



1. Application details

1.1. Permit application details

Permit application No.: 684/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Henderson Pty Ltd

1.3. Property details

Property: LOT 8 ON DIAGRAM 79888 (Lot No. 8 GREENOUGH WALKAWAY 6528)
Local Government Area: Shire Of Greenough
Colloquial name: 8 Greenough Rd, Walkaway

1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|--------------------|-----------|--------------------|---------------------|
| 32 | | Mechanical Removal | Miscellaneous |

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 359: Shrublands; acacia and banksia scrub. (Hopkins et al. 2001, Shepherd et al. 2001). | The proposal includes clearing of approximately 30ha of regrowth that is the result of a fire during 1997, which destroyed much of the original vegetation. Approximately 90% of the species observed during the inspection were Acacia rostellifera and A. blakelyi. Other plants noted include Acacia xanthina, Grevillea candelabroides, Grevillea Leucopteris, Lechenaultia linarioides, Stylobasium spathulatum and Hibbertia spicata with some Eucalyptus erythrocorys. Considerable weed invasion was also noted throughout the property with capeweed dominating (DAWA Land Degradation Assessment Report DoE TRIM GD 556). | Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994) | The description of the vegetation under application was obtained after a site visit to the property on Monday 1st August 2005 and the Land Degradation and Assessment Report conducted by a Department of Agriculture officer (DoE TRIM GD 556). |

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 includes clearing of approximately 30ha of regrowth that is the result of a fire during 1997, which destroyed much of the original vegetation. Approximately 90% of the species observed during the inspection were Acacia rostellifera and A. blakelyi. Other plants noted include Acacia xanthina, Grevillea candelabroides, Grevillea Leucopteris, Lechenaultia linarioides, Stylobasium spathulatum and Hibbertia spicata with some Eucalyptus erythrocorys. Considerable weed invasion was also noted throughout the property with capeweed dominating. (DAWA, 2005) Due to the previous disturbance over the area under application this proposal is unlikely to be at variance with this Principle. |
| Methodology | DAWA, 2005. GIS Databases: - Interim Biogeographic Regionalisation of Australia-EA 18/10/00. |

(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

CALM advise that the nearest database record of Threatened or Priority fauna is located approximately 10.4km from the area under application. However, the area under application appears to provide connectivity between areas of bushland in an otherwise extensively cleared landscape. It is likely that the vegetation occurring within the area under application is utilised by fauna, both as habitat and for travelling through the landscape between areas of remnant bushland. This proposal will affect the connectivity of bushland in this area (CALM, 2005), however negotiations have allowed 15ha to be retained in a large patch that provides connectivity between adjacent areas of remnant vegetation and therefore still providing a habitat for fauna. This proposal is therefore unlikely to be at variance to this Principle.

Methodology CALM, 2005.

(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

CALM advise that two species of Declared Rare Flora, two species of Priority Three and two species of Priority Four flora have been recorded in the local area within a 10km radius. Given that the notified area has been previously cleared and allowed to regenerate, and is now dominated by regeneration of *Acacia rostellifera* and *Acacia blakelyi*, it is unlikely that Declared Rare or Priority Flora that is recorded in the local area will occur within the area under application. This proposal is therefore not likely to be at variance to this Principle. (CALM, 2005)

Methodology CALM, 2005.

GIS Databases:

- Declared Rare and Priority Flora list - CALM 13/08/03.

CALM's Threatened Flora Data Management System and CALM's Herbarium Specimen Collection Database [The comprehensiveness of the database is dependent on the amount of survey carried out in the area and does not necessarily represent a comprehensive listing (CALM, 2005)].

(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 at variance to this Principle

The Threatened Ecological Community (TEC) database highlighted two TEC's, 4.2km and 2km away from the area under application. Both TEC's require a buffer of 500m, which the area under application is well outside of. It is not expected that this proposal will impact upon these TEC's, nor is it likely that a TEC occurs at the site of the proposed clearing, due to previous land use impacts (CALM, 2005). This proposal is therefore not at variance to this Principle.

Methodology CALM, 2005.

GIS Databases:

- Threatened Ecological Communities - CALM 15/07/03

(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 Geraldton Sandplains Bioregion has 26.8% remaining and Beard vegetation association 359 has 21.1% of the native vegetation remaining, making them vulnerable by conservation status standards. In addition, the Shire of Greenough has 15.0% of native vegetation remaining within the intensive agricultural area.

CALM recommends that this proposal should not be approved within the area that is demonstrating successful regeneration, as less than 30% of the original extent of this vegetation association (representing type 359) remains and 85% of the pre-European settlement native vegetation in the Greenough Shire has since been cleared (CALM, 2005). CALM advise that the regenerating vegetation is developing well in both density and species composition and recommend a decrease in the area to be cleared, in order to preserve the vegetation representative of vegetation association type 359 which is showing promising regeneration (CALM 2005). Negotiations with the applicant has resulted in a reduction in the area to be cleared to 32ha and retaining 15ha of the area that is showing good regeneration to the original Beard Vegetation Association 359. In addition the area to be retained provides connectivity between adjacent areas of remnant vegetation. This proposal is therefore not likely to be at variance to this Principle.

Methodology CALM, 2005.

GIS Databases:

- Interim Biogeographic Regionalisation of Australia - EA 18/10/00

- Pre-European Vegetation - DA 01/01

- Local Government Authorities - DLI 08/07/04

- EPA Position Paper No 2 Agriculture Region - DEP 12/00
Shepherd et al, 2001.
Department of Natural Resources and Environment, 2002

(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 at variance to this Principle

No watercourses run through the area under application. The Greenough River is the only major watercourse in the area and is located 1.6km to the North east of the proposal. Due to the distance of the proposal from any watercourse, the area under application is not at variance to this Principle.

Methodology GIS Databases:
- Hydrography, linear - DoE 01/02/04

(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 Department of Agriculture Land Degradation Assessment Report (DAWA 2005) recognises that although the removal of remnant vegetation would increase the risk of wind erosion, the farming system employed by the farmer necessitates the need for vegetative cover on the soil surface at all times, thus reducing the risk of wind erosion. In fact, the proponent is known to have purchased wind eroded blocks in the district in the past, and has managed them well with no further instances of erosion occurring on them. The proposal is also considered unlikely to adversely impact on groundwater quality and is not likely to contribute to water erosion. (DAWA, 2005) The proposal is not likely to cause appreciable land degradation and is therefore unlikely to be at variance to this Principle.

Methodology DAWA (2005).
GIS Databases:
- Rainfall, Mean Annual - BOM 30/09/01
- Salinity Risk LM 25m - DOLA 00
- Acid Sulphate Soil risk map, SCP DOE 01/02/04

(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

CALM advise that there is one registered CALM for Wildlife site located approximately 5.9km from the area under application (CALM, 2005), however the area under application does provide connectivity between adjacent area of bushland. Beard vegetation association type 359 has 0% in secure tenure and the benchmark of 15% representation in conservation reserves (JANIS Forests Criteria 1997) has not been met. In addition there is 21.1% of this vegetation type remaining. Negotiations with the applicant has resulted in a reduction in the area to be cleared to 32ha and retaining 15ha of the area that is showing good regeneration to the original Beard Vegetation Association 359. In addition the area to be retained provides connectivity between adjacent areas of remnant vegetation. This proposal is therefore not likely to be at variance to this Principle.

Methodology CALM, 2005.
GIS Databases:
- CALM Regional Parks - CALM 12/04/02
- WRC Estate - WRC 05/99
- CALM Managed Lands & Waters - CALM 01/06/04
- Proposed National Parks FMP-CALM 19/03/03
- Register of National Estate - EA 28/01/03

(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 area under application falls within the Greenough River catchment, however it is not a Public Drinking Water Source Area (PDWSA) nor is it part of a PDWSA Protection Zone. The elevation contours drop away to the North-Northeast, however the Greenough River runs West-Northwest away from the area under application. Due to the distance from the Greenough River and orientation of the area under application it is unlikely to cause deterioration in the quality of surface or underground water and therefore unlikely to be at variance with this Principle.

Methodology Site visit (1st August 2005)
GIS Databases:
- Current WIN data sets

- PDWSA Protection Zones - DOE 07/01/04
- Public Drinking Water Sources (PDWSAs) - DOE 29/11/04
- Hydrographic Catchments - Catchments - DOE 03/04/03.

(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 at variance to this Principle

The area under application falls within the 500mm rainfall zone that is average for Western Australia and consists of sandy soils. Lot 8 Greenough Road is located approximately 1.6km from the Greenough River, at an elevation between 5 - 20m. It is considered that due to the sandy nature of the site and the distance from the Greenough River that the removal of vegetation is unlikely to cause or exacerbate the incidence of flooding and is therefore not at variance to this Principle.

Methodology GIS Databases:

- Rainfall, Mean Annual - BOM 30/09/01
- Hydrography, linear - DOE 01/02/04
- Topographic Contours, Statewide - DOLA 12/09/02
- Soils, Statewide - DA 11/99

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

Comments

The Shire of Greenough has indicated that Council supports the clearing proposal subject to compliance of conditions to collect seed stock prior to removal of vegetation and fence remaining areas of native vegetation on the property. The area to be retained will be fenced and the applicant has approved seed stock collection within this area, however no seed stock will be removed from the area to be cleared as the seed is of little biodiversity value and contains weeds.

There is no further requirement for a Works Approval or EP Act Licence for the area under application. There is no requirement for a water licence on the property currently and the applicant is aware that if his circumstances change he may require a water licence.

An Environmental Impact Assessment (EIA) was conducted over the area under application as part of the Geraldton Region Plan which identified proposed areas for infrastructure and areas of conservation within the Midwest region. This EIA does not affect this application as the property in question is already partly cleared from previous agricultural purposes and was not identified as an area of interest (EPA Bulletin Number 891).

There are two Native Title Claims over the area under application, however the property is freehold land and therefore Native Title is extinguished.

Methodology Submission - Shire of Greenough
EPA Bulletin Number 891.

4. Assessor's recommendations

| Purpose | Method Applied | area (ha)/ trees | Decision | Comment / recommendation |
|---------------|--------------------|------------------|----------|--|
| Miscellaneous | Mechanical Removal | 32 | Grant | The assessable criteria have been addressed and negotiations have resulted in the applicant reducing the area to clear to 32ha, which includes approximately 7ha of which is already partially cleared and agreeing to retain 15ha of native vegetation on the property. The area retained will provide connectivity between adjacent areas of bushland and secures 15ha of Beard Vegetation Association type 359. The assessing officer therefore recommends that the permit should be granted subject to the conditions on the permit. |

5. References

CALM (2005) Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref IN24699.

DAWA (2005) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref GD556.

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.

Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALM Science after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.

JANIS Forests Criteria (1997) Nationally agreed criteria for the establishment of a comprehensive, Adequate and Representative reserve System for Forests in Australia. A report by the Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-committee. Regional Forests Agreement process. Commonwealth of Australia, Canberra.

Keighery, BJ (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

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 |
|------|--|
| CALM | Department of Conservation and Land Management |
| DAWA | Department of Agriculture |
| DEP | Department of Environmental Protection (now DoE) |
| 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 DoE) |