



1. Application details

1.1. Permit application details

Permit application No.: 1685/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Mark William Giles

1.3. Property details

Property: LOT 23 ON PLAN 25332 (MULLALYUP 6252)
Local Government Area: Shire Of Donnybrook-Balingup
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.03		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 3: Medium forest; jarrah-marri (Hopkins et al. 2001; Shepherd et al. 2001).	The proposal involves clearing a combined total of 1.03 hectares for two areas: one for fencing (0.25ha) and one for construction of a dam (0.78ha).	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The description of the clearing application area is based on a site visit conducted by DEC officers on 26 April 2007.
Mattiske Vegetation Complex - Balingup (BLf): Woodland of Eucalyptus rudis on valley floors and woodland of Eucalyptus patens-Corymbia calophylla on footslopes with some Eucalyptus marginata subsp. marginata on lower slopes in the humid zone (Mattiske Consulting 1998).	The vegetation under application for the fencing comprises predominantly regrowth blackbutt (Eucalyptus patens) and marri (Corymbia calophylla) with an understorey of bracken fern and blackberry with a few grass trees (Xanthorrhoea preissii) over pasture grasses (DEC Site Visit 2007).		
Hedde Vegetation Complex - Balingup in Medium to High Rainfall: open forest and fringing woodland (Hedde et al 1980).	The vegetation under application for the dam construction is riparian vegetation comprising mainly blackbutt and marri trees over ti-tree (Taxandria linearifolia) and scattered blackberry (DEC Site Visit 2007).		
	Although both areas under application are vegetated, they are open to livestock grazing and its impact and the impact of high numbers of kangaroos reported for the property over many years is evidenced by the absence of a diverse understorey and the presence of pasture		

grasses. Evidence of feral pigs and rabbits are also plentiful (DEC Site Visit 2007).

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 vegetation under application appeared to range from degraded, around the fence line and proposed dam tailings to good, down stream of the proposed dam (Keighery, 1994; DEC Site Visit, 2007).

The vegetation under application is located in the Mullalyup valley comprised of Beard Vegetation Unit 3 (Hopkins et al. 2001) of which there is 72.1% (Shepherd et al. 2001) of the pre-1750 extent remaining. The local area (10km radius) is over 75% vegetated with approximately 95% of that vegetation in DEC managed State Forest.

The vegetation appeared to be somewhat modified by grazing, resulting in low plant species diversity (5-10 native plant species) (DEC Site Visit 2007); given this it is unlikely the vegetation represents an area of higher biodiversity than other, larger areas of remnant vegetation within the local area.

Given the scale of the clearing proposed and the above information, it is not likely the proposal is at variance to this Principle.

Methodology Keighery (1994);
DEC Site Visit (2007);
Hopkins et al. (2001);
Shepherd et al. (2001);
GIS Databases:
- CALM Managed Lands and Waters - CALM 1/06/04;
- Busselton 50cm Orthomosaic - DLI 03

(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 areas proposed for clearing contain medium creekline and riparian vegetation in Good condition (Keighery, 1994), which are likely to hold habitat value for native fauna, e.g. birds and possibly brushtail possums (DEC Site Visit, 2007).

The local area is over 75% vegetated, most of which is DEC managed State Forest, including the Wilga, Mullalyup, East Kirup and Greenbushes State Forests, which are likely to offer equal or better habitat than that within the area under application.

Given that there is a large amount of consolidated vegetation adjacent to the application area, the high percentage of DEC managed State Forest within the local area (10km radius), and the small scale of clearing proposed, the vegetation of the application area is not likely to represent significant fauna habitat.

Methodology Keighery (1994);
DEC Site Visit (2007);
GIS Databases:
- CALM Managed Lands and Waters - CALM 1/06/04;
- Busselton 50cm ORTHOMOSAIC - DLI03

(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**

Within the local area there is one known population of *Tetratheca parvifolia* (P3); this species is found generally within gravelly soils and higher in the landscape than the areas proposed to be cleared (Florabase).

Given the area under application occurs at the bottom of a valley on clay soils, it is unlikely this species occurs within the area under application.

Therefore, it is unlikely that the proposed clearing is at variance to this Principle.

Methodology Florabase (2007);
GIS Database:
- Threatened Flora Database (DEFL) - DEC 17/04/07

(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 recorded occurrences of Threatened Ecological Communities (TECs) within the vicinity of the proposed clearing (the nearest is approximately 36 kilometres away). The vegetation under application is also not considered to constitute any known TEC.

Therefore, it is not likely that the proposed clearing is at variance to this Principle.

Methodology GIS Databases:
- Threatened Ecological Communities - CALM 12/04/05;
- Threatened Plant Communities - DEP 06/95;
- Environmentally Sensitive Areas - DOE 30/05/05

(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 vegetation at the site is a component of Beard Vegetation Association 3 (Hopkins et al. 2001) of which there is 72.1% (Shepherd et al. 2001) of the pre-1750 extent remaining, and therefore of Least Concern for biodiversity conservation (Department of Natural Resources and Environment, 2002).

The original vegetation on the site is placed within the Balingup Complex (Havel 2002; Mattiske 1998) which is classified as Least Concern for biodiversity conservation, with 56.7% (Hopkins et al. 2001; Shepherd et al. 2001) remaining. Given the local area (10km radius) is over 75% vegetated, the area proposed for clearing is not considered to be a significant remnant within an extensively cleared area.

Therefore, it is not likely that the proposed clearing is at variance to this Principle.

Methodology Hopkins et al. (2001);
Shepherd et al. (200);
Havel et al. (1980);
Mattiske Consulting (1998);
Department of Natural Resources and Environment (2002);
GIS databases:
- Mattiske Vegetation - CALM 24/3/98;
- Heddle Vegetation Complexes - DEP 21/06/95;
- Pre European Vegetation - DA 01/01;
- Busselton 50cm ORTHOMOSAIC - DLI03

(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 no EPP areas, lakes, RAMSAR or ANCA wetlands, or any mapped wetlands within the local area (10km radius) of the proposed clearing.

The purpose of the proposed clearing is for constructing a dam; therefore the area under application is within an environment associated with a watercourse.

To mitigate the loss of vegetation associated with a watercourse due to the proposed clearing, conditions have been imposed on the Permit to revegetate an equivalent 1.0 hectare area at the tail of the dam once construction is complete and to fence the area to prevent stock access to the revegetated areas and the watercourse.

Although these conditions will minimise further degradation of the watercourse, the clearing of riparian vegetation is at variance to this Principle.

Methodology DEC Site Visit (2007);
GIS Databases:
- ANCA, Wetlands - CALM 08/01
- EPP Areas - DEP 06/95
- EPP Lakes - DEP 28/07/03
- Hydrography Linear - DoE 1/2/04
- RAMSAR, Wetlands - CALM 21/10/02
- Busselton 50cm ORTHOMOSAIC - DLI03

No other approval from the Department of Environment and Conservation or Department of Water is required for this proposal.

No public submissions have been received by the Department at the time of writing.

Methodology Shire of Donnybrook-Balingup submission (2007).

GIS Database:

- Town Planning Scheme Zones - MFP 8/98

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Dam construction or maintenance	Mechanical Removal	1.03	<p>Assessable criteria have been addressed and the assessment of the vegetation under application revealed the proposal is at variance to Principle (f); is unlikely to be at variance to Principles (a), (b), (c), (d), (e), (g), (h), (i) and (j).</p> <p>Revegetation and fencing (related to the revegetation) conditions are recommended to be imposed on this Permit.</p> <p>The assessing officer recommends the permit be granted, subject to revegetation and fencing conditions to offset the loss of riparian vegetation from the area.</p>

5. References

- DEC Site Visit (2007). Department of Environment and Conservation, Western Australia. TRIM Ref: DOC22294.
- Department of Environment and Conservation (2007). Florabase Website. Site accessed 28 May 2007.
- 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.
- Heddl, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.
- 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.
- Shire of Donnybrook-Balingup (2007). Submission to clearing proposal. TRIM Ref: DOC22861.

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)

(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 proposed to be cleared for the dam wall has a high salinity risk (GIS Database); the remaining areas under application have a low salinity risk and a groundwater salinity of 500-1000 mg/L (GIS Database).

Given the low salinity risk, low groundwater salinity and high percentage of vegetation remaining within the local area (10km radius), the proposal is not likely to cause appreciable land degradation.

Due to the small scale of clearing proposed, appreciable land degradation is unlikely to occur.

Methodology GIS databases:

- Acid Sulfate Soil Risk Map, SCP - DoE 01/02/04
- Salinity Risk LM 25m - DOLA 00.
- Groundwater Salinity, Statewide - 22/02/00

(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 no formal conservation reserves within 10 km of the proposed for clearing and therefore the proposal is not likely to be at variance with this principle.

Methodology GIS Databases:

- DEC Managed Lands and Waters - CALM 1/06/04
- Register of National Estate - EA 28/01/03
- 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 is not likely to be at variance to this Principle

The proposed clearing is in the Balingup Brook sub-catchment of the Hardy Estuary - Blackwood River catchment. The area proposed to be cleared has a high salinity risk in one area, and low salinity risk in other areas (DEC Database); all areas contain a groundwater salinity of 500-1000 mg/L (GIS Database).

Due to the small scale of the proposed clearing, the high rainfall of the area and the high percentage of vegetation remaining within the local area (10km radius), the proposed clearing is not likely to cause deterioration in the quality of surface or underground water.

Methodology GIS Databases:

- Evaporation Isopleth - BOM 9/98;
- Hydrogeology, statewide- WRC 05/02/02;
- Hydrographic Catchments, Catchments - DoE 3/4/03;
- Public Drinking Water Source Areas (PDWSAs) - DOE 29/11/04;
- Rainfall, mean annual;
- RIWI Groundwater Areas - WRC 13/06/00;
- RIWI Surface Water Areas - WRC 18/10/02

(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 small scale of the application area and the high percentage of vegetation remaining within the local area (10km radius), the proposed clearing is unlikely to cause or exacerbate the incidence or intensity of flooding.

Methodology GIS databases:

- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The property is zoned General Farming Pastoral under the Shire TPS No.4. The Shire advise they have no objection to the proposal if an equivalent area is replanted (Shire submission 2007).

The application area is not within a proclaimed surface water catchment area gazetted for surface water management under the Rights In Water and Irrigation Act 1914 (RIWI).