



1. Application details

1.1. Permit application details

Permit application No.: 1966/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: Barry James Dunnet

1.3. Property details

Property: LOT 2 ON DIAGRAM 10390 (CHANNYBEARUP 6260)
 Local Government Area: Shire Of Manjimup
 Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1		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
Beard vegetation Association 1: Tall forest; karri (Eucalyptus diversicolor) (Shepherd et al. 2001)	The proposal includes clearing of 1 ha of isolated vegetation that appears to be in good condition.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Vegetation condition determined using orthomosaic mapping (Donnelly 50cm 04)

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 1 ha of native vegetation. Aerial photography suggests that the vegetation is in good condition (Keighery 1994). The vegetation is, however, a small remnant within a paddock that has been extensively cleared.

The small size of the area to be cleared and its location within a paddock suggests that it is likely to be subject to edge effects and possible weed infestations and therefore it is unlikely that the clearing is at variance to this principle.

Methodology Keighery 1994
 GIS Database:
 - SAC Bio datasets 07/08/2007
 - Pre-European Vegetation - DA 01/01

(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 clearing proposed consists of one small area totalling 1ha with no connectivity to larger tracts of native vegetation. The Donnelly State Forest is located 150m East and Pemberton National Park is located 1.8km Northwest and 6.6km southeast of the proposed clearing. There are 1 threatened and 3 priority fauna known to occur within the local area (10km radius).

Given the small size of the area under application and the large tracts of National Park and State Forest which exist nearby it is not considered to represent a significant habitat for fauna.

Methodology GIS Database:

(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 populations of Declared Rare Flora (DRF) and 3 populations of priority flora within the local area (10km radius). Of these no DRF or priority populations occur within the same Mattiske vegetation complexes (Pm 1).

Given the above it is considered unlikely to be a significant habitat for rare flora.

Methodology GIS Database:

- SAC Bio datasets 07/08/2007
- Mattiske Vegetation - CALM 24/03/98

(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 20km radius of the proposed clearing. It is unlikely that the proposed clearing will impact on any known TEC's.

Methodology GIS Database:

- SAC Bio datasets 07/08/2007

(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 at variance to this Principle

The proposed clearing is located in the Shire of Manjimup and within the Warren Bioregion. The extent remaining within these areas is 85.8% and 80% respectively.

The vegetation is a component of the Beard Vegetation Association 1 of which 78.6% of Pre-European vegetation is remaining (Shepherd et al. 2001). In addition it is a component of Mattiske Vegetation Complex Pm1 of which 65.6% is remaining.

At a regional level the conservation status is of 'least concern' (Department of Natural Resources and Environment 2002) and at the local level it has a conservation status of 'least concern' (Department of Natural Resources and Environment 2002).

Due to the conservation status of the proposed clearing, the small area under application, the extent of vegetation remaining in the local and bioregional areas and the extent of vegetation complexes remaining the area under application is not considered to be a significant remnant of native vegetation in an area that has been extensively cleared.

Methodology Shepherd et al. (2001)

- Department of Natural Resources and Environment (2002)
- GIS Database:
- Mattiske Vegetation - CALM 24/03/98
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Pre-European Vegetation - DA 01/01

(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

There are approximately 15 mapped wetlands within a 10km radius of the proposed clearing. The nearest being 3.3km west. The proposed clearing is unlikely to have a significant impact due to the distance.

The proposed clearing includes an unnamed minor perennial watercourse which is a tributary of fly brook 125m to the east. Therefore the proposed clearing is at variance with this principle.

Methodology GIS Database:

- Hydrography, linear - DOE 01/02/04
- EPP, Areas - DEP 06/95
- EPP, Lakes - DEP 28/07/03
- Geomorphic Wetlands - Swan Coastal Plain } DEC

- Anca Wetlands - CALM 08/01
- EPP, Wetlands - DEP 21/07/04

(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 a medium salinity risk and a ground water salinity of 500-1000 mg/L. Given the small size of this clearing it is unlikely to impact upon salinity.

The chief soils are hard and also sandy so there is little risk of wind or water erosion. The proposed area of clearing has a medium relief with sedimentary rocks and extensive deep aquifers so it is unlikely water logging will occur.

Therefore the clearing is unlikely to be at variance to this principle.

- Methodology** GIS Database:
- Topography Contours, Statewide - DOLA 12/09/02
 - 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

The Donnelly State Forest lies 150m East and 1 National Park (Pemberton) 1.8km northwest and 6.6km southeast of the proposed area.

Given the proximity of the state forest and the nearby National Park, the lack of vegetation linkage/corridors and the small area to be cleared it is unlikely the proposed clearing will impact on the environmental values of nearby conservation areas..

- Methodology** GIS Database:
- CALM Managed Lands and Waters - CALM 1/06/04
 - System 6 Conservation Reserves - DEP 06/95

(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 proposed area is not in a Public Drinking Water Source Area or catchment area. Topography shows the area under application has medium relief. The area also has low groundwater salinity (500-1000 mg/L) and an evaporation rate of 1200 mm combined with a rainfall rate of 1200 mm. Soil geology mapping shows the area has high permeability with deep aquifers.

Given the size of the area to be cleared, the medium relief and low impact on groundwater salinity the proposed clearing is unlikely to impact on groundwater quality.

The proposed area is, however, directly associated with an unnamed minor perennial watercourse. Therefore it is likely the export of sediments into this watercourse will occur, which may lead to a decrease in surface water quality and the proposal maybe at variance to this principle.

- Methodology** GIS Database:
- Hydrography, linear - DOE 01/02/04
 - Acid Sulfate Soil Risk Map, Swan Coastal Plain - DEC
 - Groundwater Salinity, Statewide - DOW
 - Hydrogeology, Statewide - DOW
 - Soils, Statewide - DA 11/99
 - Public Drinking Water Source Areas (PDWSAs) - DOW
 - Hydrographic Catchments - Subcatchments - DOW
 - Evaporation Isopleths - BOM 09/98
 - Mean Annual Rainfall Isohyets (1975-2003) } DOW
 - Topography 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 soil in the area under application consists of sedimentary rocks with high permeability, rainfall of 1200mm and an evaporation rate of 1200mm.

Given the small size of the proposed clearing and the medium relief it is considered unlikely to be at variance with this principle.

Methodology GIS Database:

- Hydrogeology, Statewide - DOW
- Soils, Statewide - DA 11/99
- Topography Contours, Statewide - DOLA 12/09/02
- Evaporation Isoleths - BOM 09/98
- Mean Annual Rainfall Isohyets (1975-2003) } DOW

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

Comments

There is one Native Title claim (Southwest Boojarah 2) over the area under application, as the property is privately owned the granting of the clearing permit is a secondary approval and does not constitute a future act under the Native Title Act 1993.

There are no Aboriginal Sites of Significance listed within the area under application. It is the responsibility of the proponent to ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

The proposal is within the RIWI act area of Donnelly River and tributaries, however a RIWI license is not required.

Methodology GIS Database:

- Native Title Claims - DLI 7/11/05
- Aboriginal Sites of Significance } DIA
- RIWI Act, Surface Water Areas - DOW
- RIWI Act, Rivers - DOW
- RIWI Act, Irrigation Districts - DOW
- RIWI Act, Groundwater Areas - DOW
- RIWI Act, Areas } DOW

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Dam construction or maintenance	Mechanical Removal	1	Assessable criteria have been addressed and it is found that principles a, d, and e are not at variance, principles b, c, g, h and j are not likely to be at variance, principle i maybe at variance and principle f is at variance.

5. References

- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- 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.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

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)

