



1. Application details

1.1. Permit application details

Permit application No.: 354/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **George Heydon and Garry Gosatti Foxland Investments Pty Ltd trading as Arlewood Estate Pty Ltd**

1.3. Property details

Property: LOT 2 ON DIAGRAM 34843 (Lot No. 2 HARMANS WILYABRUP 6280)
Local Government Area: Shire Of Busselton
Colloquial name:

1.4. Application

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

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 Unit 3	Judith Carter (DoE) and Cathy Derrington (DoE) undertook initial field visit on 31 January 2005. The officers were accompanied by the proponents Peter Harding (Busselton Survey Office) and George Heydon (land owner).	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	DoE site visit (2005)

Mattiske Consulting
C2 Cowaramup
Cw2

Species identified predominantly include jarrah (*Eucalyptus marginata*) regrowth from previous logging), some marri, bracken fern (*Pteridium esculentum*) and exotic grass species.

The area under application has been grazed by sheep and cattle for a number of years. The condition of the vegetation is consistent with long term grazing impacts being that it has very little understorey. The area under application had evidence to logging.

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 predominantly consists of jarrah (*Eucalyptus marginata*) and marri (*Corymbia calophylla*) with an under storey of bracken fern (*Pteridium esculentum*) and exotic weeds. A history of logging and grazing disturbance is evident and the vegetation is therefore considered to be Degraded (Keighery 1994, DoE site visit 2005). Consequently, the area under application has limited biodiversity value.

The proponent has agreed to reserve other areas of higher biodiversity value within the property and fence if stock are introduced. Some of these areas have been fenced to keep stock out for some time increasing the biodiversity value of these areas.

Methodology DoE site visit (2005)
Keighery (1994)

(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

DoE site visit (2005) indicates that the vegetation may provide some habitat for fauna species, however the level of disturbance within the site is likely to limit the habitat value of the vegetation.

The proponents are willing to retain an area of vegetation that is higher quality than the area under application and fenced if stock are introduced. These areas are likely to be of higher habitat quality than the area under application, as parts have fenced out stock for some time.

Methodology DoE Site Visit (2005)

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

Comments Proposal may be at variance to this Principle

No declared rare flora or priority flora have been recorded within the area under application. A number of DRF and priority flora occur within a 10 km radius from the property, they are as follows:

Declared Rare Flora 'Caladenia excelsa' (three locations ranging from 4 to 10 kms from the area under application).

There are three Priority 2 species within the local area. The closest is *Boronia capitata* subsp. *graci*, 6.3km north north east of the area under application.

There are eleven Priority 3 species within the local area. The closest is *Pultaneae pinifolia* 3.3 km north east of the area under application.

There are two Priority 4 species within the local area. The closest is *Thysanotus glaucus* 5.7km north east of the area under application.

Declared Rare Flora and Priority Species within the Local Area (10km radius)

	No. Species	No. Specimens	No. Specimens in same Beard Veg Type		No. Specimens in same Matiske Veg Type	
			Yes	No	Yes	No
Rare	1	3	3	0	0	3
Priority 1	0	0	0	0	0	0
Priority 2	2	2	1	1	1	1
Priority 3	6	11	6	5	4	7
Priority 4	2	2	1	1	1	1
TOTAL	11	18	11	7	6	12

Methodology GIS databases:
- 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 significant ecological community.

Comments Proposal is not likely to be at variance to this Principle

No Threaten Ecological or Plant Communities were found within the local area (10km radius).

Methodology GIS databases:
- Threatened Ecological Communities - CALM 15/7/03

(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

Pre-European	Current Extent (ha)	Remaining (ha)	(%)
IBRA Bioregion Warren	851 529	739 273	86.8
Shire - Busselton	145 966	64 904	44.5
Beard Unit 3	3 046 385	2 197 857	72.1
Mattiske Consulting			
C2 Cowaramup	128 773	29 617	23
Cw2	63 666	8 276	13
Cowaramup Valleys			
W2 Wilyabrup	35 235	7 399	21

Havel (2002)

Mattiske report indicates that C2, W2 and Cw2 vegetation units are found to be among the most deficient in this sub region from a conservation point of view. The State Government is committed to the National Objectives Targets for Biodiversity Conservation 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).

Given the area under application is not regionally representative of the above mentioned vegetation units and due to past disturbance, including grazing and logging (DoE site visit 2005) it is assessed that the proposal is not at variance with this principle. The proponent's are willing to retain (and fence, if stock are introduced) areas of vegetation that are representative of the above mentioned Mattiske vegetation units. Parts of these areas have not been grazed for some time.

The property has approximately 49% of vegetation remaining and if implemented this clearing proposal will leave 40% remaining (36ha). There is approximately 35-40% of vegetation remaining in a 10km radius of the property.

Methodology

DoE site visit (2005)
 EPA (2000)
 Havel (2002)
 Shepherd et al. (2001)
 GIS databases:
 - Mattiske Vegetation - CALM 24/3/98
 - Interim Biogeographic Regionalisation of Australia - EM 18/10/00
 - Local Government Authorities - DLI 8/07/04
 - Pre European Vegetation - DA 01/01

(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

One of the areas under application, the northern most area, is over a watercourse (located on or close to the upper reaches of the Wilyabrup Brook Catchment).

As part of the negotiation (DoE site visit 2005), the proponent agreed to remove this vegetation from the application as it was not intended to be cleared for some time.

Methodology

DoE site visit (2005).
 GIS databases:
 - 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

DAWA report (2005):

Water erosion

'The slope of the landscape under the proposed clearing ranges from 0 to 7%. There is a slight chance of increased water erosion in the south western block of clearing under this proposal. This risk can be managed through the maintenance of ground cover and appropriate vine establishment techniques. Consideration of infiltration rates of the soil when scheduling irrigation will also reduce the risk of runoff, and associated erosion.'

Waterlogging

'Drainage in the area concerned is well defined. Provided that appropriate irrigation management is applied, there is deemed to be no significant waterlogging risk associated with this proposal.'

Eutrophication

'Provided appropriate fertigation techniques are applied, the risk of eutrophication associated with this clearing and land use change will be limited. The soils have high phosphorus retention capabilities, and are not prone to excessive leaching. The application of low concentrations of fertiliser through fertigation (as opposed to surface applied granular fertilisers) limits the chances of nutrients washing into water bodies with overland flow.'

Salinity

'Drainage is well defined in this area, the soil has limited salt store, and in a high rainfall zone. The proposal is not expected to contribute to salinity.'

Wind Erosion

'There is limited risk of wind erosion under this proposal, as the proposed cleared areas have loamy and gravelly surfaced soils. The proposed land use does not involve regular cultivation of the soil, nor any stock traffic, and this further limits the risk of wind erosion.'

'The proposed land use (viticulture) is well suited to the soil types and climate in this area, and provided appropriate establishment, and management practices are maintained, the risk of land degradation associated with this proposal is limited. There is a slight water erosion risk associated with this proposal, but simple steps can be taken to maintain this risk at an acceptable level.'

Methodology DAWA report (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**

Leewin Naturaliste National Park is located 4.6 km from the proposed clearing site. No vegetation links join the proposed clearing site and the National Park.

Methodology GIS database:
- CALM Managed Lands and Waters - CALM 1/06/04

(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 in the Wilyabrup Brook Catchment in the Busselton Coast Basin. The salt store is not expected to rise significantly as a result of the proposed clearing as the area under application is in a high rainfall area with a medium evaporation rate and is reasonably well drained lateritic soils. Offsite groundwater points have low salinities.

The acid sulfate risk in this area has not been mapped.

Methodology GIS databases:
- Evaporation Isopleth - BOM 09/98
- Hydrogeology, statewide - WRC 05/02/02
- Hydrographic Catchments, Catchments - DoE 3/4/03
- Rainfall, Mean Annual - BOM 30/09/01
- Soils, statewide - DA 11/99
- WIN Groundwater sites, other - DEWCP (Current)

(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 likely to be at variance to this Principle**

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

Methodology Hydrogeological advice (R. Smith, Supervising Hydrogeologist, DoE, pers. comm. 2005)

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

Comments

Appeal to WAPC regarding subdivision of LOT 2 ON DIAGRAM 34843 was successful. Subdivision conditions do not exempt proponents from obtaining a clearing permit.

Methodology Appeal outcome, to WAPC, regarding subdivision (2005)

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Horticulture	Mechanical Removal	13.5	Grant	Recommend that the permit be granted. The proposal is at variance with Principle (e), as three Mattiske vegetation types are under 30%. However, the area under application is not representative of these vegetation types due to the degraded condition of the area (see section 2.1). The proposal may be at variance with Principle (b) and (c). The vegetation under application may provide some habitat for fauna species, however the degraded condition within the site is likely to limit the habitat value of the vegetation. The area under application is unlikely to support significant flora species due to the degraded condition of the vegetation.

5. References

- DAWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref SWO23755.
- 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.
- Havel, J.J. and Mattiske Consulting Pty Ltd (2002) Review of management options for poorly represented vegetation complexes, Conservation Commission.
- 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.