Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2083/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Department of Education and Training

1.3. Property details

Property: LOT 103 ON PLAN 20990 (House No. 38 BRADMAN BUTLER 6036)
LOT 12675 ON PLAN 20990 (House No. 26 BRADMAN BUTLER 6036)
LOT 12677 ON PLAN 20990 (House No. 26 BRADMAN BUTLER 6036)
Local Government Area: City Of Wanneroo
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
9.5		Mechanical Removal	Building or Structure

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: -No.1948: low woodland; banksia on limestone Heddle Vegetation Complex: -Cottesloe Complex - Central and South (mosaic of woodland of E. gomphocephala and open forest of E. gomphocephala - E. marginata - E. calophylla; closed heath on the Limestone outcrops).	The proposed clearing area comprises an area of 9.5 hectares for the purpose of 'Butler High School' in the City of Wanneroo (Butler).	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	A DEC site inspection confirmed that the overall vegetation condition in the proposed clearing area is 'degraded.' Only a small portion of the application site (northwest corner) appeared to be in 'good' to 'degraded' condition. However, this area is also experiencing disturbances such as illegal waste dumping, aggressive weeds, and edge effects associated with the surrounding urban development. The south eastern portion of the application site is considered as 'completely degraded' and can be described as 'parkland cleared' (Keighery, 1994).

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 overall condition of native vegetation within the proposed clearing area is considered 'degraded.'

Whilst a small area in the northwest corner of the application site appears to be in 'good' to 'degraded' condition, the majority of the area has experienced a high level of disturbance (DEC, 2007 and GHD, 2007).

In addition to that, the proposed clearing area is subject to edge effects resulting from a high level of urban development surrounding the application site.

Consequently, native vegetation within the proposed clearing area is not likely to comprise a high level of biological diversity.

Methodology DEC, 2007
GHD, 2007

(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 thirty nine records of conservation significant fauna within a ten (10) kilometre radius of the application site.

The species identified closest to the application site (at approximately 910m and 1.6km) are two records of the 'Priority 5' marsupial Isoodon obesulus fusciventer (Quenda).

The third closest species, recorded at approximately 2km from the proposed site, is the 'Endangered' Carnaby's Black Cockatoo (Calyptorhynchus latirostris).

Given that a small portion of the application area consists of mature trees and the condition of the area under application ranges from 'degraded' to 'completely degraded', it is unlikely to comprise or be necessary for the maintenance of indigenous fauna (DEC, 2007).

Methodology

GIS Database
-SAC Bio Datasets
DEC Site Visit (15 October 2007)

(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

Two conservation significant flora species were identified within a 5 kilometre radius of the proposed clearing area.

These two species (Eucalyptus argutifolia and Acacia benthamii) were recorded at approximately 3 kilometres from the application site.

E. argutifolia has been declared 'Rare.'

Aerial photography suggests that there are no ecological linkages between the recorded location of E. argutifolia and the proposed clearing area as the surrounding area has been highly modified by urban development.

Furthermore, the proponent has provided supporting documentation regarding two flora surveys that were conducted on 28th October 2006 and 21st February 2007. No DRF or Priority Flora species were identified during the flora surveys (GHD, 2007).

Therefore, native vegetation in the proposed clearing area is not likely to include, or be necessary for the continued existence of, rare flora.

Methodology

GHD, 2007
GIS Database
-SAC Bio Datasets

(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 14 records of Threatened Ecological Communities (TECs) within a 2km radius of the proposed clearing area.

The closest TEC record is for SCP26a (approximately 200 metres East of the application site) identified as 'Melaleuca huegelii - Melaleuca acerosa (currently M. systena) Shrublands on limestone ridges' (Gibson et al. 1994 type 26a).

TEC26a is in the same Beard vegetation association as the proposed clearing area (low woodland; banksia on limestone) and the same Heddle vegetation complex (Cottesloe Complex - Central and South).

TEC26a is also in the same soil type as the application site (chief soils are siliceous sands).

The proponent's supporting documentation and flora surveys indicate that vegetation within the top NW corner has some similarities with TEC26a (GHD, 2007). However, it appears to be closer to SCP community type 24 (GHD, 2007).

A DEC site inspection confirmed that the north western corner of the proposed clearing area is in 'good' to

'degraded condition' (Keighery, 1994 and DEC, 2007). The presence of aggressive weeds, dying shrubs, and illegal waste dumping is evident in this portion of the application area. (DEC, 2007).

Given the condition of the vegetation and the urban modification surrounding this area, it is unlikely to comprise the whole or a part of, or be necessary for the maintenance of a threatened ecological community.

Methodology DEC Site Visit (15 October 2007)
GHD, 2007
GIS Database
-SAC Bio Datasets

(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 proposed clearing area is located in the City of Wanneroo and within the Swan Coastal Plain Interim Biogeographic Regionalisation of Australia (IBRA) region.

The Swan Coastal Plain IBRA region has a 38.1 per cent of the Pre-European vegetation extent remaining with a conservation status classified as 'Depleted.'

The vegetation proposed to be cleared is a component of Beard vegetation association 1948 (low woodland; banksia on limestone) of which 21.4 per cent of the Pre-European extent remains with a conservation status classified as 'Vulnerable.'

The area under application is also within the Heddle Cottesloe Complex - Central and South of which 41 per cent of its Pre-European extent remains with a conservation status of 'Vulnerable.'

Approximately 36 per cent (12,362 hectares) of the original extent of the Cottesloe Complex - Central and South remains on the Swan Coastal Plain portion of the Perth Metropolitan region with 18 per cent proposed for protection (Government of Western Australia, 2000).

The National Objectives and Targets for Biodiversity Conservation 2001-2005 specified as a goal for all jurisdictions to have 'clearing controls in place that prevent clearance of ecological communities with an extent below 30 per cent of that present pre- 1750' (Department of Environment and Heritage, 2001. National Objective and Targets for Biodiversity Conservation 2001-2005, Canberra).

In adhering to this national objective, the EPA acknowledges that 'the threshold level below which species loss appears to accelerate exponentially at an ecosystem level is regarded as being at a level of 30% of the pre-clearing extent of the vegetation type' (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).

Whilst the Pre- European extent remaining of the Beard vegetation association unit 1948 (21.4 per cent) is below 30 per cent , the Heddle Cottesloe Complex - Central and South (41 per cent) and within the Swan Coastal Plain portion of the Perth Metropolitan region (36 per cent) is above the federal and state 30 per cent threshold level.

Furthermore, the Pre- European extent remaining within the City of Wanneroo is 57.6 per cent with a conservation status of 'Least concern.'

Accordingly, the Pre-European extent remaining in a local context suggests that native vegetation within the application site is unlikely to be significant as a remnant of native vegetation in an area that has been extensively cleared.

Methodology GIS Database:
-Interim Biogeographic Regionalisation of Australia - EA 18/10/00
-Heddle Vegetation Complexes - DEP 21/06/95
-Cottesloe Complex-Central And\South

(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**
As aerial photography suggests and a DEC site visit confirmed, native vegetation in the proposed clearing area is not growing in, or in association with, an environment associated with a watercourse or wetland.

Methodology GIS Database:
-Swan Coastal Plain North 20 - orthomosaic - DLI 06
- DEC Site Visit (15 October 2007)

(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 proposed clearing area is characterised by a low relief elevation of 25m AHD [Australian Height Data] with siliceous sands as chief soils.

The mean annual rainfall in the area is 800mm.
Groundwater salinity in the application site has been mapped for 500-1,000 mg/L Total Dissolved Solids (TDS).

The application site is situated in an area that has been identified as 'Class 3' with no known Acid Sulphate Soil (ASS) risk.

In addition to that, the areas surrounding the application site have been highly modified by urban development.

Therefore, the clearing of native vegetation within the application site is not likely to cause appreciable land degradation in the surrounding areas.

Methodology

GIS Database:
-Topographic contours, Statewide DOLA 12/09/02
-Rainfall, Mean Annual - BOM 30/09/01
-Acid Sulphate Soil Risk Map - Swan Coastal Plain DEC
-Groundwater Salinity Statewide 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

A System 6 Conservation Reserve was identified within a 5km radius of the application site.

The portion of this conservation area that is closest to the proposed clearing area (at approximately 200 metres East of the application site) has been highly modified by urban development.

This System 6 Conservation Reserve also includes Bushforever site 383 and the Neerabup National Park.

Bushforever site 383 is situated at approximately 880 metres East of the proposed clearing area and extends into the Neerabup National Park which is 1 kilometre East of the application site.

The portion of Neerabup National Park closest to the proposed clearing area is in the same Beard vegetation association as the proposed clearing area (low woodland; banksia on limestone).

Neerabup is also in same Heddle vegetation complex (Cottesloe Complex - Central and South) and within the same soil type (chief soils are siliceous sands) as the application site.

Aerial photography suggests that there are no evident ecological linkages between these conservation areas and the proposed clearing site since the surroundings have been highly modified by urban development.

Accordingly, the clearing of native vegetation in the application site is unlikely to have an impact on the environmental values of any adjacent or nearby conservation area.

Methodology

GIS Database:
-CALM Managed Lands and Waters - CALM 01/07/05
-Bushforever } MFP 07/01
-System 6 Conservation Reserve DEP 06/95

(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 proposed clearing area is not associated with any known watercourses.

Groundwater salinity in the application site has been mapped for 500-1,000 mg/L Total Dissolved Solids (TDS).

The application site is within the Perth Coastal Underground Water Pollution Control Area, protected as a 'Priority 3' Public Drinking Water Source Area (PDWSA).

The Department of Water (DoW) advised that since the clearing area is zoned for public use - high school and there are no watercourses or wetlands associated with the proposed site, the DoW does not object to the clearing permit (DoW, 2007).

Given the above, the clearing of native vegetation in the application site is unlikely to cause deterioration in the quality of surface or underground water.

Methodology DoW, 2007
GIS Database:
-Groundwater Salinity Statewide DOW
-Public Drinking Water Source Areas (PDWSAs) - DOW

(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 proposed clearing area is characterised by a low relief elevation of 25m AHD [Australian Height Data] with siliceous sands as chief soils.

The mean annual rainfall in the area is 800mm.

Considering the vegetation condition of the proposed clearing area, the modified surroundings, and the highly permeable soil type (GHD, 2007), the clearing of native vegetation is unlikely to cause, or exacerbate, the incidence or intensity of flooding in the local area.

Methodology GIS Database:
-Topographic contours, Statewide DOLA 12/09/02
-Rainfall, Mean Annual - BOM 30/09/01

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

Comments

The application site is within the Perth Coastal Underground Water Pollution Control Area, protected as a 'Priority 3' Public Drinking Water Source Area (PDWSA).

The Department of Water advised the following: 'As the proposed site at Butler is in a P3 area at Butler, DOW would have no objection to the site clearing subject to the following: a. the site is zoned for a school site by the City of Wanneroo in their local planning scheme. b. the school amenities are connected to deep sewerage. c. the Water Corporation confirms that nearby shallow bore QW10 is not a public water supply production bore. If the bore is used for public water supplies, we would be seeking to negotiate a 300 metre buffer to any facilities on the school site that may pose a groundwater contamination risk.'

The Water Corporation confirmed the following: 'There is a proposed site for a future Water Corporation production bore to the bottom left of the blue hatched area (protected catchment) called Q160 or QN10. The bore referred to as QW10 is an existing production bore (aka Q170) located between Marmion Ave and Masthead Cl.'

In light of the information received from the Water Corporation, the Department of Water (DoW) gave the following advice: "The Department of Water (DoW) has assessed the application and notes the clearing area is zoned for public use - high school and is located within the Perth Coastal Underground Water Pollution Control Area. The DoW notes there are no watercourses or wetlands mapped on the lot and therefore given the zoning the DoW does not object to the clearing permit but notes the following for your consideration:
The clearing area is managed for Priority 3 (P3) source protection. P3 source protection areas are defined to manage the risk of pollution to the water source. P3 areas are declared over land where water supply sources need to co-exist with other land uses such as residential, commercial and light industrial developments. Protection of P3 areas is achieved through management guidelines for land use activities. An educational establishment is considered acceptable in a P3 areas under the Land Use Compatibility Table with the following conditions:
The Lot is to be connected to deep sewerage, except where exemptions apply under State Government Sewerage Policy.
The DoW also notes the clearing area is located adjacent to a Water Corporation water supply production bore and the DoW recommends:
A 300 metre buffer to any facilities on the school site that are likely to impact on water quality. These could include ovals and playing fields given the potential for fertiliser and pesticide use."

The area under application is not located within a Native Title Claim area. Therefore, the clearing as proposed should not fall under future act procedures under the Native Title Act 1993.

Methodology

4. Assessor's comments

Purpose	Method	Applied	Comment

		area (ha)/ trees	
Building or Structure	Mechanical Removal	9.5	The assessable criteria have been addressed and the proposal was found not likely to be at variance to the 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.

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

GHD (2007) Department of Housing and Works: Butler High School, Clearing Permit Application

Heddle, 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.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

SAC Bio Datasets Advice (180707) Department of Environment and Conservation , Kensington, 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.

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)