Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1911/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Pro Ten Investments

1.3. Property details

Property: LOT 701 ON DIAGRAM 100776 (Lot No. 701 HENDERSON SERPENTINE 6125)

Local Government Area: Shire Of Serpentine-Jarrahdale

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
	57	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
Heddle Vegetation Complex: Southern River Complex : open woodland of E. calophylla - E. marginata - Banksia species with fringing woodland of E. rudis - M. rhaphiophylla along creek beds. Beard Vegetation Association 999: Medium woodland; marri	The proposal is to clear 57 native trees for the purpose of constructing buildings and infrastructure for a poultry farm. The vegetation under application has been previously parkland cleared and comprises Melaleuca rhaphiophylla and Eucalyptus spp. over introduced grasses. Some of the Melaleuca trees are located on the fringe of a spoon drain. The Dampier to Bunbury Natural Gas Pipeline (DBNGP) crosses the northeast portion of Lot 701 Henderson Road, Hopeland. A Covenant on the DBNGP easement prohibits it from being cultivated, ploughed, drilled or from any disturbance to a depth of more than 300mm below the surface level of the soil within this easement. In addition, the Covenant prevents any structures or buildings being erected within the DBNGP corridor.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	Vegetation clearing description based on a site visit conducted by DEC officers on 25 July 2007.

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 comprises individual Melaleuca rhaphiophylla and Eucalyptus spp. with no understorey present, and therefore is considered to be in a completely degraded condition. Given the completely degraded condition and the low species diversity of the vegetation under application it is not considered likely to comprise a high level of biodiversity.

Methodology DEC Site visit - 25/07/07

(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 have been 5 reported occurrences of the Priority listed Fauna, Quenda (Isoodon obesulus fusciventer) (P5) within a10km radius of the applied area, but given the absence of understorey within the applied area, the vegetation under application is not considered likely to provide suitable habitat for ground-dwelling fauna such as the Quenda.

The Baudin's Black-Cockatoo (Calyptorhynchus baudinii) has also been recorded approximately 8km northeast of the applied area and are known to feed on the seeds and flowers of Banksia and Eucalyptus trees. Given that the vegetation under application predominantly comprises Melaleuca rhaphiophylla, with some Eucalyptus spp, it is not considered likely to comprise significant habitat for this species.

Given the completely degraded condition of the vegetation under application and the proposed clearing is limited to 57 trees, it is not considered likely to comprise significant habitat for indigenous fauna.

Methodology DEC Site visit - 25/07/07
GIS Databases:
SAC BIO Datasets - accessed 08/08/07

(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 populations of Declared Rare Flora (DRF) within a 5km radius of the area under application, however there is one species of the Priority listed flora (Stylidium longitubum) (P3) which is located approximately 3.5km southwest of the applied area. S. longitubum is a herb that is generally found in seasonal wetlands (Western Australian Herbarium 1996). The vegetation under application is completely degraded being previously parkland cleared and grazed. Given the lack of understorey, this species is not considered likely to be present.

Given the absence of DRF in the local area and the completely degraded condition of the vegetation, it is not considered likely that the vegetation under application includes, or is necessary for the continued existence of, rare flora.

Methodology DEC Site visit - 25/07/07
Western Australian Herbarium (1996)
GIS Databases:
SAC BIO Datasets - accessed 08/08/07

(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 is one known occurrence of a Threatened Ecological Community (TEC) within the local area (5km radius), which is located approximately 4km south of the area under application. This TEC has been identified as Floristic Community Type 15 (forests and woodlands of deep seasonal wetlands).

Given that the area under application is completely degraded, it is not considered likely that it comprises or is necessary for the maintenance of a TEC.

Methodology DEC Site visit - 25/07/07
GIS Databases:
SAC BIO Datasets - accessed 08/08/07

(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

Heddle et al. (1980) defines the vegetation under application as Southern River Complex, of which there is 19.8% of pre-European extent remaining and which is described as being of a 'vulnerable' status for biodiversity conservation
(Department of Natural Resources and Environment 2002, EPA 2006).

The vegetation under application is also described as Beard vegetation association 999 which has 13.1% of pre-European remaining (Shepherd 2006) and which is also considered to be of a 'vulnerable' status for biodiversity conservation (Department of Natural Resources and Environment 2002). In addition the vegetation under application is within the Shire of Serpentine Jarrahdale of which there is 58.6% of pre-European extent remaining, and which is considered to be of 'least concern' for biodiversity conservation (Department of Natural Resources and Environment 2002; Shepherd et al. 2001).

The vegetation under application comprises individual Melaleuca rhaphiophylla and Eucalyptus spp. which is in a completely degraded condition. It is therefore not considered likely that the vegetation under application is representative of the Heddle and Beard vegetation complexes and is not considered likely to be significant as a remnant in an area that has been extensively cleared.

	Pre-European area (ha)	Current extent (ha)		Conservation status***	Remaining %
			% in reserves/DEC- managed land		
Swan Coastal Plain	1,501,456	571,758	38.1%**	Depleted	
Shire of Serpentine Jarrahdale		90,478	53,038 58.6%*		Least Concern
Heddle vegetation complex					
Southern River Complex	57,979	11,501	19.8%***	Vulnerable	1.5%
Beard vegetation association 999	115,712	15,161	13.1%	Vulnerable	5.8%

* (Shepherd et al. 2001)
** (Shepherd 2006)
***(EPA, 2006)
***(Department of Natural Resources and Environment 2002)

Methodology

DEC Site visit - 25/07/07
Department of Natural Resources and Environment (2002)
EPA (2006)
Shepherd (2006)
GIS Databases:
Heddle Vegetation Complexes - DEP 21/06/95
Pre-European Vegetation - DA 01/01

(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 at variance to this Principle

The area under application is located within a multiple use wetland. In addition, there is a Conservation Category Wetland (CCW) located approximately 750m to the west of the applied area and the Dirk Brook Drain is located approximately 165m to the south.

A spoon drain crosses Lot 701 from the western boundary through to the south-eastern boundary. The vegetation under application is predominantly Melaleuca rhaphiophylla, a species which is associated with swamps and watercourses (Western Australian Herbarium 1998). A portion of the vegetation follows this spoon drain and has fringing riparian vegetation comprising M. rhaphiophylla which is directly associated with the drain.

Given the area under application is located within a multiple use wetland and along a spoon drain and comprises wetland dependent vegetation, the proposal in its current form is considered to be at variance to this Principle.

Methodology

DEC Site visit - 25/07/07
Western Australian Herbarium - 1998
GIS Databases:
EPP, Lakes - DEP 1/12/92
Geomorphic Wetlands (mgt Categories), Swan Coastal Plain - DEC
Hydrography, linear (hierarchy) - DOW

(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 soils within the area under application are part of the Bassendean B2 Phase, which are described as well drained deep bleached grey sands or pale sands. These soils are associated with a nil to low risk of salinity, and a moderate to low risk of acid sulphate soils (State of Western Australia 2005). Given that the clearing as proposed does not involve deep excavation of the soils, it is therefore not considered likely that it would have an impact on acid sulphate soils.

The main land degradation risk associated with the removal of vegetation on the identified soil type is considered to be a high risk of phosphorous export and wind erosion (State of Western Australia 2005), however, the selective removal of Melaleuca and Eucalyptus trees is not considered likely to impact the export of nutrients. Although the soils identified on site have a high risk of wind erosion, the vegetation under application is limited to 57 individual Melaleuca and Eucalyptus trees and is considered to be in a completely degraded condition.

In addition, the ground within the applied area is covered with non-native pasture grasses, which would minimise the risk of wind erosion. It is therefore not considered likely that the proposed clearing would result in appreciable land degradation.

Methodology

DEC Site visit - 25/07/07
State of Western Australia (2005)
GIS Databases:
Acid Sulphate Soil Risk Map, Swan Coastal Plain - DEC
Salinity Risk LM 25m - DOLA 00

(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

There are two areas reserved for conservation purposes within a 5km radius of the applied area, the closest being Bush Forever site 378 which is located approximately 2.2km west of the applied area.

The vegetation under application comprises individual Melaleuca rhaphiophylla and Eucalyptus trees and is in a completely degraded condition with limited connectivity to the surrounding vegetation. Therefore the vegetation under application has limited value as an ecological corridor to facilitate the movement of fauna to the nearby conservation reserves.

Given the distance to the nearest conservation reserve, and that the vegetation under application is in a completely degraded condition, it is not considered likely that the proposed clearing would have an impact on the environmental values of any nearby conservation reserves.

Methodology

DEC Site visit - 25/07/07
GIS Databases:
Bushforever - MFP 07/01
CALM Regional Parks - CALM 12/04/02

(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 multiple use wetland. The applied area is also located within a Priority 3 Public Drinking Source Area (PDWSA), a water source area identified as being at risk of pollution from catchment activities (Department of Environment 2004). In addition, the identified soils are associated with a nil to low risk of salinity, and a moderate to low risk of acid sulphate soils (State of Western Australia 2005). The vegetation under application is in a completely degraded condition and it is not considered likely that the proposed clearing of 57 individual Melaleuca and Eucalyptus trees would cause deterioration in the quality of underground water through salinity or acid sulphate soils.

The area under application is located within the Dirk Brook Catchment area. The nearest mapped watercourses are the Karnet Drain which is located approximately 600m northwest of the area under application and the Dirk Brook Drain which is situated approximately 165m south of the applied area. In addition, a spoon drain crosses Lot 701 from the western boundary through to the south-eastern boundary which has riparian vegetation growing directly adjacent to it.

Although the vegetation under application is in a completely degraded condition, it is considered that the removal of riparian vegetation directly adjacent to this drainage stream may cause a temporary deterioration in the quality of surface water through sedimentation. The proposed clearing therefore may be at variance to this Principle.

Methodology DEC Site visit - 25/07/07
Department of Environment (2004)
State of Western Australia (2005)
GIS Databases:
Acid Sulphate Soil Risk Map, Swan Coastal Plain - DEC
Groundwater Salinity, Statewide - DOW
Hydrography, linear (hierarchy) - 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 area under application is located within a multiple use wetland, at an elevation of 15-20 metres within a flat landscape. The soils identified on site are moderately well drained, pale grey deep sands (State of Western Australia 2005), which are associated with a low to moderate risk of water logging.

Given the free-draining nature of the sandy soil, the proposed clearing of 57 individual Melaleuca and Eucalyptus trees, is not considered likely to cause or exacerbate the incidence or intensity of flooding.

Methodology DEC Site visit - 25/07/07
State of Western Australia (2005)
Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC
Hydrography, linear (hierarchy) - DOW
Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The lot under application is part of a Native Title Claim however, since it is privately owned Native Title is extinguished under the Native Title Act. Therefore the clearing as proposed should not fall under the future acts process of the Native Title Act 1993.

The Dampier to Bunbury Natural Gas Pipeline (DBNGP) crosses the northeast portion of Lot 701, Henderson Road, Serpentine. A Covenant on the Title Deeds prohibits the DBNGP Easement from being cultivated, ploughed, drilled or to otherwise disturb the soil within this Easement to a depth of more than 300mm below the surface level of the Easement. In addition, the Covenant prevents any structures or buildings being erected within the Easement. TRIM ref: DOC 29539.

The Department of Water advise that on the 13th August 2008, the applicant was issued with a water licence. TRIM ref: DOC60328.

Alinta has advised that the northeast area under application falls within the 80 metre setback corridor for the Dampier to Bunbury Natural Gas Pipeline (DBNGP) and that the proposed poultry farm is not permitted to encroach into this 80 metre gas pipeline buffer zone. The Department of Environment and Conservation (DEC) has received correspondence from the Serpentine-Jarrahdale Shire that this issue has been resolved, but DEC is still waiting for confirmation and comment from Alinta on this issue.

The Serpentine-Jarrahdale Shire has advised that issues relating to the DBNGP have now been clarified and that the Council has now granted conditional approved of the proponent's Development Application. TRIM ref: DOC 33244.

The Department of Water (DOW) has advised that the applicant has applied for a licence to construct two bores and to take water for the purposes of a poultry farm. The DoW advise that water is available and the requested amount has been set aside until the assessment has been completed. The proponent is required to provide an operating strategy in order for the DoW to complete the assessment on their application for a water licence.

The local LCDC group recommend that no clearing permit be granted until issues relating to the DBNGP are resolved and that revegetation offsets are applied. The LCDC are able to recommend contractors to the proponent and to provide advise on seed collection and revegetation.

Although the clearing of native vegetation is not likely to impact on the export of phosphorous, depending on design and management, the proposed poultry farm has the potential of increasing the nutrient export risk. However, it is considered that the nutrient export risk will be addressed by the nutrient management requirements for Development Approval by the Shire of Serpentine-Jarrahdale.

Given that the proposal will traverse a spoon drain in the southern area under application, there is the potential to impact the hydrology of this stream. If drainage issues associated with the relocation of the drain are not adequately addressed, this may result in localised flooding.

Poultry farming has been identified as an intensive land use and is considered to be compatible with conditions within P3 areas (DOE 2004).

The Department of Watwer advise that on the 13th August 2008, the applicant was issued with a water licence (TRIM ref: DOC60328).

Methodology GIS Database:
Native Title Claims - DLI 7/11/05

4. Assessor's comments

Comment

The assessable criteria have been addressed and the proposed clearing is at variance to Principle f, and may be at variance to Principle i.

5. References

Department of Environment (2004) Environmental Code of Practice for Poultry Farms in Western Australia, Department of Environment, Western Australia.

Department of Environment (2004) Water Quality Protection Note: Land use compatibility in Public Drinking Water Source Areas, Department of Environment, Western Australia.

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 (2006) Guidance for the Assessment of Environmental Factors -level of assessment of proposals affecting natural areas within the System 6 region and Swan Coastal Plain portion of the System 1 Region. Report by the EPA under the Environmental Protection Act 1986. No 10 WA.

Government of Western Australia (1997) Wetlands Conservation Policy for Western Australia, Department of Conservation and Land Management and the Water and Rivers Commission, Perth WA.

Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth WA.

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.

Shepherd (2006) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

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 25 July 2007, Department of Environment and Conservation (DEC), Western Australia.TRIM ref DOC32197.

Western Australian Herbarium (1998). FloraBase - The Western Australian Flora. Department of Environment and Conservation. http://florabase.calm.wa.gov.au/ accessed 20/08/07

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)