



1. Application details

1.1. Permit application details

Permit application No.: 78/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: MR Warwick James Speechly

1.3. Property details

Property: LOT 30 ON PLAN 23855 (Lot No. 30 CASUARINAS AMBANIA 6632)

Local Government Area: Shire Of Mullewa

Colloquial name: Victoria Location 10136

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
102		Mechanical Removal	Cropping

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 veg type 379 – Shrublands; scrub-heath on lateritic sandplain in the central Geraldton Sandplain Region (Shepherd et al. 2001).	Area under application is similar to general vegetation type.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	Site visit carried out to determine vegetation condition.

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 excellent condition of the area, in a highly cleared landscape, and the presence of significant habitat, make it likely that the proposal may be at variance to this Principle.

Methodology Site visit

(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 at variance to this Principle**

CALM advice is that the area is likely to be a habitat for the following priority listed fauna: Priority 1 - Daphnia jollyi, and Priority 4 - Hooded Plover.

CALM also advise that given the large area proposed to be cleared (and that the majority of the landscape has already been cleared), the area under notice is an important refuge for fauna moving across a mostly cleared landscape.

Methodology CALM Threatened and Priority Fauna Database.
CALM advice (2004)

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, significant flora.

Comments **Proposal is at variance to this Principle**

No rare or endangered flora recorded in the area under application, however no field assessments for flora have been undertaken. Rare species have been located 3 km away on a road reserve.

CALM advise that a large number of priority flora species are known to exist with a 10 km radius of the site.

CALM advise is that given the number of priority species in the area and the substantial size of the proposed clearing, there is a high likelihood of Priority flora and possibility of Declared Rare flora occurring within the area proposed to be cleared. CALM also advises that a flora survey be undertaken.

Methodology CALM advice (2004)
 CALM Threatened Flora Data Management System.
 CALM Herbarium Specimen Collection Database.
 GIS datasets.

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a significant ecological community.

Comments **Proposal is not likely to be at variance to this Principle**
 No known occurrences of TECs within 10 km of the site. CALM advice is there appears to be a low probability of the proposed clearing being at variance with this Principle based on available limited data.

Methodology CALM's Threatened Ecological Community Database.
 CALM Advice 2004

(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 at variance to this Principle**
 Mr Speechly's property is located in the Shire of Mullewa where there is only 7.1% of native vegetation cover remains in the intensive land use zone. The pre-European extent remaining of the Beard vegetation association 379 is 20.3%.

Mr Speechly's property (~1,600ha) includes 200 ha which is currently vegetated with native vegetation in Excellent condition (Keighery 1994). The proposed clearing will reduce this amount to approximately 100 ha, or only 6.25% of the property. The closest area of native vegetation outside of Mr Speechly's property is approximately 2 km away.

Clearing in the Mullewa shire has left areas of remnant vegetation in isolated islands. 'This process of fragmentation tends to mask the cascading effects that can be subtle and hard to see, such as lack of pollination of plants, or lack of regeneration of saplings. Cascading effects commonly follow the introduction of exotic plants, animals or micro-organisms. Introduced weeds have effects that start at the base of the food chain, displacing native species and even entire communities of native plants. These effects flow on to animals that depend on the native plants for food and shelter' (EPA 2000).

The vegetation remaining in the area proposed to be cleared is below 30% (currently 23.2%). The State Government is committed to the National Objectives Targets for Biodiversity Conservation 2001-2005 which includes a target that prevent clearance of ecological communities with an extent below 30% of that present pre-1750 (Department of Natural Resources and Environment, 2002; EPA, 2000).

reserves/CALM-	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	% in managed land
IBRA Bioregion - Geraldton Sandplains	2,474,401	663,290	26.8	Vulnerable	
Shire - Shire of Mullewa	496,895	35,336	7.1	Endangered	
Beard veg type - 379	633,325	128,007	20.3	Vulnerable	

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

Methodology Shepherd et al. 2001; EPA 2000.

(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**
 The area under application is not in a wetland and is greater than 3km from a watercourse.

Methodology GIS databases.

(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

With the retention of 20m perimeters surrounding the proposed cleared areas, the likelihood of soil erosion will be decreased.

DAWA advice identified a minimal risk of wind erosion following clearing, but said that appropriate management strategies such as the retention of adequate stubble cover from no tillage farming would minimise any risk. It concluded that the proposal is not likely to cause appreciable on site and off site land degradation.

Methodology DAWA Advice

(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 at variance to this Principle

No conservation areas adjacent to the site. CALM advise that there are 5 CALM managed reserves within the local area.

CALM advise that the vegetation proposed to be cleared provides a valuable role as a stepping stone for ecological connectivity with CALM managed nature reserves within an already cleared landscape.

Methodology CALM advice 2004.

(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 at variance to this Principle

Groundwater at a depth of greater than 150m with no salinity problems in the area.

Methodology GIS databases

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.

Comments Proposal is not at variance to this Principle

Sandplains with no evidence of flooding occurring in the area. Clearing of the vegetation should not increase the likelihood of flooding.

Methodology Site visit.

Planning instrument or other matter.

Comments Shire of Mullewa had no comments

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Cropping	Mechanical Removal	102	Refuse	<p>That the permit be refused on the basis that it is at variance with Principles (b), (c), (e) and (h), and may be at variance with Principle (a). In particular:</p> <ul style="list-style-type: none">- There is a significant chance there may be priority flora located on this site. No flora survey has been carried out.- It likely provides an ecological stepping stone to other conservation areas.- It is likely to provide habitat for priority fauna and an important refuge for fauna moving across a mostly cleared landscape.- The vegetation representation in the Shire is very low (only 7% of the pre-European extent remains). Additionally, the vegetation type to be cleared is not well represented (only 20% of the pre-European extent remains). <p>A meeting was held today with CPS 78/1 applicants Mr and Mrs Speechly and Ron Shepherd (Regional Manager, Midwest/Gascoyne) and Paul Anderson (A/Program Manager, Midwest/Gascoyne) from this department to ascertain the Speechlys' decision on discussions held at a previous meeting on 22 October 2004. The outcome of the meeting is as follows:</p> <ol style="list-style-type: none">1. The Speechly's preferred option is that the clearing application be considered and approved as submitted. That is the clearing of 102 Ha for cropping in areas E and D as described in the Regional Manager's memo dated the 28/10/2004 (TRIM Ref.

HD19301).

2. If their preferred option is refused, they are prepared to keep area E and clear areas A,C and D instead but they are not prepared to enter into a conservation covenant over area E. (TRIM Ref. HD19302)

Note: Area B will not be considered in any option as the area consists of fine sand and could be subject to erosion.

This outcome does not provide any long term conservation outcome and accordingly, it is recommended that the application be refused.

5. References

- CALM (2004) Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref CEO 160/04.
- DAWA (2004) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref HD17885.
- 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 (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.
- 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, 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.