



1. Application details

1.1. Permit application details

Permit application No.: 1331/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: NAT DUCA PTY LTD

1.3. Property details

Property: LOT 12 ON PLAN 252989 (House No. 570 ROBINSON KINGSFORD 6701)
 Local Government Area: Shire Of Carnarvon
 Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.4		Mechanical Removal	Hazard reduction or fire control

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. (Hopkins et al. 2001, Shepherd et al. 2001)	The proposal includes clearing of approximately 8.1 ha of regrowth, two thirds of which was recently cleared and piled (DEC ICMS No 6255). The predominant soil surface vegetation throughout the block is Buffel grass with some Birdwood grass (DAFWA, 2006). Juvenile river gum (Eucalyptus camaldulensis) and limestone wattle (Acacia sclerosperma) is also abundant as an overstorey shrub cover in those areas of the lot that have not recently been cleared by the bulldozer (DAFWA, 2006). The property has also been maintained regularly over the previous 10 years for fire hazard reduction significantly reducing the quality and condition of the vegetation.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The description and condition of the vegetation under application was obtained after a site visit on Tuesday 15 August 2006 (DEC Trim Ref No. DOC10509) and from the Land Degradation and Assessment Report conducted by the Department of Agriculture and Food (DEC Trim Ref No. DOC2396).

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 vegetation under application consists mainly of Buffel grass with some Birdwood grass as ground cover. Juvenile river gum (Eucalyptus camaldulensis) and limestone wattle (Acacia sclerosperma) are abundant as the overstorey scrub cover. (DAFWA, 2006)

The proposal includes clearing of 8.1 ha, approximately 6.7ha of which has already been cleared and pushed into piles (Site visit 2006). The area cleared has been addressed through the Mid West Regions, Local Environmental Enforcement Group (LEEG).

The property has also been maintained regularly over the previous 10 years for fire hazard reduction significantly reducing the quality of vegetation. The level of disturbance at this site and limited diversity of native

species suggests that the original biodiversity value has been compromised. It is therefore unlikely that the vegetation under application is representative of an area of high biodiversity in the Bioregion or the local area.

Methodology DAFWA (2006)
 Site visit (15 August 2006)
 GIS Databases:
 - Interim Biogeographic Regionalisation of Australia - EA 18/10/00.

(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 proposal includes clearing of 8.1 ha, approximately 6.7ha of which has already been cleared and pushed into piles (Site visit 2006). The area cleared has been addressed through the Mid West Regions, Local Environmental Enforcement Group (LEEG). The property has also been maintained regularly over the previous 10 years for fire hazard reduction significantly reducing the quality of vegetation. The level of disturbance at this site and limited diversity of native species suggests that the original biodiversity and habitat value has been compromised. The vegetation under application is therefore unlikely to provide a significant habitat for indigenous fauna.

Methodology Site visit (15 August 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 known records of Declared Rare or Priority Flora within the local area (10 km from the area under application). The proposal includes clearing of 8.1 ha, approximately 6.7ha of which has already been cleared and pushed into piles (Site visit 2006). The area cleared has been addressed through the Mid West Regions, Local Environmental Enforcement Group (LEEG). The property has also been maintained regularly over the previous 10 years for fire hazard reduction significantly reducing the quality of vegetation. It is therefore unlikely that this proposal is at variance with this Principle.

Methodology Site visit (15 August 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 likely to be at variance to this Principle**
 There are no records of Threatened Ecological Communities (TEC's) within 10 km of the proposed clearing. This proposal is therefore not likely to be 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 Camarvon IBRA Bioregion which has 99.8% of the pre-European extent remaining (Shepherd et al. 2001). Beard Vegetation Association 308 and the Camarvon 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 - Camarvon	8,382,974	8,369,554	99.8	Least concern	11.3
Shire - Camarvon	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 - DL1 08/07/04
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 700m North and the McNeill Claypan System is located 1.5 km east of the notified area. The proposal includes clearing of 8.1 ha, approximately 6.7ha of which has already been cleared and pushed into piles (Site visit 2006). The area cleared has been addressed through the Mid West Regions, Local Environmental Enforcement Group (LEEG). Due to the previous clearing 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 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 may be at variance to this Principle**

DAFWA (2006) advise that 'the inherent characteristics of the surface soils of Lot 12 do not predispose them to wind erosion. Lot 12 will be susceptible to water erosion if action is not taken to preserve the perennial soil surface cover and if concentrated and diverted future flood flow cannot be averted. The proposed clearing of 8.1 hectares of land within Lot 12 is unlikely to cause appreciable land degradation.'

DOW (2006) advise that 'there is a floodway located on the lot. The potential impact of removing 8.1 ha of native vegetation would be a benefit as there will be less obstruction to major flooding through the area. However a resulting issue could be possible erosion. Care must be taken to ensure that some vegetation is retained to minimise potential erosion.' To address this issue a condition has been imposed on the permit to ensure vegetation on the property be retained to a minimum height of 150 mm.

In the event of a major rainfall or flood event there may be the potential for water erosion to occur. However if the underlying soil surface and perennial grass cover is maintained, it is unlikely that this proposal will be at variance with this Principle.

Methodology DAFWA (2006)
DOW (2006)
GIS Databases:
- Rainfall, Mean Annual - BOM 30/09/01
- Salinity Risk LM 25m - DOLA 00
- 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 2 km North and One Tree Point Nature Reserve is located approximately 4.7 km from the area under application. In addition the Wooramel Seagrass Bank, which is registered as National Estate is located 4.8 km from the notified area. The McNeill Claypan System, registered as an ANCA (Australian Nature Conservation Agency) Wetland and an Environmentally Sensitive Area is located 1.5 km east from the proposal.

The area under application is located within the Carnarvon horticulture district and is surrounded by horticulture proposals. The proposal includes clearing of 8.1 ha, approximately 6.7ha of which has already been cleared and pushed into piles (Site visit 2006). The area cleared has been addressed through the Mid West Regions, Local Environmental Enforcement Group (LEEG). The property has also been maintained regularly over the previous 10 years for fire hazard reduction significantly reducing the quality of vegetation. The proposed clearing is not likely to impact on the environmental values of the identified conservation reserves and the area itself is not being managed for conservation. This proposal is therefore not likely to be at variance with this Principle.

Methodology 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 may 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 700 m north of the notified area. DAFWA (2006) advise that 'soil salinity does not adversely impact on the vegetation that covers Lot 12 and the present levels of salinity are compatible with the presently zoned status of the land.'

DOW (2006) advise that 'there is a floodway located on the lot. The potential impact of removing 8.1 ha of native vegetation would be a benefit as there will be less obstruction to major flooding through the area. However a resulting issue could be possible erosion. Care must be taken to ensure that some vegetation is retained to minimise potential erosion.' To address this issue a condition has been imposed on the permit to ensure vegetation on the property be retained to a minimum height of 150 mm.

In the event of a major rainfall or flood event there may be the potential for water erosion to occur and therefore loss of soil cover to the Gascoyne River. However if the underlying soil surface and perennial grass cover is maintained, it is unlikely that this proposal will be at variance with this Principle.

Methodology DOW (2006)
DAFWA (2006)
GIS Databases:
- 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

DOW (2006) advise that 'there is a floodway located on the lot. The potential impact of removing 8.1 ha of native vegetation would be a benefit as there will be less obstruction to major flooding through the area. However a resulting issue could be possible erosion. Care must be taken to ensure that some vegetation is retained to minimise potential erosion.'

This proposal is unlikely to cause or exacerbate the incidence of flooding and therefore unlikely to be at variance with this Principle.

Methodology DOW (2006)
GIS Databases:
- Rainfall, Mean Annual - BOM 30/09/01
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The Shire of Carnarvon has advised that the Shire has no objection to a clearing permit being granted to clear Lot 12 Robinson Street in the locality of Kingsford for the purpose of fire hazard reduction or fire control.

An Environmental Impact Assessment (EIA) was conducted over the area under application as part of the Shire of Carnarvon Town Planning Scheme which identified proposed areas for infrastructure and areas of conservation within the Shire of Carnarvon. The Scheme was formally assessed for environmental review and managed through scheme maps, provisions and local planning strategy. This EIA does not affect this application as the property falls within the horticultural district and is zoned accordingly (EPA reference CRN145179).

There is no further requirement for a RIWI Act Licence, 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.

Two Aboriginal Sites of Significance apply over the area under application. The proponent will be advised in the covering letter of their obligations.

The proposal includes clearing of 8.1 ha, approximately 6.7ha of which has already been cleared and pushed into piles (Site visit 2006). The area cleared was estimated through a site visit conducted on 15 August 2006. This matter has been addressed through the Mid West Regions, Local Environmental Enforcement Group (LEEG) and a Letter of Warning was sent.

DoW (2006) advised that 'the potential impact of removing 8.1ha of native vegetation would be a benefit as there will be less obstruction to major flooding through the area. However, a resulting issue could be erosion.' It was further advised to be careful that some vegetation is retained to minimise potential erosion.

Methodology Shire of Carnarvon submission

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Hazard reduction or fire control	Mechanical Removal	1.4	<p>The assessable criteria have been addressed and the proposal may be at variance to Principles (g and i).</p> <p>Principle (g): In the event of a major rainfall or flood event there may be the potential for water erosion to occur. However if the underlying soil surface and perennial grass cover is maintained, it is unlikely that this proposal is at variance with this Principle. To address this issue a condition has been imposed on the permit to ensure vegetation on the property be retained to a minimum height of 150 mm.</p> <p>Principle (i): In the event of a major rainfall or flood event there may be the potential for water erosion to occur and therefore loss of soil cover to the Gascoyne River. However if the underlying soil surface and perennial grass cover is maintained, it is unlikely that this proposal is at variance with this Principle. To address this issue a condition has been imposed on the permit to ensure vegetation on the property be retained to a minimum height of 150 mm.</p> <p>It is recommended that a clearing permit be issued for 1.4ha of the area under application. The remaining area under application has been found to be illegally cleared and addressed by the DEC, Mid West Region, Local Environmental Enforcement Group. As such the area cleared under application has not been addressed in this assessment.</p>

5. References

- DAFWA (2006) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DEC TRIM Ref DOC2396.
- 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. DEC TRIM ref DOC10509.

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)

