Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 846/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Ashley Prout & Associates

1.3. Property details

Property: LOT 322 ON PLAN 175526 (Lot No. 322 ORLEANS BAY CONDINGUP 6450)

Local Government Area: Shire Of Esperance

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
215		Mechanical Removal	Grazing & Pasture

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 42 - Shrublands; mallee & acacia scrub on south coastal dunes. Beard Vegetation Association 516 - Shrublands; mallee scrub, black marlock. Beard Vegetation Association 6048 - Scrublands; banksia scrub-heath on sandplain in the Esperancee Plains Region (Hopkins et al, 2001, Shepherd et al. 2001)	The area in the southeast of the property (site 1) is entirely riparian species associated with the wetland, predominantly Melaleuca and rush and sedge species such as Baumea articulata with dense Agonis sp. stands on the western side of the site. The large area in the central west of the property (site 2) comprises ridges with Banksia speciosa woodland and low lying areas with wetlands and riparian vegetation dominated by Melaleuca sp., rushes and sedges (Baumea articulata) and Agonis obtusissima. Other Banksia species including B. occidentalis, B. nutans and B. repens were found near the southern Swampy area. The sand ridge to the east of this site is dominated by Agonis sp and Nyutsia floribunda. Large area in the north of the property (site 3) has a dried up wetland in the south, remnant vegetation evident. Sand ridges dominated by chittick (Lambertia inermis). Some Mallee, Banksia speciosa and Nuytsia floribunda.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	Site 1: Wetland Site 2: Three main swampy areas with linking corridors of riparian vegetation, between these low lying areas are sandy ridges. Site 3: Combination of riparian vegetation (dried up wetland) and sandy ridges with Banksia speciosa on some and the others dominated by Chittick. Some of the north western edge was burnt last year. Condition: Site 1: Excellent, slight pasture grass invasion at the edges Site 2: Pristine-Excellent, some pasture grass species invading 1-2m on edges. Site 3: Excellent

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

A DEC Site Inspection showed the area under application to have very high levels of biodiversity. The vegetation is of Excellent Condition (Keighery 1994). The proposed area is adjacent to Cape Le Grand National Park and has very similar vegetation structure and associations and so contains a similarly high level of biological diversity. Cape Le Grand National Park contains various Declared Rare and Priority Flora species, and due to the close proximity and similar vegetation, are likely to occur in the proposed area. The proposed clearing of 215 hectares is likely to have a significant impact on the biodiversity value of the property and surrounding areas.

Therefore the proposal is at variance to this Principle.

Methodology

Site visit (DEC TRIM ref AD250)
GIS Database:
-CALM Managed Lands and Waters - CALM 01/07/05

(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 at variance to this Principle

The vegetation under application exhibits diverse native vegetation species (DEC Site Visit) and is located adjacent to Cape Le Grand National Park. The area under application is likely to provide significant habitat for indigenous fauna due to the high biodiversity level of the vegetation. Also the area applied to be cleared appears to consist mainly of swamp areas which would provide suitable habitat for various frog species.

The vegetation extent remaining in the Intensive Land-use Zone of Shire of Esperance is 27.4%, which does not meet the 30% target, therefore the proposed clearing of 215 hectares for farming use will impact on fauna habitat by further reducing the vegetated areas of the Shire of Esperance.

This proposal is at variance to this Principle.

Methodology

Site visit (DEC TRIM ref AD250).

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

Comments

Proposal may be at variance to this Principle

The closest Declared Rare Flora is Anigozanthos bicolor subsp. minor, located 11km north.

The closest Priority Flora are Caladenia exstans, located 7.5km west and Leucopogon rotundifolius, located 6km south east.

These populations occur in the same vegetation type as the proposed clearing. Due to the high level of biodiversity in the area and the excellent condition of the vegetation, there is a high possibility that these populations may occur in the area. A secondary assessment would be required to address whether DRF and Priority Flora are found in the area under application.

Methodology

Site visit (DEC TRIM ref AD250)
GIS Database:
-Declared Rare and Priority Flora List - CALM 01/07/05

(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 (TECs) within the local area. The closest TEC is found 66km west of the proposed area. The proposed clearing is unlikely to impact this TEC, due to the distance between the TEC and the area proposed to be cleared.

Methodology

GIS Database:
-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 seriously at variance to this Principle

The National Objective and Targets for Biodiversity Conservation 2001-2005 (AGPS 2001) recognises that the retention of 30% or more of the pre-clearing extent of each ecological community is the target.

The Environmental Protection Authority's (EPA 2000) Position Statement No. 2 - Environmental Protection of Native Vegetation in Western Australia identifies a 30% threshold level for vegetation types, beyond which species extinction is believed to occur at an exponential rate. Any further clearing may have irreversible consequences for the conservation of biodiversity and is, therefore, not supported. The Shire of Esperance retains only 27.4% of the Pre-European vegetation extent, classing it as vulnerable.

The proposal is also located within the Agricultural Zone as defined within the EPA Position Statement No.2, where there is a presumption against any further clearing of native vegetation for agricultural purposes.

	Pre-European	Current area (ha)	Remaining extent (ha)	Conservation status**	% in reserves %*
IBRA Bioregion -					
- Esperance	2,520,106	1,144,872	45.4	Depleted	
Shire of Esperance	4,256,774	1,609,610	27.4	Vulnerable	
Beard Veg Type 6048***	135,614	20,728	15.3	Vulnerable	5.8
Beard Veg Type 516	1,514,361	666,416	43.2	Depleted	35.9
Beard Veg Type 42	370,327	357,275	96.5	Least Concern	46.8

* (Shepherd et al. 2001).
** (Department of Natural Resources and Environment 2002)
*** The target of 15% representation in conservation reserves (Janis, 1997) has not been met for this vegetation association.

Given the above information, the proposal of clearing 215 for the purpose of farming is seriously at variance to this Principle.

Methodology

Department of Natural Resources and Environment (2002)
Hopkins et al. (2001)
Shepherd et al. (2001)
AGPS (2001)
GIS Databases:
- Pre-Eurpoean Vegetation - DA 01/01.
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00.
- EPA Position Paper No.2 Agriculture Region - DEP 12/00

(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

A DEC Site Inspection showed various areas to be associated with wetlands. Wetland means 'an area of seasonally, intermittently or permanently waterlogged or inundated land, whether natural or otherwise, and includes a lake, swamp, marsh, spring, dampland, tidal flat or estuary (EP Act).

The whole of Site 1 and a large proportion of Site 2 and Site 3 show many wetland attributes, including significant well established riparian vegetation. GIS Mapping shows the area to be classed as swamp. The EPA's Position Statement No.4 - Environmental Protection of Wetlands, aims to protect the environmental values and functions of wetlands in Western Australia.

Given the above information, the proposal is at variance to this Principle.

Methodology

Environmental Protection Act 1986 (EP Act)
Site Visit (DEC TRIM ref AD250)
GIS Databases:
- Lakes - 250K GA
- Rivers - 250K GA

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments

Proposal is seriously at variance to this Principle

The following advice was received from the Department of Agriculture WA (DAWA) now the Department of Agriculture and Food WA (DAFWA):

- The clearing is likely to have a nil to partial risk of salinity with poorly drained flats having a partial risk of salinity from a seasonally perched aquifer. The removal of native vegetation is likely to increase recharge to the deeper watertable, causing groundwater to rise at a similar rate to a bore north 5.8km (0.05 m/yr) (DAWA, 2005).

- The area under application has a moderate to extreme risk of wind erosion . The majority of the site has a high risk of wind erosion that can be managed, however areas of extreme risk such as crests of dunes should be considered to remain native vegetation due to the risk of wind erosion. The area under application has a high risk of water erosion on 61% of the property due to slopes of greater than 3%. (DAWA, 2005)

- Areas adjacent to dunes or with poorly drained flats (under 30% of the area) have a moderate risk of waterlogging. Some of the winter wet depressions scattered throughout the area may have a higher waterlogging hazard (DAWA, 2005)

In summary the Commissioner for Soil and Land Conservation has concerns for wind and water erosion on the crests and slopes of dunes, and waterlogging on the flats. Additionally, within the DAWA report it was suggested that the proponent should develop a management pan outlining how wind and water erosion as well as the risk of waterlogging will be managed during clearing and establishing pasture on the remainder of the area.

The proponent subsequently submitted a proposed clearing land capability report for site 3 which concluded that although the land in question is sandy, the existing vegetation and landforms are such that wind erosion should not be a major risk. Blugum plantations surrounding the area should further reduce this risk. Normal farm management skills should allow this area to be developed safely and farmed with minimal risk of land degradation (TRIM ref AI954).

Comments received from DAWA in response to this report outlined that irrespective of protection offered by blugums there is a need to maintain 50% ground cover (TRIM ref AI955).

Given the above information, the proposal is seriously at variance to this Principle.

Methodology

Department of Agriculture WA (DAWA) 2005 TRIM ref IN24962)
Proposed Clearing Land Capability Report (TRIM ref AI954)
Comments from DAWA Esperance (TRIM ref AI955)

(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 seriously at variance to this Principle

The property is adjacent to the Cape Le Grand National Park.

A portion of the vegetation under application provides a buffer for the National Park.

The maps associated with the South Coast Macro Corridor Project (draft) suggests that the property under application is a Strategic Zone A, and contains areas of woody vegetation where polygons that are smaller than 30 hectares in size are spaced less than 1km apart would potentially form the most strategic link between major protected areas. This Potential Corridor is drawn through the centre of the property.

Given the above, the proposal is seriously at variance to this Principle.

Methodology

CALM South Coast Region (2002) The South Coast Macro Corridor Project
GIS Database:
-CALM Managed Land and Waters - CALM 01/07/05

(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 is at variance to this Principle

Advice from DAWA (2005) indicates that the removal of the native vegetation as proposed may contribute to nutrient enrichment of surface and/or underground water due to the nature of the soil type. In addition, the poorly drained low lying areas would have a risk of salinity from seasonal perched aquifers.

Therefore the proposal is at variance to this Principle.

Methodology Department of Agriculture WA (DAWA) 2005.

(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 has no to very low risk of flooding. The property records between 575mm and 625mm mean annual rainfall isohyet, and drainage from the property is internal to flats and depressions and external via sheet flow (only occurs during high intensity rainfall events) and creeks to Orleans Bay (DAWA, 2005).

Therefore the proposal is not likely to be at variance to this Principle.

Methodology

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

Comments

The proposal is not at variance with any planning instruments and no further licences or approvals are required.

A subdivision application has been lodged for part of the property but does not cover the area under application.

There is a Native Title Claim over the area under application. The Department of Environment and Conservation's advertising of the application in the West Australian newspaper constitutes legal notification of the native title representative body for the purpose of the future act procedures under the Native Title Act 1993. No response was received from the representative body.

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Grazing & Pasture	Mechanical Removal	215	Refuse	The Principles have been assessed and the clearing as proposed - May be at variance to Principles (c) (f) (h) (i) Is at variance to Principles (a) (b) Is seriously at variance to Principles (e) (g) (a) The removal of large areas of vegetation in excellent condition is likely to have significant adverse impacts on the biodiversity of the region. (b) The removal of large areas of vegetation will significantly reduce the dispersal capacity of fauna in local nature reserves. (c) It is likely that there may be Declared Rare and Priority Flora occurring within the area under application. (e) The Shire of Esperance records less than 30% native vegetation remaining and will be affected by this clearing. The proposal is located within the Agricultural Zone, of which the EPA Position Statement No.2 is against any further clearing for agricultural purposes. (f) More than 50% of the proposed vegetation is located within swamp wetland and has substantial riparian vegetation. (g) The proposed clearing has the potential to cause appreciable land degradation, in the form of wind and water erosion. (h) The vegetation under application provides a valuable role as a buffer for an adjacent conservation reserve, and provides an ecological 'stepping stone' for DEC managed nature reserves. (i) The proposed clearing has the potential to increase salinity risk and may contribute to nutrient enrichment of surface and/or groundwater.

Therefore, the assessing officer recommends that the permit be refused.

5. References

AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.

DAFWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. DoE TRIM ref XXXXX.

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.

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.

6. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAWA	Department of Agriculture
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)