



1. Application details

1.1. Permit application details

Permit application No.: 2060/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: Trevor John & Karen Linda Grose

1.3. Property details

Property: LOT 17 ON DIAGRAM 26333 (Lot No. 17 CHAPMAN GLENFIELD 6532)
 LOT 17 ON DIAGRAM 26333 (Lot No. 17 CHAPMAN GLENFIELD 6532)
 Local Government Area: Shire Of Greenough
 Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.06		Mechanical Removal	Hazard reduction or fire control

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 & banksia scrub (Hopkins et al. 2001, Shepherd et al. 2001)	The vegetation is represented by 11 individuals of Acacia rostellifera that exist in a single, somewhat linear row on the middle portion of the area under application. The understorey consists mainly of weeds such as buffel grass, wild canola and wild mustard. There is little or no middle storey present in the vegetation. There is evidence of historic burning, heavy vehicle tracks and weed invasion within and outside the vegetated area. The vegetation under application occurs on a gently sloping terrain. (DEC Site Visit 2007)	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The description and condition of the vegetation under application were obtained through a site inspection conducted on 17 September 2007 (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 is represented by 11 individuals of Acacia rostellifera that exist in a single, somewhat linear row on the middle portion of the area under application. The understorey consists mainly of weeds such as buffel grass, wild canola and wild mustard. There is little or no middle storey present in the vegetation. There is evidence of historic burning, heavy vehicle tracks and weed invasion within and outside the vegetated area. The proposal area is a linear strip of land surrounded by houses on the north and south sides, a major road on the western side and agricultural lands on the eastern side. (DEC Site Visit 2007) The vegetation appears to be in a 'degraded' condition (Keighery 1994).

Due to the small area (approximately 0.06 ha), low species and ecosystem diversity and the edge effects from surrounding urban and residential land uses, the area under application is not likely to be representative of high biodiversity.

Methodology GIS Databases:
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00.
Keighery 1994
DEC Site Visit 2007

(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**

There are two records of Declared Threatened Fauna, one record of a Priority 1 Fauna and one record of a Priority 4 Fauna within a radius of 10 km. The closest of them appear to occur at a distance of approximately 1.4 km from the proposal area. The vegetation is represented by 11 individuals of *Acacia rostelifera* that exist in a single, somewhat linear row on the middle portion of the area under application. The understorey consists mainly of weeds such as buffel grass, wild canola and wild mustard. There is little or no middle storey present in the vegetation. There is evidence of historic burning, heavy vehicle tracks and weed invasion within and outside the vegetated area. The proposal area is a linear strip of land surrounded by houses on the north and south sides, a major road on the western side and agricultural lands on the eastern side. (DEC Site Visit 2007) The vegetation appears to be in a 'degraded' condition (Keighery 1994).

Given the small area and edge effects from surrounding urban and residential land uses, this isolated patch of vegetation is not likely to provide quality habitat to the Threatened or other significant fauna.

Methodology GIS Databases:
- SAC Bio datasets 140907
Keighery 1994
DEC Site Visit 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**

There are 16 records of Declared Rare Flora (DRF), which are also Environmentally Sensitive Areas (ESAs). There are two records of a Priority 4 Flora, two records of a Priority 3 Flora, two records of a Priority 2 Flora and two records of a Priority 1 Flora within a radius of 10 km. The closest of them is a P2 Flora that occurs approximately 3.5 km away in the Chapman River Regional Park. All other significant flora occurs in the Moresby Range with the closest occurrence being approximately 4.6 km away from the area under application. One of the two Priority 2 Flora occur in the same soil type as the area under application, while all the other significant taxa occur on soil types that are different from the area under application.

The vegetation is represented by 11 individuals of *Acacia rostelifera* that exist in a single, somewhat linear row on the middle portion of the area under application. There is evidence of historic burning, heavy vehicle tracks and weed invasion within and outside the vegetated area. The proposal area is a linear strip of land surrounded by houses on the north and south sides, a major road on the western side and agricultural lands on the eastern side. (DEC Site Visit 2007) The vegetation appears to be in a 'degraded' condition (Keighery 1994).

Considering that the proposed clearing is only a small patch of *Acacia rostelifera*, and given the level of disturbance from the surrounding residential and urban landuses, the vegetation in the area under application is not likely to be necessary for the existence of Rare or Priority Flora.

Therefore this proposal is not likely to be at variance with this Principle.

Methodology GIS Databases:
- SAC Bio datasets 140907
- Clearing Regulations - Environmentally Sensitive Areas - DoE 30/05/05
Keighery 1994
DEC Site Visit 2007

(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 four known records of Threatened Ecological Communities (TECs) within a radius of 10 km. However, the closest of them occur 6.3 km away on the Moresby Range and not expected to be affected by the proposed clearing.

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

Methodology GIS Databases:
- SAC Bio datasets 140907

(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**
 Veg Representation

	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	35.5
Shire - Greenough***	177,404	26,612	15.0	Vulnerable	Not available
City of Geraldton***	Not available	Not available	Not available	Not available	Not available
Beard veg type - 359	44,496	8,384	18.8	Vulnerable	0.0

* (Shepherd et al. 2001; Shepherd, 2006)

** (Department of Natural Resources and Environment 2002)

*** Area within Intensive Landuse Zone

The vegetation in the areas 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. 2006). The Shire of Greenough has 15.0% of the pre-European extent remaining (Shepherd et al. 2001) and data are not available for the City of Geraldton. The Geraldton Sandplains Bioregion has 42.2% of the pre-European extent remaining (Shepherd et al. 2006). The Shire of Greenough and Beard Vegetation Association 359 have a 'vulnerable' status of biodiversity conservation (Department of Natural Resources and Environment 2002).

The area under application falls within EPA Position Statement No. 2 however it does not impact on this proposal as the clearing is not for agricultural purposes.

The vegetation is represented by 11 individuals of *Acacia rostellifera* (DEC Site Visit 2007), which is only one component of the Beard Vegetation Association 359 (Hopkins et al. 2001).

The Shire of Greenough and the Beard Vegetation Association 359 have less than 30 % of Pre-European vegetation remaining, which is lower than the State Government's commitment to the National Objectives Targets for Biodiversity Conservation 2001-2005 (AGPS 2001) which includes a target that prevents clearance of ecological communities with an extent below 30 % of that present pre-1750 (Department of Natural Resources and Environment 2002; EPA 2000).

However, given that the Beard Vegetation Association is not fully represented in the small patch of remnant vegetation, and the area of proposed clearing is low, this proposal is not likely to be at variance with this Principle.

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
 AGPS 2001
 Department of Natural Resources and Environment 2002
 Hopkins et al. 2001
 Shepherd 2006
 Shepherd et al. 2001
 DEC Site Visit 2007

(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**
 There are no watercourses or wetlands within the areas under application (DEC Site Visit 2007). The closest watercourse is the Chapman River, which is known to be a major non-perennial watercourse; however it occurs 2.5 km south of the area under application.

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

Methodology GIS Databases:
 - Hydrography, linear - DoE 01/02/04
 - Hydrographic Catchments - Catchments - DoE 23/03/05
 DEC Site Visit 2007

(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

Chief soils are deep, red-brown loamy sands and clayey sands. The vegetation is represented by 11 individuals of *Acacia rostellifera* that exist in a single, somewhat linear row on the middle portion of the area under application. There is evidence of historic burning, heavy vehicle tracks and weed invasion within and outside the vegetated area. (DEC Site Visit 2007) The remaining vegetation appears to be in a 'degraded' condition (Keighery 1994).

The small amount of proposed vegetation removal is not likely to cause significant wind or water erosion and unlikely to contribute to further land degradation.

Methodology GIS Databases:

- Rainfall, Mean Annual - BOM 30/09/01
 - Salinity Risk LM 25m - DOLA 00
 - Soils, Statewide - DA 11/99
- DEC Site Visit 2007

(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 Wokatherra Nature Reserve is situated approximately 6 km northeast of the area under application. The Geraldton Customs House Complex, which is in the Register of National Estate, is situated 8.5 km south of the area under application. However, due to the great distance, the proposed clearing is not likely to impact on the environmental or heritage values of these Conservation Areas.

Therefore, this proposal is not likely to be at variance to this Principle.

Methodology 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

The area under application is situated within the Coastal hydrographic catchment. The area under application is not situated within a Public Drinking Water Source Area (PDWSA). The soils in the local area are sandy and on average, there is a low risk of salinity in the area under application. The proposal area does not contain water courses or surface water expressions of groundwater. The groundwater has a salinity level of 3000-7000 mg/L. The vegetation is represented by 11 individuals of *Acacia rostellifera* that exist in a single, somewhat linear row on the middle portion of the area under application and indicate historic disturbances from surrounding landuses (DEC Site Visit 2007).

The sandy soils in the area under application are assumed to be highly permeable, however the small area of proposed vegetation removal is not likely to exacerbate groundwater recharge, rising of the watertable or flooding. Similarly, due to the small area, the proposed clearing is not likely to deteriorate the quality of underground water any further.

Therefore, this proposal is not likely to be at variance to this Principle.

Methodology GIS Databases:

- Groundwater Salinity, Statewide - 22/02/00
 - Public Drinking Water Source Areas (PDWSAs) - DOE 09/08/05
 - Hydrographic Catchments - Catchments - DOE 23/03/05
 - Hydrography, linear - DoE 01/02/04
- DEC Site Visit 2007

(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 vegetation is represented by 11 individuals of *Acacia rostellifera* that exist in a single, somewhat linear row on the middle portion of the area under application. The vegetation under application occurs on a gently sloping terrain. (DEC Site Visit 2007) The mean annual rainfall in the region is 500 mm. Data are not available to

estimate the depth to groundwater.

Due to the relatively low average annual rainfall in the region (500 mm) and the area of vegetation removal is narrow and small, the proposed clearing is unlikely to exacerbate flooding.

Methodology GIS Databases:
- Rainfall, Mean Annual - BOM 30/09/01
- Topographic Contours, Statewide - DOLA 12/09/02
DEC Site Visit 2007

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

Comments

The City of Geraldton-Greenough has not indicated if there are any planning requirements or approvals that would affect the clearing.

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 the application. However, the area under application is freehold land and therefore Native Titles have been extinguished.

There are no Aboriginal Sites of Significance in the area under application.

There are two Environmental Impact Assessments (EIAs) that cover the area under application: CRN119444 is the Geraldton Region Plan [Level of Assessment 16. Not a Proposal Under Part IV - section 16 Report (no appeals). LoA set on 07/01/1998). Geraldton Region Plan identifies proposed areas for infrastructure and proposed areas for conservation in the Midwest (EPA 1998). However, the area under application does not seem to have been identified as an area of interest in relation to proposed infrastructure or conservation plans. CRN204237 is the Shire of Greenough Town Planning Scheme 5 District Zoning Scheme [Scheme Amendment Not Assessed - Advice Given Under Section 48a(1)(A) (no appeals). LoA set on 18/02/2004]. The DZS does not appear to affect the proposal area as it represents the designated landuse.

Methodology GIS Databases:
- Aboriginal Sites of Significance - DIA 28/02/03
- Environmental Impact Assessments - DOE 24/10/05
- Native Title Claims - DLI 7/11/05
EPA 1998

4. Assessor's comments

Purpose	Method Applied	area (ha)/ trees	Comment
Hazard reduction oal fire control	Mechanic Removal	0.06	The assessable criteria have been addressed and no objections were raised.

5. References

- AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.
- DEC Site Visit (2007) Department of Environment and Conservation (DEC), Western Australia. DEC TRIM Ref DOC40143.
- 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.
- EPA (1998) Geraldton Region Plan. Bulletin 891, Environmental Protection Authority, Perth, Western Australia.
- 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.
- 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. (2006). Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.
- 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)