



1. Application details

1.1. Permit application details

Permit application No.: 1721/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: R A, J E, G R, B D Cornthwaite

1.3. Property details

Property: LOT 20 ON PLAN 40607 (CAPEL RIVER 6271)
Local Government Area: Shire Of Capel
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.9		Mechanical Removal	Grazing & Pasture
1.2		Mechanical Removal	Grazing & Pasture
0.9		Mechanical Removal	Grazing & Pasture

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: Pinjarra No. 1136: Medium woodland of Marri with some Jarrah, Wandoo, River Gum and Casuarina (Hopkins et al., 2001; Shepherd et al., 2001)	The proposal involves clearing of 4.0ha of native vegetation for grazing and pasture. The property was historically used as pasture and grazing for sheep and is currently used to graze cattle.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The description of the application area is based on aerial orthomosaic photos and discussions with the proponent. The application was historically and is currently used for grazing and pasture. The application area appears to have been 'significantly' modified.
Heddle Vegetation Complex: Swan Complex No.33. Fringing woodland of E. rudis and M. raphiophylla with localised occurrence of low open forest of Casuarina obesa and M. cuticularis (Heddle et al., 1980).	The vegetation under application has been highly modified due to historical land use. The proponent intends to clear in between trees to facilitate access for machinery and stock and will be retaining the mature trees as shade for stock (TRIM ref DOC27033).		
Abba Complex No.30. A mixture of open forest of E. calophylla, E. marginata, Banksia spp. and woodland of E. calophylla with minor occurrences of E. haematoxylon. Woodland of E. rudis and Melaleuca spp. along creeks and on flood plains (Heddle et al., 1980).			

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 in a completely degraded condition (Keighery, 1994).

The proposal involves clearing 4.0ha of native vegetation for grazing and pasture. The property was historically used for pasture and grazing for sheep and is currently used to graze cattle. The vegetation has been highly modified and therefore it is not likely to be at variance to this principle.

Methodology DonnyBrook 50cm Orthomosaic - Landgate04

(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 7 records of 2 'Vulnerable' and 5 records of 4 'Priority' fauna species occurring within a 10km local area of the application. The closest record, Chuditch (*Dasyurus geoffroi*) is approximately 4.3km south east of the application area (SAC Bio Datasets 270607).

The proposal involves clearing 4.0ha of native vegetation for grazing and pasture. The property was historically used for pasture and grazing for sheep and is currently used to graze cattle. The vegetation has been highly modified.

Given the degraded condition of the vegetation under application, and the current and historical use of the property for livestock grazing and pasture, it is not likely that this proposal will be at variance to this principle.

Methodology SAC Bio Datasets (270607)

(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 47 records of 20 'Rare' and 113 records of 84 'Priority' flora species occurring within a 10km local area of the application. The closest record, *Acacia semitrullata*, is approximately 1.8km west of the application area (SAC Bio Datasets 270607).

The proposal involves clearing 4.0ha of native vegetation for grazing and pasture. The property was historically used for pasture and grazing for sheep and is currently used to graze cattle. The vegetation has been highly modified.

Given the degraded condition of the vegetation and the current and historical use of the property for livestock grazing and pasture, it is not likely that this proposal will be at variance to this principle.

Methodology SAC Bio Datasets (270607)

(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 10 records of 5 Threatened Ecological Communities (TEC's) occurring within the 10km local area of the application. The closest record, SCP3a, is approximately 2.9km south west of the application area (SAC Bio Datasets 270607).

The TEC is described as *Eucalyptus calophylla* - *Kingia australis* woodlands on heavy soils of the Swan Coastal Plain.

The TEC's that occur within the 10km local area are associated with the same Beard and Hedde vegetation associations. However, the application area is linked to different soil complexes.

The proposal involves clearing 4.0ha of native vegetation for grazing and pasture. The property was historically used for pasture and grazing for sheep and is currently used to graze cattle. The vegetation has been highly modified.

Given the degraded condition of the vegetation, the differences in soil associations and the current and historical use of the property for livestock grazing and pasture it is not likely that this proposal will be at variance to this principle.

Methodology SAC Bio Datasets (270607)

(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 area proposed to be cleared has been highly modified and is in a completely degraded condition (Keighery, 1994).

The National Objectives and Targets for Biodiversity Conservation 2001-2005 (AGPS, 2001) recognises that the retention of 30% or more of the pre-clearing extent of each ecological community is the target.

	Pre-European (ha)	Current extent (ha)	Remaining (%)	Conservation** status	% In reserves DEC Managed Land
IBRA Bioregions****					
Swan Coastal Plain^	1,501,456	571,758	38.1	Least Concern	N/A
Shire*					
Capel	55,869	159,071	83.2	Least Concern	N/A
Hedde Vegetation Complex					
Swan No.33	15,800	2,142	13.6	Vulnerable	N/A
Abba No.30	16,133	911	5.6	Endangered	N/A
Mattiske Vegetation Complex***					
N/A					
Beard Vegetation Complex****					
1136	48,127	2,611	5.4	Endangered	N/A

* (Shepherd et al. 2006)

** (Department of Natural Resources and Environment 2002)

*** (Mattiske Consulting 1998)

**** (Shepherd et al. 2001)

^ Area within Intensive Land Use Zone

There are large areas of remnant vegetation within the 10km local area (east of the application area), it is unlikely that the 4.0 hectares of vegetation within the application area would be considered 'significant' as a remnant in a local context.

The property was historically used for pasture and grazing for sheep and is currently used to graze cattle. The vegetation has been highly modified.

Even though this vegetation association has an 'Endangered' conservation status, it is unlikely the vegetation within the application would be considered 'significant' as a remnant as it has been highly modified and is in a completely degraded condition.

Methodology

Keighery (1994)
 AGPS (2001)
 Shepherd et al. (2001)
 Shepherd (2006)
 Mattiske Consulting (1998)
 Department of Natural Resources and Environment (2002)
 GIS Databases:
 -Pre-European Vegetation - DA 01/01
 -Hedde Vegetation Complexes - DEP 21/06/95

(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 at variance to this Principle

The application is associated with a sumpland and a palusplain.

The closest hydrographical records include a minor tributary (non-perennial) approximately 350m south west, a major tributary, Capel River (non-perennial) approximately 500m south and an EPP wetland approximately 600m south of the application area. There are no ANCA or Ramsar wetlands within the 10km local area of the application.

The application area is associated with a sumpland and a palusplain, and is therefore at variance to this principle.

However, given the highly degraded nature of the vegetation under application, the proposed clearing is unlikely to have any deleterious effect on these wetlands.

Methodology Keighery (1994)
GIS Databases:
-Hydrography, linear - DOE 1/2/04
-Geomorphic Wetlands (Classification), Swan Coastal Plain - DEC
-Geomorphic Wetlands (Classification), Swan Coastal Plain - DEC_1
-Geodata, Lakes - GA 28/06/02
-RAMSAR, Wetlands - CALM 14/02/03
-EPP, Wetlands 2004 (DRAFT) - DOE 21/7/04
-EPP, South West Agricultural Zone Wetlands - DEP 10/10/01
-EPP, Lakes - DEP 1/12/92
-ANCA, Wetlands - CALM 08/01

(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 application area was mapped as having a low to moderate Acid Sulphate Soils risk, a groundwater salinity of 500-1000 mg/L and a low salinity risk.

The application area is associated with Bassendean soils. Dunes, flats and swampy depressions, of the Swan Coastal Plain, with pale deep sands, sandy duplexes and wet soils (Northcote et al., 1960 - 1968). The application area is likely to be free draining due to sandy soils.

Given the above, it is unlikely the proposed clearing will cause appreciable land degradation.

Methodology Northcote et al. (1960 - 1968)
GIS Databases:
Acid Sulfate Soil Risk Map, Swan Coastal Plain - DEC
Groundwater Salinity, Statewide - DOW
250K Map Series, Groundwater Salinity - DOW

(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**
GIS Database records indicate that the closest DEC reserve to the application area is a Timber Reserve approximately 1.4km east of the application area.

The property was historically used for pasture and grazing for sheep and is currently used to graze cattle. The vegetation has been highly modified.

Given the degraded condition of the vegetation, and the distance to conservation reserves the proposed clearing is unlikely to impact on environmental values of nearby conservation areas.

Methodology GIS Databases:
-CALM Managed Lands and Waters - CALM 1/07/05
-Cadastre - DLI

(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 application is associated with a sumpland and a palusplain.

The closest records of surface water are a minor tributary (non-perennial) approximately 350m south west, a major tributary, Capel River (non-perennial) approximately 500m south and an EPP wetland approximately 600m south of the application area.

The proposal involves clearing 4.0ha of native vegetation for grazing and pasture. The property was historically used for pasture and grazing for sheep and is currently used to graze cattle. The vegetation has been highly modified.

Given the above, it is not likely the proposal will be at variance to this principle.

- Methodology** GIS Databases:
- Hydrography, linear - DOE 1/2/04
 - Geomorphic Wetlands (Classification), Swan Coastal Plain - DEC
 - Geomorphic Wetlands (Classification), Swan Coastal Plain - DEC_1
 - Geodata, Lakes - GA 28/06/02
 - RAMSAR, Wetlands - CALM 14/02/03
 - EPP, Wetlands 2004 (DRAFT) - DOE 21/7/04
 - EPP, South West Agricultural Zone Wetlands - DEP 10/10/01
 - EPP, Lakes - DEP 1/12/92
 - ANCA, Wetlands - CALM 08/01
 - Soils, Statewide - DA 11/99

(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 application area is associated with Bassendean soils. Dunes, flats and swampy depressions, of the Swan Coastal Plain, with pale deep sands, sandy duplexes and wet soils (Northcote et al., 1960 - 1968). The application area is likely to be free draining.

The property was historically used for pasture and grazing for sheep and is currently used to graze cattle. The vegetation has been highly modified.

Given the above, it is not likely the proposal will be at variance to this principle.

- Methodology** Northcote et al. (1960 - 1968)
 GIS Databases:
 -Soils, Statewide - DA 11/99

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

Comments
 The property is freehold zoned rural under the Shire of Capel Town Planning Scheme No.7 and Rural under the Greater Bunbury Region Scheme (GBRS).

The proposal involves clearing 4.0ha of native vegetation for grazing and pasture. The proponent has advised of his intentions to clear between trees to facilitate access for machinery and stock. The mature trees will be retained for shade for stock (TRIM ref DOC27033).

The application area is covered by an Aboriginal Site of Significance (SO1484 - Grindstone site). It is the responsibility of the proponent to ensure that no Aboriginal Sites of Significance are damaged through the clearing process. The permit holder will be notified of their obligations under the Aboriginal Heritage Act 1972 in the cover letter to this permit.

There is one Native Title claim over the area under application (South West Boorah 2). As the property is privately owned the granting of the clearing permit is a secondary approval and does not constitute a future act under the Native Title Act 1993.

No other approvals from the Department of Environment and Conservation or Department of Water are required for this proposal.

A submission from the Capel LCDC was received (TRIM ref DOC16805). A ministerial response (TRIM ref MINE1153/07) to this submission was sent out to the Capel LCDC on 23/05/07. No submission from this ministerial response has been received.

- Methodology** GIS Databases:
- Town Planning Scheme Zones - MFP 8/98
 - Native Title Claims - DLI
 - Aboriginal Sites of Significance - DIA

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Grazing & Pasture	Mechanical Removal	1.9		The assessable criteria have been addressed and the proposal is at variance to principle (f) and is not likely to be at variance to all the other remaining principles.
Grazing &	Mechanical	1.2		The assessable criteria have been addressed and the proposal is at variance to

Pasture	Removal	
Grazing & Pasture	Mechanical Removal	0.9

principle (f) and is not likely to be at variance to all the other remaining principles.
The assessable criteria have been addressed and the proposal is at variance to principle (f) and is not likely to be at variance to all the other remaining principles.

5. References

- AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.
- 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.
- Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- 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.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- SAC Bio Datasets (270607) Department of Environment and Conservation, Kensington, 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
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)