Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2115/1

Permit type: Purpose Permit

1.2. Proponent details

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

1.3. Property details

Property: LOT 301 ON PLAN 42295 (ULARRING 6436)

Local Government Area: Shire Of Menzies

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.5		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: 251 - Low woodland; mulga & Allocasuarina cristata	The proposed clearing is for up to 1.5ha within Crown Reserve 49153, located within the Shire of Menzies, for the construction of infrastructure to cater for visitors at the Inside Australia exhibition site at Lake Ballard. The current land use for the Reserve is Landscape Protection. Vegetation within the area under application is in good condition with a sparse understorey consisting of Atriplex spp., Maireana spp., Ptilotus spp., Scaevola spp. and Solanum spp. and the occasional Acacia spp. and Hakea kippistiana in the over storey. There is evidence of previous disturbance to the site in the form of existing tracks and previous cattle grazing. A vegetation survey identified four vegetation types within the area under application, being Mulga Sand dune, Chenopod shrubland, Acacia shrubland and Mulga creek line vegetation. The majority of the area under application (~1.2ha) is described as Mulga sand dune vegetation with an over storey dominated by	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Vegetation description and condition is based on a vegetation survey of the area under application conducted by Botanica Consulting in July 2007.

Acacia aneura and sparse understorey of Atriplex spp. and Maireana spp..

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 area under application is in the Murchison IBRA Region which has a current pre-European extent of 100% (Shepherd 2006). The proposed clearing is for 1.5ha within Crown Reserve 49153 which has a current land use of landscape protection.

The majority of vegetation (1.5ha) within the area under application is best described as Mulga sand dune vegetation consisting of sparse over storey of Acacia aneura and understorey of Atriplex spp. and Maireana spp. in good condition. Previous disturbances to the area include the past clearing of existing access tracks and cattle grazing (Botanica Consulting, 2007).

It is considered that the low density in the shrub layer and previous disturbance may limit the habitat potential for ground dwelling fauna in the local area.

Given the remaining extent of vegetation in the local area, previous disturbance to the site and the lack of significant habitat for ground dwelling fauna, the proposed clearing is not considered to comprise a high level of biodiversity in the local area.

Methodology

References:
- Botanica Consulting (2007)
- Shepherd (2006)

GIS Databases:
- Ballard 140cm Orthomosaic - Landgate03
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00

(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 proposed clearing is limited to 1.5ha in an area that has 100% of pre-European vegetation remaining (Shepherd, 2006). Vegetation under application is in good condition. The majority of the area under application (~1.2ha) is described as Mulga sand dune vegetation consisting of sparse over storey of Acacia aneura and understorey of Atriplex spp. and Maireana spp.. It is considered that the low density in the understorey and previous disturbance may limit the habitat potential for ground dwelling fauna in the local area

There area 3 known records of 2 Priority fauna species within the local area (50km radius). One record of the Hooded Plover (P4) ~23km east and 2 records of the Woma Python (P1) ~49km south east of the applied area. The Hooded Plover has been recorded on Lake Ballard, a nationally significant Lake ~50m from the area under application (Directory of Important Wetlands, 2007).

In addition, Lake Ballard is recognised as one of the most important breeding sites in Australia for the endemic Banded Stilt. Breeding occurs on small low islets when the depth across the lake reaches 0.3m. The lake is also utilised by a number of indigenous bird species within the local area. At least twelve other bird species have been recorded on the lake. (Directory of Important Wetlands, 2007)

While it is possible that these and other fauna species may utilise the habitat within the area under application, the majority of fauna identified in the area generally inhabit the aquatic environment directly associated with the Lake. Given the proposed clearing is a relatively small area (1.5ha) of low density vegetation on a sandy rise ~30m south of the Lake, surrounded by large areas of remnant vegetation, it is considered unlikely that vegetation applied to be cleared comprises significant habitat for indigenous fauna.

Methodology

References:
- Directory of Important Wetlands (2007)
- Shepherd (2006)

GIS Databases:
- SAC Bio datasets (06/11/2007)

(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

There are no known records of Declared Rare Flora (DRF) and 17 records of 12 Priority Flora species within the local area (~50km radius), the closest being Grevillea subterlineata (P3) ~ 9km east. Of these species it is considered that Newcastelia insignis (P2) may occur within the area under application as it occurs in the same vegetation association and soil type. The closest known population is ~29km south west of the applied area.

A flora survey carried out by Botanica Consulting (2007) did not identify any DRF or Priority Flora within the area under application.

Given the appropriately timed flora survey did not identify DRF in the area under application the proposed clearing is not considered likely to be at variance to this principle.

Methodology

References:
- Botanica Consulting (2007)

GIS Databases:
- Pre-European Vegetation - DA 01/01
- SAC Biod atasets (06/11/2007)
- Soils, Statewide - DA 11/99

(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 Threatened Ecological Communities (TEC) or Priority Ecological Communities (PEC) in the area under application. The closest community of conservation significance is a PEC >100km south west of the applied area known as 'Die Hardy Range 4 - thickets on the lower slopes of the Die Hardy Range'. Vegetation and soil mapping associated with the PEC differ to those associated with area under application.

Given the distance to the nearest TEC or PEC (>100km) and the different soil types and vegetation associations, it is considered that the vegetation under application is not associated with any TEC's or PEC's. Therefore, the proposed clearing is considered unlikely to be at variance to this Principle.

Methodology

GIS Databases:
- Pre-European Vegetation - DA 01/01
- SAC Biod atasets (06/11/2007)
- Soils, Statewide - DA 11/99

(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 area under application is part of the Murchison IBRA Region with a current pre-European representation of 100% (Shepherd 2006). The applied area is part of Beard Vegetation Association 251 which also has a current representation level of 100% (Shepherd 2006).

The State Government is committed to the National Objectives Targets for Biodiversity Conservation which includes a target that prevents clearance of ecological communities with an extent below 30% of that present pre-1750 (Commonwealth of Australia, 2001).

Given the current representation levels of the IBRA Region and vegetation association the proposed clearing of 1.5ha is not likely to be significant as a remnant of native vegetation in the local area.

	Pre-European (ha)	Current extent (ha)	Remaining (%)	Conservation** status	% In reserves DEC Managed Land
IBRA Bioregions*					
Murchison	28,120,557	28,120,557	100	Least Concern	6.7
LGA					
Shire of Menzies	-	-	-	-	-
Beard Vegetation Type*					
251	173,096	173,096	100	Least Concern	69.5

* (Shepherd. 2006)

** (Department of Natural Resources and Environment 2002)

Methodology References:
- Commonwealth of Australia (2001)
- Department of Natural Resources and Environment (2002)
- Shepherd (2006)

GIS Databases:
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- 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 may be at variance to this Principle

The area under application intersects a minor non-perennial watercourse. Minor non perennial watercourses are utilised as drainage during high rainfall events. Given the area under application has a low annual rainfall of 300mm, this drainage line is dry for extended periods of time and not considered likely to support riparian vegetation. In addition, flora dentified to be growing in the drainage line were also found in the surrounding area and therefore not considered to be wetland dependant species (Botanica Consulting, 2007).

The closest wetland is Lake Ballard, an ANCA wetland ~30m from the area under application. ANCA wetlands are identified as wetlands of national conservation significance. Lake Ballard is significant as a good example of an intermittent saline lake of the Bioregion and a breeding site for many bird species in the local area (Directory of Important Wetlands, 2007). A minimum 50m buffer is recommended to prevent deleterious impacts to the wetland (WRC, 2001).

The majority of the area under application (~1.2ha) is described as Mulga sand dune vegetation consisting of sparse over storey of Acacia aneura and understorey of Atriplex spp. and Maireana spp. (Botanica Consulting, 2007). These understorey species are known to occur on the fringe and perimeter of Lake Ballard (Directory of Important Wetlands, 2007).

Given the area under application is within the recommended 50m buffer of Lake Ballard and that the shrub layer under application could be considered to be associated with fringing vegetation of the Lake, the vegetation under application could be considered to be associated with a wetland environment and therefore may be at variance to this principle.

Methodology References:
- Botanica Consulting (2007)
- Directory of Important Wetlands (2007)
- WRC (2001)

GIS Databases:
- ANCA, Wetlands - CALM 08/01
- Clearing Regulations - Environmentally Sensitive Areas - DOE 30/5/05
- Hydrography, linear - DOE 1/2/04
- 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

Common soil types associated with the area under application are gypseous, saline loams and sandy red earths (Northcote et al. 1968). These soils generally have a high risk of wind erosion. Water erosion is considered to be a low risk given the relatively flat nature of the landscape, high infiltration rates and low annual rainfall (300mm) associated with the area under application.

Salinity risk mapping is not available for the area under application, however; Lake Ballard is known as a saline environment and groundwater salinity associated with the area under application is 3,000 - 35,000mg/L and is considered brackish to extremely saline. The limited extent of the proposed clearing is not considered likely to increase salinity in the local area causing appreciable land degradation.

The majority vegetation under application is Mulga sand dune vegetation consisting of sparse over storey of Acacia aneura and sparse understorey of Atriplex spp. and Maireana spp.. Given the low density of vegetation to be cleared it is not considered likely that the clearing as proposed would cause appreciable land degradation.

Methodology References:
- Northcote et al. (1968)

GIS Databases:
- Groundwater Slainity, Statewide ý 22/02/00
- Rainfall, Mean Annual ý BOM 30/09/01
- Salinity Risk LM 25m - DOLA 00
- 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 may be at variance to this Principle

There are no CALM managed conservation areas within the local area. The closest CALM managed land is former lease hold land (>100,000ha) proposed for conservation ~60km south east of the applied area. Given the distances to the closest conservation area it is considered that the clearing as proposed is unlikely to impact the environmental values of the conservation areas.

Lake Ballard, an ANCA wetland is ~30m from the area under application. ANCA wetlands are identified as wetlands of conservation significance. Lake Ballard is significant as a good example of an intermittent saline lake of the Bioregion and a breeding site for many bird species in the local area (Directory of Important Wetlands, 2007). A minimum 50m buffer is recommended to prevent deleterious impacts to the wetland (WRC, 2001). The northern portion of the vegetation under application occurs within the recommended 50m buffer of Lake.

Given the area under application is within the recommended 50m buffer, the proposed clearing may indirectly impact the foreshore of the lake through weed invasion. To mitigate the loss of any environmental values of Lake Ballard, a condition will be placed on the permit to manage the spread of weeds.

Methodology

References:
- WRC (2001)

GIS Databases:
- ANCA, Wetlands - CALM 08/01
- Ballard 140cm Orthomosaic - Landgate03
- CALM Managed Lands and Waters - CALM 1/07/05

(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 not likely to be at variance to this Principle

The area under application intersects a minor non-perennial watercourse. Minor non perennial watercourses are utilised as drainage during high rainfall events. Given the area under application has a low annual rainfall of 300mm, this drainage line is dry for extended periods of time, therefore the proposed clearing is not considered likely to impact the water quality of the drainage line.

Lake Ballard is an intermittent saline lake ~30m north or the area under application. (Directory of Important Wetlands, 2007). Salinity risk mapping is not available for the area under application, however; given the saline environment of Lake Ballard and the low density of vegetation to be cleared, it is not considered likely that the clearing as proposed would cause an increase in the salinity of the Lake.

Groundwater salinity in the local area is between 3,000 - 35,000mg/L and is considered brackish to extremely saline. The proposed clearing of 1.5ha of low density vegetation is unlikely to impact the recharge and water quality of the regional groundwater.

Methodology

References:
- Directory of Imporant Wetlands (2007)

GIS Databases:
- ANCA, Wetlands - CALM 08/01
- Groundwater Slainity, Statewide ý 22/02/00
- Hydrography, linear - DOE 1/2/04
- Hydrography, linear (hierarchy) - DOW
- Salinity Risk LM 25m - DOLA 00

(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 within a low rainfall area with an average annual rainfall of 300mm. The closest watercourse is a minor non perennial watercourse which is intersected by the southern portion of the area under application. Minor non-perennial watercourses are considered to be utilised as surface water drainage

during heavy rainfall events. This minor watercourse drains into Lake Ballard, a large intermittent saline lake, ~50m from the applied area.

Given the low density of vegetation within the area under application and the low annual rainfall associated with the area, it is not considered likely that the proposed clearing will cause or exacerbate the incidence of flooding.

Methodology GIS Databases:
- ANCA, Wetlands - CALM 08/01
- Hydrography, linear - DOE 1/2/04
- Rainfall, Mean Annual ý BOM 30/09/01

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

Comments

The clearing will take place on Lot 301 on Plan 42295 (Crown Reserve 49153). A management order has placed care, control and management of the reserve with The Lake Ballard Association (Inc). The Lake Ballard Association have authorised the Shire of Menzies to undertake the development and maintenance of the Inside Australia site within Crown Reserve 49153 (Lake Ballard Association (Inc), 2007).

The Shire has advised the proposed clearing will be kept to a minimum. The Shire intends to retain as many large trees as possible for shade and the vegetation in the proposed camping and parking area will be removed by hand (Shire of Menzies, 2007).

The DEC Goldfields Regional Manager has advised that DEC and the Shire of Menzies have consulted over the redevelopment of the Inside Australia exhibition site. A new reserve, management board and advisory committee have been set up and DEC is on the advisory committee (DEC, 2007).

The Shire of Menzies have agreed for DEC to project manage the development of the Inside Australia Site. DEC advises that that they have no objections to the clearing and that it will be well managed and is essential (DEC, 2007).

There are no Aboriginal Sites of Significance or Native Title Claims associated with the area under application.

There is no other RIWI Act Licence, Works Approval, or EP Act Licence at variance to this principle.

Methodology References:
- DEC (2007)
- Lake Ballard Association (Inc) (2007)
- Shire of Menzies (2007)

GIS Databases:
- Aboriginal Sites of Significance - DIA
- Native Title Claims - DLI

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Building or Structure	Mechanical Removal	1.5	The assessable criteria have been addressed and the clearing as proposed may be at variance to Principle (f) and (h).

5. References

Botanica Consulting (2007) Flora and Vegetation Survey of an Area at Lake Ballard. Prepared for the Shire of Menzies.

Commonwealth of Australia (2001). National Targets and Objectives for Biodiversity Conservation 2001-2005, AGPS, Canberra.

DEC (2007). Advice received from Goldfields Regional Manager. Department of Environment and Conservation (DEC). (TRIM Ref: DOC40067).

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.

Directory of Important Wetlands (2007). Department of Environmental. Commonwealth Government. Sited 06/11/07 at www.environment.gov.au/wetlands

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

Lake Ballard Association (2007). Letter authorising the Shire of Menzies to carry out site works and maintenance on Crown Reserve 49153. (TRIM Ref: DOC40812).

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-

68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
Shepherd, D.P. (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.
Shire of Menzies (2007). Advice received from the Shire about the nature of the proposed clearing. (TRIM Ref: DOC39458).
WRC (2001) Water and Rivers Commission Position Statement: Wetlands. Water and Rivers Commission, Perth.

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)