



1. Application details

1.1. Permit application details

Permit application No.: 166/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: MR Garry Keeffe CEO Shire of Northampton

1.3. Property details

Property: LOT 4485 ON PLAN 232431 (SANDY GULLY 6535)
Local Government Area: Shire Of Northampton
Colloquial name: Whitecliffs Rd, Northampton, 7-8km from Horrocks

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
15		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 359: Shrublands; acacia & banksia scrub (Hopkins et al. 2001, Shepherd et al. 2001).	The area proposed to be cleared is 7ha from Lot 2, Victoria Location 4485 off the Whitecliffs Road in the Shire of Northampton. The site is a flat low-lying area of undulating sandplain with yellow brown shallow sand. Vegetation likely to be affected includes Acacia spathulata, Grevillea leucopteris, Eremaea beaufortoides, Dryandra sessilis, Ecdeiocolea monostachya and Isotoma hypocrateriformis (DAWA 2004).	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Observed during site visit: the area to be cleared is altered through grazing and weed invasion although it is in very good condition for this region. The stocking rates have been low and there is no evidence of recent grazing on the location. There had been recent rains and it was observed that the vegetation was in good condition with seedlings present indicating a germination event has occurred and grazing pressure is low. The trees and shrubs present did not show signs of overgrazing or a browse line. The vegetation that may be affected by this proposal included Acacia sp., Melaleuca sp., Eucalyptus sp., Waitzia sp. And Conostylis sp.

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 may be at variance to this Principle**
CALM advised that the remnant occurs within the Geraldton Sandplains IBRA region, which is considered to be a hotspot of botanical diversity of international significance. The area that is proposed to be cleared varies from Beard's vegetation community 359 in that the sand is shallower over the gravel than the surrounding area, and the vegetation therefore lacks the taller Banksia and Acacia overstorey. This proposal may therefore be at variance to this Principle.

Methodology CALM, 2006.
GIS Databases: Interim Biogeographic Regionalisation of Australia-EA 18/10/00.
Site visit, DoE Officer, 2004.

(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 advised that although no assessment of fauna values was carried out, it is likely that the site would be of some value as a fauna habitat due the vegetation structure being intact. Therefore this proposal may be at variance to this Principle.

Methodology CALM, 2006.
CALM's Threatened and Priority Fauna Database [The comprehensiveness of the database is dependent on the amount of survey carried out in the area and does not necessarily represent a comprehensive listing (CALM, 2006)].
Site visit, DoE Officer, 2004.

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

Comments **Proposal is not at variance to this Principle**

Following a Level 2 Flora and Vegetation survey requested by the DoE, CALM requested that the retention of the vegetation in the vicinity of the fenceline (and thus P4 *Diuris recurva*) become a licence condition. CALM also stated that since the Shire of Northampton was not intending to clear the entire parcel, that it was reasonable to conclude that some *Hakea erinacea* will remain post clearing, however the size and viability of such populations remains unknown. No Declared Rare Flora or identified populations of Priority Flora (provided suitable conditions are set) will be impacted if this proposal is approved. This proposal is therefore not at variance to this Principle.

Methodology CALM, 2006.
GIS Databases: Declared Rare and Priority Flora list - CALM 01/07/05.
Site visit, DoE Officer, 2004.
Florabase, 2006.
CALM's Threatened and Priority Flora Database [The comprehensiveness of the database is dependent on the amount of survey carried out in the area and does not necessarily represent a comprehensive listing (CALM, 2006)].

(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**

CALM have advised that no TECs have been recorded within the vicinity of the vegetation proposed to be cleared and no occurrences of TECs were identified during the field inspection. This proposal is therefore not at variance to this Principle.

Methodology CALM, 2006.
CALM's Threatened Ecological Community Database [The comprehensiveness of the database is dependent on the amount of survey carried out in the area and does not necessarily represent a comprehensive listing (CALM, 2006)].
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 likely to be at variance to this Principle**

The vegetation under application is part of Beard vegetation association 359 and lies in the Northampton Shire in the Geraldton Sandplains Bioregion. Current figures estimate that there is 21.1% of association 359 remaining in Western Australia and none of this is in secure tenure. The Geraldton Sandplains has a vegetation extent of 26.8% and the Shire of Northampton has 19.6% of its pre-European extent remaining (Shepherd et al. 2001). As the area proposed to be cleared will be rehabilitated, this proposal is not likely to be at variance to this Principle.

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.
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 at variance to this Principle**

The area under application is in the Greenough River Basin within the Hutt River Catchment. There are 2 non-perennial lakes, 2 minor non-perennial watercourses and 1 area subject to inundation in the vicinity. The closest lake is approximately 863m from the proposed clearing and is approximately 187m in diameter. The other lake is approximately 84m wide and is approximately 1.7km away. The area subject to inundation is approximately 1.2km from the proposed clearing and contains a minor non-perennial watercourse (approximately 1.48km away). The remaining minor non-perennial watercourse drains directly into the ocean and is approximately 1.5km from the area under application.

The local watercourses would not be affected by the proposed clearing because of their distance from the area under application. Any rainfall in the area drains directly into limestone then straight into the ocean. In addition,

sand ridges surround the site.

Methodology GIS databases:
- Hydrographic Catchments-Catchments DOE 3/4/03
- Hydrography linear - DOE 01/02/04.
DoE - Midwest/Gascoyne Hydro advice 2004.

(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 have advised that whilst the proposed clearing is likely to increase wind and water erosion, given the surrounding vegetation and land use of the site, this is not considered to be an issue of concern. The area under application falls within the 1000-3000mg/L salinity risk area, however, the proposed clearing is not likely to increase land salinisation on or off site. Given the site is surrounded by dense native vegetation and is located in an enclosed swale, the proposed use as a gravel pit should not pose a significant risk for land degradation. This proposal is therefore not likely to be at variance to this Principle.

Methodology DAWA, 2004.
GIS Databases: Salinity Risk LM 25-DOLA 00, Acid Sulfate Soil Risk Map SCP DOE 04/11/04, Soils Statewide-DA 11/99.
Department of Agriculture (2004 Map Unit Database).
Site visit, DoE Officer, 2004

(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 at variance to this Principle**

There are no CALM Regional Parks, proposed National Parks, or parcels of land registered as National Estate in the area under application. There is a Waters and Rivers Commission Estate 28km away. CALM-managed lands and waters in the area include 3 C-class nature reserves. The gazetted Chilimony Nature Reserve (1464km square) is vested with the Conservation Commission for the purpose of conservation of flora and fauna and is approximately 27km from the area under application. The 2 remaining un-named nature reserves are also vested with the Conservation Commission for the purpose of conservation of flora and fauna. The larger of the 2 is 521km square (approximately 27km away) and the other is 33km square (approximately 28km away). The area under application is an adequate distance from these conservation areas such that the vegetation under application does not impact on the environmental values, provide a buffer, contribute to an ecological linkage, or provide habitats not well represented on conservation land. This proposal is therefore not at variance to this Principle.

Methodology CALM, 2004.
GIS Databases - CALM Regional Parks - CALM 12/04/02, CALM Managed Lands and Waters - CALM 01/07/05, Proposed National Parks FMP-CALM 19/03/03, Register of National Estate - EA 28/01/03
Site visit, DoE Officer, 2004.

(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 at variance to this Principle**

The area under application is in the Greenough River Basin that lies in the Hutt River Catchment. There are a number of soaks in the vicinity of the area under application, however the nearest is approximately 1.4km away. There are no proclaimed, gazetted or declared areas or catchments that this proposal may impact upon. The proposed clearing is unlikely to have an adverse impact on groundwater quality as the site is internally draining and surrounded by sand ridges. DAWA advised that given the small area of remnant vegetation proposed to be cleared compared to the total area remaining in the patch it is considered unlikely that the clearing will adversely impact on groundwater quality.

Methodology DAWA, 2004.
GIS Databases - Current WIN data sets, PDWSA Protection Zones - DOE 07/01/04, Public Drinking Water Sources (PDWSAs) - DOE 29/11/04, Hydrographic Catchments - Catchments - DOE 03/04/03.

(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 at variance to this Principle**

The area under application does not fall within a recognised floodplain region. Given the relatively small scale of the area and that the site is internally draining, flooding impacts are unlikely to occur.

Methodology GIS Databases - Rainfall, Mean Annual - BOM 30/09/01, Interim Biogeographic Regionalisation of Australia - EA 18/10/00, Pre-European Vegetation - DA 01/01, Local Government Authorities - DLI 08/07/04.

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

Comments **Proposal is not at variance to this Principle**

The area under application is privately owned - the Shire of Northampton has the owner's written consent to enter the property and act on their behalf to obtain clearing permits and extract gravel.

The Shire of Northampton advised that the area of land in question is zoned Rural and there are no Town Planning Scheme issues with the clearing proposed.

This application was presented at a DoE regional team meeting to seek advice on any Environmental Protection or water licensing issues. In this case, there were no additional licences or permits required.

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Extractive Industry	Mechanical Removal	15	Grant	The assessable criteria have been addressed and no objections were raised. The assessment of the vegetated area under application revealed that the proposal may be at variance to Principles (a) for biodiversity and (b) for fauna, however rehabilitation conditions will be imposed that will minimise environmental harm over this relatively small area. A specific condition has been imposed to manage the concerns raised by CALM regarding the introduction of weeds to the site. In addition, the area containing the known Priority 4 species, <i>Diuris recurva</i> has been excised from the area under application. The assessing officer therefore recommends that the clearing permit be granted with conditions to protect the biodiversity values of the area under application.

5. References

- ATA Environmental, (2005). Shire of Northampton lot 4485 Whitecliffs road vegetation and flora survey. Perth, Western Australia.
- 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 CEO1528/04.
- DAWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref CEO1548/04.
- 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.
- EPA (2002) Terrestrial Biological Surveys as an element of biodiversity protection. Position Statement No. 3. March 2002. Environmental Protection Authority
- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALM Science after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.
- 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)

