance with condition 2 of this Permit;

site preparation means management of existing site topsoil and preparation of the finished soil surface, for example by ripping or tilling the soil surface and respreading site topsoil and chipped native vegetation;

vegetation establishment period means a period of at least two summers after the *revegetation* during which time replacement and infill *revegetation* works may be required for areas in which *revegetation* has been unsuccessful, and involves regular inspections of *revegetation* sites to monitor the success of *revegetation*;

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*.

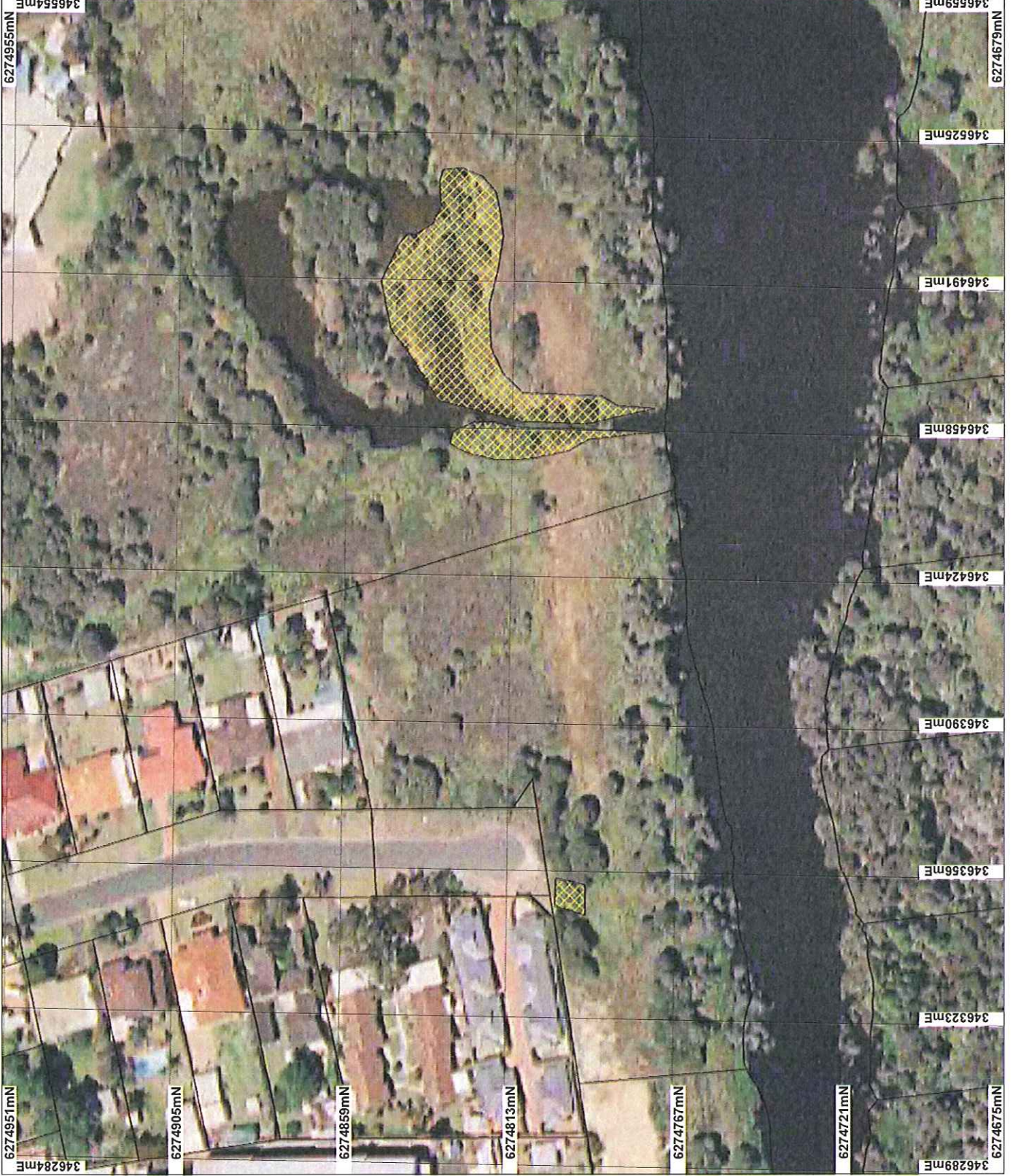


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

10 September 2009

Plan 3240/1



LEGEND

Clearing Instrument
Closure
Basepoint 50cm Ori
2004



0 38 m

Scale 1:1317

(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.

K. Faulkner 10/9/09
Date

K. Faulkner

Officer, with delegated authority under Section 20 of the Environmental Protection Act 1985

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.: 3240/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Busselton

1.3. Property details

Property: LOT 73 ON PLAN 49894 (House No. 38 PEEL BUSSELTON 6280)
 Local Government Area:
 Colloquial name:

1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|--------------------|-----------|--------------------|---------------------|
| 0.21 | | Mechanical Removal | Restoration |

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 Unit: 1000 - Mattiske Vegetation Complex**: Qw (Quindalup) - Tall shrubland of Acacia saligna-Agonis flexuosa and open heath on depressions amongst recent dunes in the subhumid zone. | The proposal is to clear 0.21ha of native vegetation predominately for the purpose of wetland rehabilitation with one tree at the end of Edwards St proposed to be removed to access the wetland restoration site. The vegetation under application is predominately Melaleuca preissiana and Ficinia nodosa over weed understorey with some Samphire present. (DEC, 2009) | Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994) | The condition of the vegetation was determined through a site inspection (DEC, 2009) on 19 August 2009. |

* Shepherd (2007)

** Mattiske and Havel (1998)

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 proposal is to clear 0.21 ha of native vegetation for the purpose of wetland rehabilitation.

The vegetation under application is in a degraded (Keighery, 1994) condition consisting predominately of Melaleuca preissiana and Ficinia nodosa over weed understorey (DEC, 2009).

The local area retains approximately 25% native vegetation, most of which is in similar or better condition as the applied area.

The applied area is mapped as a conservation category wetland however the applied area is not likely to contain a high level of biological diversity in the local area (10km radius) (DEC, 2009).

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

Methodology

References:
DEC (2009)

Keighery (1994)

GIS Database:

CALM Managed Lands and Waters - CALM 01/06/05

SAC Biodatasets - accessed 10 August 2009

Mattiske Vegetation (01/03/1998)

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 is not likely to be at variance to this Principle

The applied area is in a degraded (Keighery, 1994) condition consisting predominately of *Melaleuca preissiana* and *Ficinia nodosa* over weed understorey.

The local area retains approximately 25% native vegetation most of which is in a similar or better condition as the applied area.

Given the relatively small size of the applied area (0.21ha) and the condition of the vegetation under application the clearing as proposed is not likely to be at variance to this principle.

In addition DEC notes that the purpose for clearing is to increase biodiversity of the wetland.

Methodology References:

DEC (2009)

Keighery (1994)

GIS Database:

CALM Managed Lands and Waters - CALM 01/06/05

Mattiske Vegetation (01/03/1998)

SAC Biodatasets - accessed 10 August 2009

Hydrography linear - DOW 13/7/06

(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 15 records of rare flora occurring within a 10km radius of the applied area.

Of these none are likely to occur within the applied area as the wetland is predominately saline. Few conservation significant flora species prefer this habitat and no known records of these species are known to occur in or near the applied area.

A site inspection of the applied area did not identify any rare or priority flora however no flora survey was undertaken (DEC, 2009).

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

Methodology References:

DEC (2009)

Keighery (1994)

GIS Database:

Mattiske Vegetation (01/03/1998)

Pre European Vegetation - DA 01/01

SAC Biodatasets - accessed 10 August 2009

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

There are 4 known Threatened Ecological Communities (TECs) within the local area (10km radius).

The vegetation under application is not within the recommended buffer of any known TEC.

A site visit observed the vegetation to be in a degraded (Keighery, 1994) condition, consisting of predominantly Melaleuca preissiana and Ficinia nodosa over weed understorey (DEC, 2009). Given the vegetation on site it is not likely that the vegetation under application constitutes a TEC.

Therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology References:
DEC (2009)
Keighery (1994)

GIS Database:
SAC Biodatasets - accessed 10 August 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 not likely to be at variance to this Principle | | | |
|--|--|---------------------|---------------|--------------------------------|
| | Pre-European (ha) | Current extent (ha) | Remaining (%) | % In reserves DEC Managed Land |
| IBRA Bioregions* Swan Coastal Plain | 1,501,208 | 583,140 | 38.84 | 32.55 |
| Shire* Busselton | 146,450 | 61,734 | 42.15 | 65.89 |
| Mattiske Vegetation Complex** Qw | 372 | 1 | 0.3 | n/a |
| Beard Vegetation Association* 1000 | 99,800 | 28,541 | 28.60 | 15.74 |
| Beard Vegetation Association with Bioregion* 1000 | 94,175 | 25,235 | 26.80 | 16.14 |

* (Shepherd, 2007)

** (Mattiske and Havel, 1998)

The local area (10km radius) retains approximately 25% native vegetation. A site visit of the applied area observed the vegetation to be in a degraded (Keighery, 1994) condition, consisting predominately of Melaleuca preissiana and Ficinia nodosa over weed understorey (DEC, 2009).

Given the type and condition of the vegetation under application it is unlikely that the vegetation represents Beard Vegetation Unit 1000 or Mattiske Vegetation complex Qw.

Considering the above the clearing as proposed is not likely to be at variance to this principle as the vegetation is not likely to be significant in this highly cleared landscape due to its degraded condition.

Therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology References:
DEC (2009)
Keighery (1994)
Mattiske and Havel (1998)
Shepherd (2007)

GIS Database:
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 10 August 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 at variance to this Principle

The vegetation under application is growing along the banks and associated slopes of a conservation category wetland.

A site visit identified *Melaleuca preissiana*, *Ficinia nodosa* and samphires growing within the applied area (DEC, 2009).

Given that there is riparian vegetation within the applied area the clearing as proposed is at variance to this principle.

DEC notes that the purpose of the clearing is primarily for wetland rehabilitation. Given this a Revegetation Management Plan condition will be placed on the permit to mitigate the removal of clearing riparian vegetation.

Methodology References:
DEC (2009)

GIS Database:

ANCA wetlands - Environment Australia 26/3/99
CALM Managed Lands and Waters - CALM 01/06/05
EPP Lakes Policy Area - DEP 14/05/97
Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain DEC 11/04/07
Hydrography linear - DOW 13/7/06
Hydrography linear (hierarchy) - DoW 13/7/06
Ramsar wetlands - DEC 03
South Coast Significant Wetlands - WRC 10/06/2003

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

Comments Proposal may be at variance to this Principle

The application area is within a conservation category wetland and vegetation proposed to be cleared exists along the inundation edge of the wetland and associated areas (DEC, 2009). Removal of the vegetation from the edges of the wetland may cause appreciable water erosion of the wetland banks.

Given the small size of the applied area (0.21ha) it is not likely that other forms of land degradation will be appreciable.

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

A Revegetation Management Plan condition will be placed on the permit to mitigate the potential for clearing to cause long term land degradation within the applied area.

Methodology References:
DEC (2009)

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

The closest area of conservation significance is located approximately 720m from the applied area, namely Ex Dir Freehold/Public Building.

In addition an un-named Nature Reserve is located approximately 1.4km north east of the applied area.

Given the distance between the applied area and these conservation areas and the type of conservation area (Public Building), the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Database:
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
SAC Biodatasets accessed 10 August 2009
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 at variance to this Principle

The applied area is within a mapped conservation category wetland and includes riparian vegetation (DEC, 2009).

Removal of the vegetation along the edges of this wetland will likely impact on the water quality of the wetland through increased sedimentation and eutrophication (given the close proximity of the applied area to residential accommodation and high risk of acid sulphate soils within the applied area).

Given the above the clearing as proposed is at variance to this principle.

To mitigate the potential for clearing to impact on the quality of water entering this conservation category wetland a Revegetation Management Plan condition will be placed on the permit.

Methodology References:
DEC (2009)

GIS Database:
Evapotranspiration Isopleths - WRC 29/09/98
Groundwater Salinity Statewide DoW 13/07/06
Hydrographic catchments, catchments - DoW 01/06/07
Hydrographic catchments, subcatchments - 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

The applied area is relatively small (0.21ha) and within a mapped conservation category wetland. A site visit observed the vegetation under application to be in a degraded (Keighery, 1994) condition (DEC, 2009).

Given the above it is not likely that the removal of a small amount of degraded (Keighery, 1994) vegetation will cause or exacerbate the incidence or intensity of flooding in the area.

Methodology References:
DEC (2009)
Keighery (1994)

GIS Database:
Evaporation Isopleths - WRC 29/09/98
Hydrographic catchments, catchments - DoW 01/06/07
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

The applied area is zoned for the purpose of 'School' under the Shire of Busselton Town Planning Scheme. As the applicant is the Shire no approvals for development of the site are required.

The applied area is within the Rights in Water Irrigation Act groundwater area for Busselton-Capel. As the proposal is to clear vegetation associated with a conservation category wetland a beds and banks licence from

the Department of Water is required.

1 Aboriginal Site of Significance occurs over the area under application, namely 'The New River' site of significance.

Methodology

GIS Database:

Cadastral - Landgate Dec 07

R/WI Act, Groundwater Areas - DoW 13/07/06

Town Planning Scheme Zones - MFP 31/08/98

Aboriginal Sites of Significance 26 April 2007

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

5. References

- DEC (2009) Site Inspection Report for Clearing Permit Application CPS 3240/1, Shire of Busselton. Site inspection undertaken 19 August 2009. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC96119).
- 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) |