



1. Application details

1.1. Permit application details

Permit application No.: 576/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Margaret River Natural Resources Pty Ltd

1.3. Property details

Property: LOT 1570 ON PLAN 153330 (METRICUP 6280)
Local Government Area: Shire Of Busselton
Colloquial name: Harmans Mill Road Loc 1570, vol 2165 fol 811

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
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 3: Medium forest; jarrah marri	From it's appearance the vegetation has been subject to thinning in the past with many logs still on the ground. Numerous fires also appear to have gone through in the past. The vegetation was open to stock grazing, with sheep present on the property at the time of the inspection.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	
Open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla-Banksia grandis on lateritic uplands in perhumid and humid zones.	There was little to no understorey, probably caused by grazing, however a few pasture species were sighted around the edges of the remnant. The vegetation consisted of an open forest with the dominant species being marri (Corymbia calophylla). Jarrah (Eucalyptus marginata) saplings were scattered sparsely throughout the vegetation. Some Banksia spp. and peppermints (Agonis flexuosa) were also present.		
Mattiske: Cowaramup (c2) - Consists mainly of lateritised uplands, covered by an open jarrah - marri forest with bull banksia second storey.			

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 within the Cowaramup (C2) Mattiske vegetation type which has been identified as being significant due to the low percentage remaining, being 23%. The condition of the vegetation however was rated as good (Keighery, BJ 1994). The DoE Site Report found obvious signs of disturbances such as thinning, fires and continued grazing. The vegetation is currently open to the sheep, who are likely responsible for the non existent understorey.

Despite the condition rating, the CALM report advised that it may be possible for many of the currently absent understorey species to regenerate, provided that some weed control was undertaken and the area was fenced

from stock.

The CALM report also advised the vegetation under application is providing a stepping stone for wildlife moving through the area, and is contributing to the overall area and connectivity of remnant vegetation in the local area. CALM advised that if the mature *Corymbia calophylla* within the vegetation proposed for clearing contain hollows, they may be suitable as habitat for birds or other fauna.

The above issues have been raised with the applicant who was willing to negotiate with the Department. An agreement was reached so that only 3ha of the remaining remnant (4.5ha) will be proposed for clearing with the remaining 1.5ha proposed to be retained. The applicant is willing to revegetate 7.7ha, which will consist of locally endemic overstorey, midstorey and understorey species that will be planted at a density sufficient to ensure it can function as a wildlife corridor. The applicant has also agreed to fence both the retained and replanted area from stock.

In its present state the Department does not believe the remnant vegetation has a high level of biological diversity. CALM advice did suggest there may be sufficient residual seed and rootstock to regenerate. The agreed retention of the topsoil, its use in the revegetation plan and the exclusion of stock does however provide the area with a good chance of re-establishing itself, provided it is managed correctly.

The Department believes the proposal is not likely to be at variance to this principle.

Methodology DoE Site Report 2005
CALM Report 2005
GIS Database:
- Mattiske Vegetation - CALM 24/3/98

(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 may be at variance to this Principle

CALM advice was requested and the following recommendations were made:

'*Engaewa reducta* (Dunsborough Burrowing Crayfish) has been recorded from within approximately 5 kilometres of the notified area. This taxon appears to be localised, and is not likely to be affected by this proposal. *Dasyurus geoffroyi* (Chuditch) has been recorded from within approximately 4.5 kilometres of the notified area. This species is highly mobile and is known to occupy a large home range, and is thus not likely to be significantly affected by this proposal. The Chuditch is listed as 'vulnerable' under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act 1999).

The proponent has stated in their application that 'approx 10 hectares of local native revegetation is proposed as an offset,' however CALM advises that it is unlikely to provide equivalent or better habitat for wildlife for many years. CALM advised that if the mature *Eucalytus marginata* and *Corymbia calophylla* within the notified area (photos DoE site report 18/8/05) contain hollows, they may be suitable as habitat for birds or other fauna.

The applicant has agreed to retain 1.5ha of the 4.5ha remnant and plant 7.7ha of endemic species along the western boundary of the property. The retention of this vegetation will result in some of the larger trees mentioned in the CALM report remaining available as possible habitat trees. The fenced revegetation will also eventually provide a more biologically diverse and larger wildlife corridor in the local area.

The Department believes this proposal may be at variance to this principle.

Methodology CALM Report 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

Caladenia excelsa (Declared Rare Flora) occurs 8.5km south west of the area under application. There are 4 other specimens in the local area (10km radius), however none of these occur within the same vegetation types. None of the DRF specimens within the local area are linked vegetatively to the area proposed for clearing.

The closest Priority 2 species in the local area is *Boronia capitata* which occurs 6.7km north of the area under application. This species does not occur within the same Beard or Mattiske vegetation type as the area proposed for clearing, however it is linked by vegetation.

Eleven Priority 3 species exist within the local area, the closest being *Pultenaea pinifolia*, which is found 2.8km north northwest of the proposed clearing. The majority of these specimens are found within the same Mattiske and Beard vegetation types and are linked by vegetation.

There are three Priority 4 species (six specimens) in the local area, three of which occur on the same Beard

and Heddle vegetation types as the area under application. The closest is *Caladenia speciosa*, 5.3km north west of the area under application. The specimen occurs within the same Mattiske and Beard vegetation type and is linked by vegetation.

CALM advice was requested and the following recommendations received:

'CALM advises that these soils may be suitable for some of the threatened or Priority flora (as well as many non-threatened species) occurring in the area, however the DoE report and, in particular the accompanying photographs suggests that past farming practices and fire regimes have significantly impacted the endemic understorey flora species. Based on the descriptive evidence available, in its current degraded state, the land in question is unlikely to support viable populations of Declared or priority flora. However, depending upon past farming practices, there may be sufficient residual native seed and rootstock to regenerate the understorey flora, but this would only be possible if the area was fenced from stock, left unburnt for a number of years and favourable weather conditions prevailed.

The applicant has agreed for the cleared vegetation and topsoil to be stockpiled and used in the revegetation areas, with the hope residual seed may regenerate. The applicant has also agreed for these areas to be fenced which will allow any existing seeds to regenerate without disturbance from stock.

Given the above information the Department believes the proposal is not likely to be at variance to this principle.

Methodology CALM Report 2005
GIS Database:
- Declared Rare and Priority Flora List - CALM 13/08/03

(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 occurrences of Threatened Ecological Communities within a 10 km radius of the proposed clearing.

The proposal is not likely to be at variance to this principle.

Methodology GIS database:
- Threatened Ecological Communities - CALM 15/07/03
- Threatened Plant Communities - DEP 06/95

(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 application is located in the Swan Coastal Plain Bioregion in the Shire of Busselton. The extent of native vegetation remaining in these areas is 41.3% and 44.5% respectively (Shepherd et al. 2001). There is approximately 25% of native vegetation remaining in the local area.

The area proposed for clearing has been identified as the Cowaramup (C2) Mattiske vegetation community, which has 23% remaining, with only 1.1% represented in conservation reserve systems. The Department of Natural Resources classes this amount to be 'vulnerable'.

In the current severely grazed state the vegetation condition will not improve. CALM advised that although the viability of residual seed native seed left in the soil is unknown, it is expected that many of the presently absent understorey species will regenerate if the proposed area was to be retained, fenced and fire was excluded for a number of years.

The applicant is willing to stockpile the topsoil and use it in the revegetation plan. The applicant has also agreed to replant 7.7ha of local species a composition, structure and density similar to pre-existing vegetation types in the area, along the western boundary of the property. The retained 1.5ha and 7.7ha of replanted vegetation will be fenced from stock access.

The retention and revegetation plan agreed to by the applicant will result in approximately 9 hectares of vegetation on the property instead of the existing 4.5 hectares. The revegetation will be monitored yearly for at least three years after planting, to ensure a satisfactory survival rate and level biological diversity is achieved.

Given the above information the Department believes the proposal is not likely to be at variance to this principle.

Methodology Bioregional Conservation Status of Ecological Vegetation Classes
CALM Report 2005
GIS Database:
- Mattiske Vegetation - CALM 24/3/98

- Interim Biogeographic Regionalisation of Australia - EM 18/10/00
- Pre European Vegetation - DA 01/01
- Local Government Authorities - DLI 8/07/04

(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

There are no watercourses or wetlands within the area proposed for clearing. Many minor perennial watercourses exist within the local area (10km radius) with one found 400m north and another 750m south of the vegetation under application. The Carbanup River exists 5km east of the property.

A Multiple Use categorised geomorphic wetland exists 7.5km north of the area proposed for clearing with approximately 5 others found in the local area.

Given the above information the Department believes it is not likely the proposal is at variance to this principle.

Methodology GIS Database:
 - Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain - DoE 15/9/04
 - Hydrography Linear - DoE 1/2/04

(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 provided the following advice:

"The area to be cleared is mapped as containing two soil landscape units:

Cowaramup Subsystem flats phase (50% of proposed area) described as lateritic flats and low rises on weathered mantle over granitic rocks in the Margaret River district and the Cowaramup Subsystem gentle slope phase (50% of the proposed area) described as lateritic rises and gentle slopes on weathered mantle over granite in the Margaret River district.

The risk of water erosion occurring at both phases within the proposed area was identified in the report. DAWA advised the risk will be greatest during the period just post clearing and while ferricrete extraction is occurring.

To combat this risk the applicant plans on installing a low bund down slope of any excavation area in the gravel, formed from the wall of the pit and overburden pushed to the edges of the excavation. The processing area will also be bunded by a low bund to ensure there is no surface water runoff. Any water present that does not soak into the soil, will be directed across the existing pasture in the south and east areas on the property to be filtered.

The DAWA report indicated that the clearing is not likely to cause appreciable land degradation problems and once the ferricrete extraction has finished and the area rehabilitated it is likely to be well suited to agriculture.

The Department concludes the proposal is not likely to be at variance to this principle.

Methodology DAWA Report 2005
 Excavation and Environmental Management Plan 2005

(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 provided the following advice:

The notified area is approximately 300m from an Unvested Crown Reserve which links with a Nature Reserve and a block of Crown Reserve vested in the Local Government. Thus the notified area provides a 'stepping stone' for wildlife moving through the area, and contributes to the overall area and connectivity of remnant vegetation in the local area.

Whilst the current condition of the vegetation within the notified area may be considered poor, it is likely that the exclusion of fire and stock (through fencing) and some weed control will hasten the regeneration of the understorey. The land has value to the continuity of vegetation corridors and wildlife habitat in the area.

The Shire of Busselton's initial submission identified the remnant as being adjacent to the 'Walburra Parkland' or 'Ryan's Road Reserve' which is connected to the an important CALM nature reserve and areas of remnant vegetation listed as a key vegetation corridor in the Shire's Biodiversity Incentive Strategy.

Discussions between the Department and the applicant resulted in an agreement to retain 1.5 hectares of the

existing vegetation and replant 7.7 hectares along the western boundary of the property, with both these areas being fenced from stock.

The Department believes the retained area will continue to provide a 'stepping stone' for wildlife in the area. The long term outcome will eventuate in 9 hectares of vegetation (rather than the existing 4.5ha) providing a key corridor for flora and fauna within the local area.

The Department believes the proposal is not likely to be at variance to this principle.

Methodology CALM Report 2005
Shire Submission 2005

(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

There are no watercourses within the area proposed for clearing or on the property.

Surface water runoff management has been discussed in Principle G.

Fuel and lubricants will be kept on site to be used in the excavation process. To protect the groundwater resource, as per the EEMP, the fuel tank will be installed to Department of Environment and Department of Industry and Resource requirements. Any spill greater than 5 litres will be reported to the Department of Environment.

The Department believes the proposal is unlikely to be at variance to this principle.

Methodology Excavation and Environmental Management Plan 2005
DAWA Report 2005

(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

Due to the scale of the proposed clearing, flooding impacts are unlikely to occur.

The Department believes the proposal is not likely to be at variance to this principle.

Methodology GIS Database:
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The Shire of Busselton has given planning approval and issued an extractive industry licence to the applicant. Both of these approvals include a condition requiring a clearing permit being obtained from the DoE prior to any works taking place.

A second submission from the Shire was received and included the following comments:

"As you are aware, the Shire of Busselton previously opposed the granting of a permit to clear vegetation. The Shire's concerns included that the remnant was of reasonable size and it had the potential to act as a wildlife corridor as part of the existing rail reserve to the west.

The outcome that has been negotiated between the Department of Environment and the proponent sufficiently addresses the Shire's concerns. As such, the Shire of Busselton no longer opposes the proposed clearing to a maximum of 3 ha, subject to the revegetation of 7.7 ha in the western portion of the site."

The Shire's approval of the clearing was subject to certain conditions being placed on the permit. These conditions were agreed upon by the applicant and in turn, if granted will be placed on the clearing permit.

Methodology Shire Submission

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Extractive Industry	Mechanical Removal	5	Grant 3ha	Assessment of the clearing application found that none of the principles were at variance to the proposal.

The Department acknowledges the vegetation type is poorly represented and in a vulnerable state. The condition of the vegetation however was rated as poor and will not improve until the current disturbances, mostly grazing, are prevented.

The Department believes the proposed outcome of retaining 1.5ha of the existing remnant and the replanting of 7.7ha vegetation along the wetern boundary is the best available option. The mature trees retained will continue to provide habitat and to some extent a 'stepping stone'.

In the long term approximately 9 hectares of vegetation will be available as a wildlife corridor in the local area.

Given the above information the Department recommends the application be granted.

5. References

- CALM Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref IN23760.
- DAWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref SWO26759.
- 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.
- Keighery, BJ (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Margaret River Natural Resources Pty Ltd (2005), Excavation and Environmental Management Plan - Sand and Laterite Gravel Quarry, Loc 1570 and Lot 112 Harman's Mill Road, Harman's Mill. Margaret River Western Australia.
- Mattiske Consulting (1998) Mapping of vegetation complexes in the South West forest region of Western Australia, CALM.
- 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)