



1. Application details

1.1. Permit application details

Permit application No.: 1581/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: JM & TA Chinnery

1.3. Property details

Property: LOT 243 ON PLAN 208726 (House No. 146 MCGLADES NORTH PLANTATIONS 6701)
 Local Government Area: Shire Of Carnarvon
 Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.17		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 vegetation association 308: Mosaic: Shrublands; Acacia sclerosperma sparse scrub / Succulent steppe; saltbush & bluebush. Shepherd et al. 2001.	The area under application is a block of 1.17 ha that occurs in the horticultural district of Carnarvon and is approximately 100m from the Gascoyne River. It has been cleared historically, and a small structure that looks like an animal enclosure remains. The vegetation appears to have regenerated poorly when compared to original vegetation that occurs along the nearby river bank; which would be better described as woodland. There are less than a dozen trees on the property, some scattered shrubs, bare areas and buffel grass (<i>Cenchrus ciliaris</i>). The condition of the vegetation is considered degraded.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The condition of the vegetation was determined during the site visit conducted on the 2nd of November 2006. Site visit DEC officer, 2006.

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 has been previously cleared and has possibly been subjected to a number of other disturbances given the loss of vegetation structure and the introduction of buffel grass. As such there is only a handful of native flora species currently growing on the property. (Site visit DEC officer, 2006) In addition the area occurs within a well vegetated landscape, as the Carnarvon IBRA Region remains mostly uncleared. Given the surrounding landscape and the degraded condition of the area under application, it is not likely to represent an area of high biodiversity. Therefore the proposal is not likely to be at variance to this Principle.

Methodology GIS Databases:
 - Interim Biogeographic Regionalisation of Australia - EA 18/10/00.
 Keighery (1994).
 Site visit DEC officer, 2006.

(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**
 The area under application has experienced a number of disturbances that have impacted upon the original structure of the vegetation, reducing its condition to degraded (Site visit DEC officer, 2006). In comparison there is a vast landscape of vegetation nearby that is pristine, having remained undisturbed and undeveloped. Although it is possible that the area under application would provide habitat for fauna, given its condition and relatively small size it is unlikely to represent an area of significant habitat; particularly as alternative vegetation in better condition is available nearby.

Methodology Site visit DEC officer, 2006.

(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 no records of Declared Rare or Priority flora occurring in the local area or wider area. The closest occurrence of significant flora is a Priority 2 species that is located some 84km from the area under application. The area under application consists of approximately 1.17ha that has been previously cleared and has possibly been subjected to a number of other disturbances given the loss of vegetation structure and the introduction of buffel grass (Site visit DEC officer, 2006). It is therefore unlikely that the area under application includes, or is necessary for the continued existence of rare flora.

Methodology Site visit DEC officer, 2006.
 GIS Databases:
 - Declared Rare and Priority Flora list - CALM 01/07/05
 - Clearing Regulations - Environmentally Sensitive Areas - DoE 30/05/05

(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 at variance to this Principle**
 There are no records of Threatened Ecological Communities occurring in the local or wider area. Indeed the closest occurrence is at Hamelin Pool which is over 100km from the area under application. Therefore the proposal is not at variance with this Principle.

Methodology GIS Databases:
 - Threatened Ecological Communities - CALM 12/04/05

(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 at variance to this Principle**
 The vegetation under application is representative of Beard Vegetation Association 308 (Hopkins et al. 2001) of which there is 99.4% of the pre-European extent remaining (Shepherd et al. 2001). In addition the application falls within the Carnarvon IBRA Bioregion which has 99.8% of the pre-European extent remaining (Shepherd et al. 2001). Beard Vegetation Association 308 and the Carnarvon IBRA Bioregion are therefore both of 'least concern' for biodiversity conservation (Department of Natural Resources and Environment 2002). This proposal is therefore not at variance with this Principle.

	Pre-European Reserves/CALM- area (ha)	Current extent (ha)	Remaining %*	Conservation status**	managed land,
%					
IBRA Bioregion - Carnarvon	8,382,974	8,369,554	99.8	Least concern	11.3
Shire - Carnarvon	Not available	Not available	Not available	Not available	Not available
Beard veg type - 308	447,098	444,535	99.4	Least concern	0.7

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

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
 Shepherd et al, 2001.
 Department of Natural Resources and Environment, 2002

(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

No watercourses or wetlands are located within the area under application. The Gascoyne River is located approximately 100m south and the McNeill Claypan System is located approximately 5.5km south of the notified area. The area under application consists of approximately 1.17ha that has been previously cleared and has possibly been subjected to a number of other disturbances given the loss of vegetation structure and the introduction of buffel grass (Site visit DEC officer, 2006). Due to the small area under application and the distance to any watercourse or wetland it is unlikely that the vegetation within the area under application is growing in association with the two identified watercourses. This proposal is therefore unlikely to be at variance with this Principle.

Methodology Site visit DEC officer, 2006.

GIS Databases:

- Hydrography, linear - DoE 01/02/04
- Hydrographic Catchments - Catchments - DoE 23/03/05
- 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 area under application is located within a low rainfall zone of 300mm per annum and contains chief soils that are recent loams and sands close to the rivers with red earth soils and light clays on more eroded areas. The area under application consists of approximately 1.17ha that has been previously cleared and has possibly been subjected to a number of other disturbances given the loss of vegetation structure and the introduction of buffel grass (Site visit DEC officer, 2006). Due to the small area under application and that the proposal will extend the current horticultural development it is unlikely that the clearing of vegetation will cause appreciable land degradation.

Methodology Site visit DEC officer, 2006.

GIS Databases:

- Rainfall, Mean Annual - BOM 30/09/01
- Salinity Risk LM 25m - DOLA 00
- Acid Sulphate Soil risk map, SCP DOE 04/11/04
- Soils, Statewide - DA 11/99

(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 Chinaman's Pool Nature Reserve is located approximately 11km south west and One Tree Point Nature Reserve is located approximately 13km from the area under application. In addition the Wooramel Seagrass Bank, which is registered as National Estate is located 15km from the notified area. The McNeill Claypan System, registered as an ANCA (Australian Nature Conservation Agency) Wetland and an Environmentally Sensitive Area is located approximately 5.5km south from the proposal.

The area under application is located within the Carnarvon horticulture district and is surrounded by horticulture proposals. The proposal consists of approximately 1.17ha that has been previously cleared and has possibly been subjected to a number of other disturbances given the loss of vegetation structure and the introduction of buffel grass (Site visit DEC officer, 2006). The proposed clearing is not likely to impact on the environmental values of the identified conservation reserves due to the distance, small area under application and the area itself is not being managed for conservation. This proposal is therefore not likely to be at variance with this Principle.

Methodology Site visit DEC officer, 2006.

GIS Databases:

- ANCA Wetlands - CALM 08/01
- 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
- Clearing Regulations - Environmentally Sensitive Areas - DOE 30/5/05

(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 located within a low rainfall zone of 300 mm per annum. The Gascoyne River is

located approximately 100m south of the notified area. In addition the area under application also falls within the Priority 1 Public Drinking Water Source Area. The Department of Water (2006) advised that 'The DWSPP proposed changes to the boundary of the water reserve which would exclude that area of intense horticulture including Lot 243. The new boundary of the Carnarvon Water Reserve has not been gazetted yet however it should be managed in accordance with the boundaries proposed in the DWSPP which excludes Lot 243. So from a public drinking water source perspective I have no objection to the proposal to develop the lot for horticulture.'

The area under application is located within the Carnarvon horticulture district and is surrounded by horticulture proposals. The proposal consists of approximately 1.17ha that has been previously cleared and has possibly been subjected to a number of other disturbances given the loss of vegetation structure and the introduction of buffel grass (Site visit DEC officer, 2006). Due to the small area under application, the low rainfall rate and that the proposal is to extend the current horticultural development it is unlikely that the clearing of vegetation will cause deterioration in the quality of surface or underground water. This proposal is therefore unlikely to be at variance with this principle.

Methodology DOW (2006).
Site visit DEC officer, 2006.
GIS Databases:
- Current WIN data sets
- Public Drinking Water Sources (PDWSAs) - DOE 09/08/05
- Hydrographic Catchments - Catchments - DOE 23/03/05
- Hydrography, linear - DoE 01/02/04
- Rainfall, Mean Annual - BOM 30/09/01

(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 area under application is located within a low rainfall zone of 300 mm per annum and contains chief soils that are recent loams and sands close to the rivers with red earth soils and light clays on more eroded areas. The Gascoyne River is located approximately 100m south of the notified area.

The area under application is located within the Carnarvon horticulture district and is surrounded by horticulture proposals. The proposal consists of approximately 1.17ha that has been previously cleared and has possibly been subjected to a number of other disturbances given the loss of vegetation structure and the introduction of buffel grass (Site visit DEC officer, 2006).

Due to the small area under application, the low rainfall rate it is unlikely that the clearing of vegetation will cause or exacerbate the incidence of flooding. This proposal is therefore unlikely to be at variance with this principle.

Methodology Site visit DEC officer, 2006.
GIS Databases:
- Rainfall, Mean Annual - BOM 30/09/01
- Topographic Contours, Statewide - DOLA 12/09/02
- Soils, Statewide - DA 11/99

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

Comments

The Shire of Carnarvon advised that no objections are raised to the clearing of land as proposed if the purpose is to extend only, the existing adjoining cultivated areas into the intended cleared areas. If the clearing is required to develop new land used (eg. Non-horticulture), or new buildings, or to implement 'downstream processing' of any adjoining horticultural use then approval for that is required pursuant to the Shire's Town Planning Scheme (TPS) No.10.

The Shire of Carnarvon's Town Planning Scheme number 12 is currently being reviewed by the EPA. Apart from this no other assessment by the EPA exists for the area under application.

There is no further requirement for a Works Approval or EP Act Licence for the area under application.

There is a Native Title Claim over the area under application. As the property is freehold land Native Title has therefore been extinguished.

The area under application falls within the Priority 1 Public Drinking Water Source Area. The Department of Water advised that 'The Carnarvon Town Water Supply Drinking Water Source Protection Plan was completed in 1999 but its full release was delayed pending the completion of the Lower Gascoyne River Local Area Management Plan which was in 2003. The DWSPP proposed changes to the boundary of the water reserve which would exclude that area of intense horticulture including Lot 243. The new boundary of the Carnarvon

Water Reserve has not been gazetted yet however it should be managed in accordance with the boundaries proposed in the DWSPP which excludes Lot 243. So from a public drinking water source perspective I have no objection to the proposal to develop the lot for horticulture.'

The proponent has an existing water licence for the property with an annual allocation of 72,000kl and expiry date of 31 December 2010. The Department of Water has further advised that no amendment is required as historical usage is around 40,000-50,000kl per year and their current allocation is sufficient to incorporate the proposed development.

Methodology

4. Assessor's comments

Purpose	Method Applied	area (ha)/ trees	Comment
Horticulture	Mechanical Removal	1.17	The assessable criteria have been addressed and no objections were raised. The assessing officer therefore recommends that the permit should be granted.

5. References

- 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.
- 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., 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.
- Site Visit Report (2006) Department of Environment and Conservation (DEC), Western Australia. TRIM ref DOC12917.

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)

