



1. Application details

1.1. Permit application details

Permit application No.: 2632/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: James Leslie and Mary Rocksborough Frith

1.3. Property details

Property: LOT 8479 ON PLAN 253886 (HESTER BROOK 6255)
 LOT 8479 ON PLAN 253886 (HESTER BROOK 6255)

Local Government Area: Shire Of Bridgetown-Greenbushes
 Colloquial name:

1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|--------------------|-----------|--------------------|---------------------|
| 0.5 | | Mechanical Removal | Extractive Industry |

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. | 0.5ha of native vegetation for the purpose of gravel extraction. | Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994) | The vegetation condition was determined from aerial mapping Bridgetown 50cm Orthomosaic (DLI04) and information provided by the proponent (TRIM DOC58886). |
| Mattiske Vegetation Complex: Hester - Tall open forest to open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla on lateritic uplands in perhumid and humid zones. | | | |

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 may be at variance to this Principle**
 The proposal is for the clearing of 0.5ha of native vegetation in degraded (Keighery 1994) condition for the purpose of gravel extraction to be used onsite.

The application area is mapped as Beard Vegetation associations 3 (Medium forest; jarrah-marri) (Shepherd, 2006). In addition, Mattiske Consulting (1998) has identified the area under application as vegetation complexes Hester (Tall open forest to open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla on lateritic uplands in perhumid and humid zones.). These vegetation complexes have not been extensively cleared and are above the 30% threshold level target identified by the EPA (2000).

The land under application lies 30m south and 170m west of the amended National Trust Conservation Covenant site. Clearing of the applied area may have detrimental impacts on the biological diversity of this area, and may be at variance to this principle. Therefore, in order to protect the biological diversity of the neighbouring National Trust Conservation Covenant site, revegetation, weed and dieback conditions will be placed on the permit.

Methodology Keighery (1994)
 EPA (2000)
 Shepard (2006)
 Mattiske (1998)

GIS database:
 - Mattiske Vegetation (01/03/1998)
 - 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

Whilst the vegetation under application may be utilised by various threatened and priority fauna species, including *Calyptorhynchus banksii naso*, *Calyptorhynchus baudinii* and *Phascogale tapoatafa*, the vegetation is sparse and the area to be cleared is only 0.5ha. The area is surrounded by larger areas of similar vegetation types in better condition and is therefore not likely to be significant habitat for fauna. Therefore, the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS database:
- SAC Biodatasets - accessed 11 Feb 08

(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 no known records of rare flora within the local area (10km radius) of this application. It is therefore not likely that the clearing as proposed is at variance to this principle.

Methodology GIS database:
- Declared Rare and Priority Flora List - CALM 13/08/03
- SAC Biodatasets - accessed 9 Sept 08

(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 threatened ecological communities mapped within the local area (10km radius). Therefore, the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS database:
- SAC Biodatasets - accessed 9 Sept 08
- 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

The vegetation within the application area is a component of Beard Vegetation Association 3 (Hopkins et al, 2001) of which there is approximately 69.4% of the pre-European extent remaining (Shepherd, 2006). The vegetation proposed for clearing is also a component of Mattiske vegetation complex Hester, of which 82.3% of the pre-European extent is remaining (Mattiske, 1998).

The proposed clearing falls within the Interim Biogeographic Regionalisation of Australia bioregion Jarrah Forest, of which 53.4% of the pre-European vegetation remains. The local area is approximately 40% vegetated with native vegetation, of which there are 3 conservation areas.

Therefore, the clearing of 0.5ha of native vegetation in a degraded condition is not likely to be at variance to this principle.

Methodology Hopkins et al. (2001)
Mattiske Consulting (1998)
Shepherd (2006)

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 9 Sept 08
- 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

The proposal area lies 740m from the Blackwood River, which is outside the recommended 50m buffer area for a watercourse. Additionally, minor perennial watercourses also occur around the application area, with the closest being 175m east, which drain into the Blackwood River. The proposed clearing is outside the recommended buffer area for these water courses (30m), and they are buffered from the proposed clearing by native vegetation. There are no wetlands mapped within the local area (10km radius).

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

Methodology GIS databases:
- Hydrography linear - 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

The proposed clearing area is of soil type Qb31, and the chief soils are hard neutral red soils and acidic red soils. The topography is low relief, and as such erosion risks are reduced. As the proposed clearing is small (0.5ha) and located on already degraded vegetation, it is unlikely to result in appreciable land degradation.

Methodology Northcote et al. (2001)

GIS database:
- 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 may be at variance to this Principle

The proposed clearing is surrounded by Yornup State Forest 2.7km south east, Hester State Forest 6km north and a nature reserve 1.2km north east. However, given the current degraded state of the vegetation under application, and the presence of larger, better condition remnant vegetation between the conservation areas and the application area, it is unlikely to be providing significant ecological linkages between conservation areas. However, as the proposal area occurs 30m south and 170m west of National Trust of Australia Conservation Covenant land, weed and dieback conditions will be placed on the permit.

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 may be at variance to this Principle

The proposed clearing lies within the Blackwood River and Hardey Estuary catchments. The Blackwood River is 740m south of the application area, and the Hester Brook, Moultons Gully and Gregory Brook also occur within the local area (10km radius). The hydrogeology of the site is rocks of low permeability and the topographical contours suggest that any surface water leaving the site will probably flow through native vegetation before reaching the river. As the area is small, the impacts on quality of surface and underground water are reduced. However, to minimise long term risks to the nearby watercourses, revegetation conditions will be placed on the permit.

Methodology GIS database:
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- 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

As the area to be cleared is small (0.5ha) it is unlikely to exacerbate the incidence or intensity of flooding.

Methodology GIS database:

- 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 purpose of the application is for gravel extraction. The extracted gravel is for internal subdivision road building and will not be used or sold off site. Given this an extractive industry licence is not required.

Town Planning approval has been sought from the Western Australian Planning Commission, who have agreed to grant approval once conditions are met.

Planning approval has been sought to extract gravel from the Shire of Bridgetown-Greenbushes.

The application area lies within a Restrictive Covenant, however an application has been submitted to the National Trust of Australia to have the covenant lifted from part of the property, including the section of land in question. The National Trust have agreed to this variation and the plan has been lodged with Landgate pending subdivision approval. Clearing of vegetation is not allowed under this covenant (Clause 1(b) and 1(m)) and neither is extractive industry (Clause 1(h)). This prevents the proponents from clearing under this application until the Covenant has been officially removed from the section of land in question.

Methodology

Restrictive Covenant - TRIM Ref DOC58916
 National Trust of Australia Advice - TRIM Ref DOC63372
 Application for Planning Approval - TRIM Ref DOC58890
 Subdivision Approval WAPC 126509 - TRIM Ref DOC59488

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

5. References

- 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.
- 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, 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.
- National Trust of Australia Advice - TRIM Ref DOC63372.
- 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) |