



1. Application details

1.1. Permit application details

Permit application No.: 1497/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Glenn Allan & Joy Lynette Harper

1.3. Property details

Property: LOT 58 ON PLAN 5709 (Lot No. 58 SUTCLIFFE WAGGRAKINE 6530)

Local Government Area: Shire Of Greenough

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.35		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 area under application is a block of 4.7 ha, of which approximately half of the area is cleared. The well vegetated section that remains is best described as shrubland, ranging from small shrubs to small trees, and is dominated by acacia species. Aside from some weedy clearings that occur throughout this area, the vegetation is quite dense. The cleared half of the block has a high weed burden, some citrus trees and only a small amount of native vegetation remaining. Overall the condition of the vegetation is considered to be very good.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The condition of the vegetation was assessed during a site visit conducted on 27 October 2006. Site visit, DEC Officer 2006.

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 area under application is a block of 4.7 ha, of which approximately half of the area is cleared. The well vegetated section that remains is best described as shrubland, ranging from small shrubs to small trees, and is dominated by *Acacia rostellifera*. Aside from some weedy clearings that occur throughout this area, the vegetation is quite dense. The cleared half of the block has a high weed burden, some citrus trees and only a small amount of native vegetation remaining. Overall the condition of the vegetation is considered to be very good. (Site visit, DEC Officer 2006)

Biodiversity Coordination Section, DEC (2007) advise that 'Section A is considered to be in a degraded condition with high weed density, whilst section B is considered to be in very good condition with some remnant vegetation. Within the local area, three Priority species have been recorded which are likely to occur within section B of the proposed clearing. As there is limited remnant vegetation within the surrounding area, the vegetation within Section B is likely to be of importance for local fauna species for foraging, shelter and nesting purposes. Section A is less diverse and likely to offer significant habitat for local populations. Given that Section B is likely to have higher ecological diversity than the local community, this section of the application may be at

variance to this principle, whereas section A is unlikely to be at variance to this principle.'

Due to the small area under application (1.35 hectares), level of disturbance, weed invasion and limited diversity of native species suggests that the original biodiversity has been compromised. It is therefore unlikely that the vegetation under application is representative of an area of outstanding biodiversity in the local area.

Methodology Site visit, DEC Officer (2006)
Biodiversity Coordination Section, DEC (2007)
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**
The area under application is a block of 4.7 ha, of which approximately half of the area is cleared. The well vegetated section that remains is best described as shrubland, ranging from small shrubs to small trees, and is dominated by acacia species. Aside from some weedy clearings that occur throughout this area, the vegetation is quite dense. The cleared half of the block has a high weed burden, some citrus trees and only a small amount of native vegetation remaining. (Site visit, DEC Officer 2006)

Biodiversity Coordination Section, DEC (2007) advised that 'Although the vegetation habitats within the proposed clearing area may not be specific to selected local priority species it is still important habitat as a remnant within an otherwise predominantly cleared landscape. Section A offers little ground cover, and potential food sources and nesting/breeding areas and is therefore unlikely to be at variance to this principle. Section B, however, is one of few areas of 'very good' condition remnant vegetation within the local and as such is important within a landscape of large scale clearing, therefore section B may be at variance to this principle.'

Due to the small area under application (1.35 hectares), level of disturbance, weed invasion and limited diversity of native species suggests that the original biodiversity and habitat value has been compromised. This vegetation is therefore unlikely to provide a significant habitat for indigenous fauna.

Methodology Site visit, DEC Officer (2006)
Biodiversity Coordination Section, DEC (2007)

(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**
The area under application is a block of 4.7 ha, of which approximately half of the area is cleared. The well vegetated section that remains is best described as shrubland, ranging from small shrubs to small trees, and is dominated by *Acacia rostellifera*. Aside from some weedy clearings that occur throughout this area, the vegetation is quite dense. The cleared half of the block has a high weed burden, some citrus trees and only a small amount of native vegetation remaining. Overall the condition of the vegetation is considered to be very good. (Site visit, DEC Officer 2006)

Biodiversity Coordination Section, DEC (2007) advise that there are 6 records of Declared Rare Flora, 4 records of Priority One, 9 records of Priority Two, 9 records of Priority Three and 6 records of Priority Four Flora Species within 10 km of the area under application. It is unlikely that any of the Declared Rare Flora species occur within the area under application due to differences in soil type, vegetation and habitat type. Of the Priority species found within the local area only three are likely to occur within the notified area.

Due to the small area under application (1.35 hectares), level of disturbance, weed invasion and limited diversity of native species suggests that it is unlikely that this proposal is at variance with this principle.

Methodology Site visit, DEC Officer (2006)
Biodiversity Coordination Section, DEC (2007)
GIS Databases:
- Declared Rare and Priority Flora list - CALM 01/07/05
- Clearing Regulations - Environmentally Sensitive Areas - DoE 30/05/05

(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**
Biodiversity Coordination Section, DEC (2007) advised that 'There is no evidence that any EPBC Act listed TEC's or State listed TEC's are present on the site of the proposed clearing. There are numerous Priority Ecological Communities (PEC's) listed within the local area. However, these PEC's are directly associated with communities within the Moresby Range region, the community description is 'Melaleuca megacephala and Hakea pycnoneura thicket on stony slopes of Moresby Range'. Clearing within the notified area is unlikely to

affect the known occurrences of these PEC's, therefore this proposal is not likely to be at variance to this principle.'

This proposal is therefore unlikely to be at variance to this principle.

Methodology Biodiversity Coordination Section, DEC (2007)
GIS Databases:
- Threatened Ecological Communities - CALM 12/04/05

(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 under application is a component of Beard Vegetation Association 359 (Hopkins et al. 2001) of which there is 18.8% of the pre-European extent remaining (Shepherd et al. 2001) This vegetation type is therefore 'vulnerable' for biodiversity conservation (Department of Natural Resources and Environment 2002). In addition the Shire of Greenough has 15.7% of the pre-European extent remaining giving it a 'vulnerable' status for biodiversity conservation.

The area under application falls within the Intensive Landuse Zone as described under EPA Position Statement No 2.

The area under application is only partly vegetated, with the vegetation under application overall described to be in very good condition. The well vegetated section that remains is best described as shrubland, ranging from small shrubs to small trees, and is dominated by acacia species. Aside from some weedy clearings that occur throughout this area, the vegetation is quite dense. The cleared half of the block has a high weed burden, some citrus trees and only a small amount of native vegetation remaining.

Due to the small area under application (1.35ha) and the reduced conservation value it is unlikely that this proposal is at variance to this Principle.

	Pre-European Reserves/CALM- area (ha)	Current extent (ha)	Remaining %*	Conservation status**	managed land,
%					
IBRA Bioregion - Geraldton Sandplains***	3,136,277	1,324,440	42.2	Depleted	35.6
Shire of Greenough***	177,404	26,612	15.7	Vulnerable	Not available
Beard veg type - 359***	44,496	8,384	18.8	Vulnerable	0

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

*** Area within the Intensive Landuse Zone

Methodology 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 or wetlands are present within the area under application. Therefore this proposal is not at variance to this Principle.

Methodology Site visit DEC Officer, 2006
GIS Databases:
- Hydrography, linear - DoE 01/02/04
- Hydrographic Catchments - Catchments - DoE 23/03/05

(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**
DAFWA (2006) advise that 'The clearing of this relatively small area of vegetation to cause land degradation in terms of salinity, wind and water erosion, waterlogging or flooding. Given the sandy soils at the site however, care should be taken to ensure loose, disturbed sand is not left exposed to wind or some wind erosion could take place. Therefore, this clearing is unlikely to be at variance with principle (g).'

Methodology DAFWA (2006)
GIS Databases:
- Rainfall, Mean Annual - BOM 30/09/01
- Salinity Risk LM 25m - DOLA 00
- Acid Sulphate Soil risk map, SCP DOE 04/11/04
- 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**
Biodiversity Coordination Section, DEC (2007) advised that two Nature Reserves occur within a 10km radius of the area under application. 'Both Nature Reserves are vested with the Conservation Commission for the purposes of conservation of flora and fauna. These reserves are sufficiently distant from the notified area that they would not be impacted by the proposed clearing.'

This proposal is therefore unlikely to be at variance to this Principle.

Methodology Biodiversity Coordination Section, DEC (2007)
GIS Databases:
- CALM Regional Parks - CALM 12/04/02
- CALM Managed Lands & Waters - CALM 01/07/05
- 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**
DAFWA (2006) advise that 'It is unlikely that the clearing of up to 4.7 ha of vegetation will contribute to groundwater rise and salinity at this site. Land degradation risk analysis on the soil sub-system indicates that none of the map unit is presently saline and zero percent is presently at risk. Groundwater is presently greater than 25 metres below ground level at this site.' In addition 'It is unlikely that the clearing of up to 4.7 ha of vegetation will contribute to eutrophication at this site.'

Therefore this proposal is unlikely to be at variance to this Principle.

Methodology DAFWA (2006)
GIS Databases:
- Public Drinking Water Sources (PDWSAs) - DOE 09/08/05
- Hydrographic Catchments - Catchments - DOE 23/03/05
- Hydrography, linear - DoE 01/02/04
- Rainfall, Mean Annual - BOM 30/09/01

(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**
DAFWA (2006) advise that 'It is unlikely that the proposed clearing will contribute to waterlogging and flooding. Degradation analyses of the soil sub-system indicates a minimal risk of waterlogging and flooding. The relatively small amount of vegetation to be cleared and the high infiltration rates of the sandy soils reduce the likelihood of clearing leading to waterlogging or flooding in this area.'

Therefore this proposal is unlikely to be at variance with this Principle.

Methodology DAFWA (2006)
GIS Databases:
- Rainfall, Mean Annual - BOM 30/09/01
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The Shire of Greenough has not advised of any planning approvals or requirements that may affect this proposal.

There is no further requirement for a RIWI Act Licence, Works Approval or EP Act Licence for the area under application.

There are three Native Title Claims over the area under application, however as the property is freehold land Native Title has been extinguished.

There were two Environmental Impact Assessments (EIA) conducted over the area under application. One EIA encompassed the Geraldton Regional Plan and was considered 'Not a Proposal under Part IV'. The level of assessment was set on 7 January 1998 (EPA CRN119444). The second EIA relates to the Shire of Greenough Town Planning Scheme 5 District Zoning Scheme. This EIA was informally assessed and advice was given with no appeals. The level of assessment was set on 18 February 2004. Neither of these Environmental Impact Assessments will impact on this proposal.

The area under application falls within the Intensive Landuse Zone as described under EPA Position Statement No 2 which does not support further clearing for agricultural purposes, due to severe loss of biodiversity.

Methodology

4. Assessor's comments

Purpose	Method Applied	area (ha)/ trees	Comment
Miscellaneous	Mechanical Removal	1.35	The assessable criteria have been addressed and no objections were raised. The assessing officer therefore recommends that the permit should be granted.

5. References

- Biodiversity Coordination Section, DEC (2007) Land clearing proposal advice (Specific Biodiversity advice). Department of Environment and Conservation, Western Australia. DEC TRIM ref DOC16114.
- DAFWA (2006) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DEC TRIM Ref DOC9242.
- 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. 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.
- 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.
- Site Visit Report (2006) Department of Environment and Conservation (DEC), Western Australia. DEC TRIM ref DOC17922.

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)

