Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1524/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Shire of Northampton**

1.3. Property details

Property: LOT 12927 ON PLAN 41490 (KALBARRI 6536)
Local Government Area: Shire Of Northampton
Colloquial name:

1.4. Application

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

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 383: Shrublands: Acacia rostellifera scrub heath. (Hopkins et al. 2001, Shepherd et al. 2001).	The area under application is a block of 6ha that adjoins the current Kalbarri refuse site. The site is located within a mostly uncleared parcel of land that is very closely surrounded by the Kalbarri National Park. The vegetation does appear to correlate well with the Beard description as it is indeed best described as shrubland. The area is dominated by different species of shrubs reaching a uniform height of approximately 2 metres that form a thick cover over the landscape. The flora that would be affected by this proposal include acacia, grevillea, allocasuarina and hakea species. Apart from the few tracks through the area and small amounts of rubbish that are scattered along the boundary with the refuse site, the vegetation is in excellent condition. (Site visit report, 2006)	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The description of the vegetation under application was taken from the site visit conducted and photographs taken on the 3rd July 2006 (DEC Trim ref DOC15434).

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 at variance to this Principle

The Biodiversity Coordination Section of DEC advised that Kalbarri supports a high diversity of fauna and flora species. Much of the Kalbarri area is on the Register of National Estate as the Kalbarri National Park, which is managed for conservation by the DEC. On the Register of National Estate (DEH 2006) it is stated that 'Kalbarri is one of a number of areas in the wheatbelt that are significant for rare species due to widespread clearing in the surrounding landscape, and to the high diversity and level of local endemism.' The area under application is in close proximity to the Kalbarri National Park and therefore may possess similar biodiversity as the

surrounding landscape. Therefore the proposal is considered to be at variance to this Principle.

Methodology Biodiversity Coordination Section, DEC 2006.
Site visit DoE Officer, 2006.
GIS Databases:
- CALM Managed Lands & Waters - CALM 01/07/05
- Register of National Estate - EA 28/01/03

(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 Biodiversity Coordination Section of DEC (2006) advised that 'the specially protected malleefowl (Leipoa ocellata) and three priority species occur within the local area; or within a 10km radius from the area under application. In addition two other threatened and priority fauna have been released into Kalbarri National Park in the years 2000, 2004 and 2005. Although the area under application could provide habitat for these and other local fauna, given that it lies within a well vegetated landscape, faunal populations would find similar habitat nearby. Thus it would not be likely that the proposal would significantly impact upon the local fauna except possibly the malleefowl.'

DEC further advised that 'Malleefowl can be sedentary with pairs using the same nest site each season, over successive years. They are found in eucalypt dominated woodlands and in some shrublands dominated by acacia. They require a sandy substrate and an abundance of leaf litter for the construction of their nests. As the area is indeed sandy and supports acacia shrubland, it is possible that it may be suitable for malleefowl.' However, the area under application is no more than 300m at its furthermost point from the existing refuse site and contains a number of tracks. The refuse site has been in use for at least 9 years, and given the proximity of the area under application to this ongoing disturbance and activity it is unlikely that the malleefowl would have utilised the area for nesting. Therefore the proposal is not likely to be at variance to this Principle.

Methodology Biodiversity Coordination Section, DEC (2006)
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**
The Biodiversity Coordination Section, DEC (2006) have advised that 'there are 4 species of Declared Rare Flora and 162 records of 48 species of Priority flora that occur within the local area; a radius of 10 km. Of the DRF, it is considered that the preferred habitat of 3 would not occur in the area under application and therefore it would be unlikely that they would be affected by the proposal. However, there is insufficient information to determine whether a number of the Priority flora and the final species of DRF; Stachystemon nematophorous, would be supported by the area under application.'

A site visit, undertaken by a DEC Flora Conservation officer, confirmed that the proposed clearing is not likely to impact on Declared Rare or Priority Flora as these were not found to be present. The vegetation community found at the site is not known to be appropriate habitat for any of the DRF and most of the Priority Flora recorded within a 10km radius of the site.

This proposal is therefore unlikely to be at variance with this Principle.

Methodology Biodiversity Coordination Section, DEC (2006)
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 likely to be at variance to this Principle**
There are no known occurrences of Threatened Ecological Communities within the local area (Biodiversity Coordination Section, DEC 2006). Therefore, it is unlikely that the proposed clearing is at variance with this Principle.

Methodology Biodiversity Coordination Section, DEC (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 at variance to this Principle

The area under application falls outside of the Intensive Land use Zone but within the Geraldton Sandplains Bioregion, which has 42.2% of native vegetation remaining (Shepherd et al, 2001, Shepherd, 2006), making it of least concern by conservation status standards (Department of Natural Resources and Environment 2002). There is no data available for the extent of vegetation remaining outside of the Intensive Land use Zone within the Shire of Northampton. In addition, Beard Vegetation Association type 383 is well represented with 98.4% remaining and 17.9% reserved in conservation estate (Shepherd et al, 2001, Shepherd, 2006).

Given that the area under application falls outside of the Intensive Land use Zone and is well represented through vegetation extent, this proposal is not at variance with this Principle.

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	Reserves/CALM-managed land, %
IBRA Bioregion - Geraldton Sandplains	3,136,277	1,324,440	42.2	Depleted	35.6
Shire - Northampton	Not available	Not available	Not available	Not available	Not available
Beard veg type - 383	13,293	13,081	98.4	Least concern	17.9

* (Shepherd et al. 2001, Shepherd 2006)

** (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.
Shepherd, 2006
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 occur within the area under application. There is an Australian Nature Conservation Agency (ANCA) wetland located approximately 5 km from the area under application within the lower reaches of the Murchison River. Given the distance to any other watercourse or wetland, it is unlikely that this proposal is at variance with this Principle.

Methodology

Site visit (3rd July 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

DAFWA (2006) advises that 'It is unlikely that the clearing of up to 6 hectares of vegetation will contribute to groundwater rise and salinity at this site. The water table is reported to be up to 50 metres below the ground surface at this location. The regional groundwater system is a high quality aquifer with low salinity reading (less than 400 mg/L). Land degradation risk analysis on the soil sub-system Mr 2 indicates that none of the map unit has a very high or extreme risk of wind erosion. Some of the site may have a moderate risk of wind erosion given the sandy soils however given the large amounts of vegetation in the surrounding area the risk should be minimal. The clearing is not proposed on any exposed hill crests and the proposed use as landfill should compact and cover the surface reducing any risk of wind erosion at this site. The clearing of this relatively small area of vegetation is unlikely to cause land degradation in terms of salinity, wind and water erosion, waterlogging or flooding.'

Methodology

DAFWA (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 Biodiversity Coordination Section, DEC (2006) advised that 'The Kalbarri National Park is situated 300m north of the area under application. In addition the Kalbarri National Park and the Unallocated Crown Land on which the application area is located are both contained within the Register of National Estate database, registered for natural values with the Department of Environment and Heritage. However, providing the Shire of Northampton rehabilitates the previously used tip areas with dense mid-storey endemic flora species, the extension of the tip in a southerly direction will increase the buffer between the tip and Park boundary to the north of the site (pers. comms. Senior Ranger, DEC, 26 June 2006).'

The area under application was registered with the Department of Land Information on 14th February 2006 as Victoria Location 12927 and vested with the Shire of Northampton as a refuse and sand site. The proposed clearing is not likely to impact on the environmental values of the identified conservation reserve due to the habitat being well represented in the adjacent National Park. In addition a condition will be placed on the permit requiring the area to be revegetated with original matter from the site. This proposal is therefore not likely to be at variance with this Principle.

Methodology

Biodiversity Coordination Section, DEC (2006)
GIS Databases:
- 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

(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 falls within the Kalbarri Water Reserve and the Priority 3 Public Drinking Water Source Area. The Department of Water (2007) advised that 'The Kalbarri Water Reserve Drinking Water Source Protection Plan (DWSPP) was published in June 2006 and identifies that the Shire will continue to manage Victoria Location 11987 (now known as Crown Reserve 48528 and 48527) for the purposes of recreation, gravel extraction and landfill.' The Department further advises that 'the Water Quality Protection Note: Land use compatibility in Public Drinking Water Source Areas identifies that landfill (solid waste disposal) class I is compatible with conditions for Priority 3 areas.'

DAFWA (2006) advised that 'It is unlikely that the clearing of up to 6 hectares of vegetation will contribute to groundwater rise and salinity at this site. The water table is reported to be up to 50 metres below the ground surface at this location. The regional groundwater system is a high quality aquifer with low salinity readings (less than 400 mg/L). Land degradation risk analysis on the soil sub-system Mr 2 indicates that none of the map unit is presently saline and zero is presently at risk. The large area of high quality vegetation in the surrounding National Park also reduces the risk of any impacts that clearing a small amount of vegetation may cause.'

Due to the relatively small area (6 ha) under application this proposal is therefore not likely to be at variance with this Principle. In addition a condition will be placed on the permit requiring the area to be revegetated with original matter from the site.

Methodology

DAFWA (2006)
DOW (2007)
GIS Databases:
- Public Drinking Water Sources (PDWSAs) - DOE 09/08/05
- 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

DAFWA (2006) advised that 'It is unlikely that the proposed clearing will contribute to water logging and flooding. The Mr 2 sub-system degradation analysis indicates a minimal risk of water logging and flooding. The high infiltration rates of the sandy soils as well as the large proportion of the catchment with dense vegetation remaining reduce the likelihood of water logging or flooding in this area.'

Given the sandy nature of the soils and the relatively small area (6 ha) under application it is unlikely that this proposal is at variance with this Principle.

Methodology

DAFWA (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 proposal is for an existing refuse site which is consistent with zoning of the land and a revegetation condition wil be imposed. The Shire of Northampton has advised that there are no planning approvals or requirements that may affect this proposal.

There is no further requirement for a RIWI Act Licence or Works Approval. The area under application is already contained under an existing Environmental Licence and there is no requirement for an amendment.

There is a Native Title claim over the area under application, however the property was registered with the Department of Land Information on 14th February 2006 as Crown Reserve 48527 vested with the Shire of Northampton for the purposes of rubbish disposal site and sand. It is the CEO of the Department's view that the grant of a clearing permit in this case constitutes a secondary approval that removes the Environmental Protection Act's prohibition on the applicant exercising its statutory powers. Accordingly, the CEO is not required to comply with future act procedures under the Native Title Act 1993.

The area under application falls within an Aboriginal Site of Significance. The proponent will be advised in the covering letter to contact the relevant authorities in relation to their obligations under the Aboriginal Heritage Act 1972.

There have been five Environmental Impact Assessments (EIA) conducted over the area under application. Two EIA's were withdrawn, the Geraldton Regional Plan was assessed as not being a proposal under Part IV and the Shire of Northampton Town Planning Scheme was not assessed. The final EIA was the original works approval for the refuse site, which was not assessed and the activities were to be managed under Part V of the Environmental Protection Act 1986. This level of assessment was set on 13th June 1997.

The Department of Water has advised that 'Lot 12927 on Plan 41940 (Crown Reserve 48527) is a Priority 3 water source protection area. The Kalbarri Water Reserve Drinking Water Source Protection Plan (DWSPP) was published in June 2006 and identifies that the Shire will continue to manage Victoria Location 11987 (now known as Crown Reserve 48528 and 48527) for the purposes of recreation, gravel extraction and landfill.' The Department further advises that 'the Water Quality Protection Note: Land use compatibility in Public Drinking Water Source Areas identifies that landfill (solid waste disposal) class I is compatible with conditions for Priority 3 areas.' The proponent will be advised on the covering letter to contact the Department of Water to identify best management practices within the Kalbarri Water Reserve.

The Water Corporation advised that 'Even though this is outside the water reserve boundary but upstream, could it be suggested that the Shire drill monitoring bores to determine any leaching of metals and nutrients into the groundwater if the tip expansion is unlined.' These requirements are outlined under their existing Environmental Licence under Part V of the Environmental Protection Act 1986.

Methodology

Shire of Northampton submission
DOW (2007)
Water Corporation submission
GIS databases:
- Native Title Claims - DLI 7/11/05
- Aboriginal Sites of Significance - DIA 26/04/07
- Environmental Impact Assessments

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Miscellaneous	Mechanical Removal	6	The assessable criteria have been addressed with the proposal not likely to be at variance with the clearing principles except for principle a which is at variance. Conditions will be placed on the permit requiring rehabilitation of the site once landfill activities have ceased.

5. References

Biodiversity Coordination Section, DEC (2006) Land clearing proposal advice (Specific Biodiversity advice). Department of Environment and Conservation, Western Australia. DEC TRIM ref DOC1957.

DAFWA (2006) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DEC TRIM Ref DOC2017.

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.
DOW (2007) Shire of Northampton Part V EP Act application for development in Kalbarri Water Reserve, Department of Water, Western Australia. DEC TRIM Ref WRD12387.
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 DOC15434.
Water Corporation (2007) Submission - Public Drinking Water Source Area, Water Corporation, Western Australia. DEC TRIM Ref DOC14730.

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)