Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1701/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: B & J Catalano Pty Ltd

1.3. Property details

Property: LOT 914 ON PLAN 211080 (CHAPMAN HILL 6280)
LOT 2991 ON PLAN 203100 (CHAPMAN HILL 6280)

Local Government Area: Shire Of Busselton

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
24.1		Mechanical Removal	Extractive Industry

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 3: Medium forest; jarrah-marri (Hopkins et al. 2001; Shepherd et al. 2001).	The proposal includes clearing of 24.1ha for the purpose of gravel extraction.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	Observed during site visit: over 50% of the vegetation under application is completely degraded due to heavy historical logging, previous agricultural activities and stock impacts over many years. There is an abundance of dead vegetation, both standing and fallen, scattered throughout the area.
Mattiske Vegetation Complex Treeton (T): Woodland of Eucalyptus marginata subsp. marginata-Corymbia calophylla with some Allocasuarina fraseriana on mild slopes in the perhumid zone (Mattiske Consulting 1998).	The vegetation under application is a very open jarrah-marri woodland dominated by E. marginata with interspersed Xanthorrhoea preissii and Corymbia calophylla. The understorey is sparse, with a mixture of smaller shrubs and pasture grasses (DEC Site Visit 2007).	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	There are pockets within the middle eastern portion of the site is generally in better condition with less disturbance.

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 proposed clearing of 24.1ha varies between completely degraded (west end and southern end of proposed clearing) and good condition (small pockets within the middle eastern part of the clearing). The vegetation under application consists of a native woodland consisting of limited species in the mid storey and under storey with the over storey consisting of predominantly Eucalyptus marginata (jarrah) with Corymbia calophylla (marri).

The vegetation structure of the area proposed to be cleared is severely disturbed due to stock grazing over many years and historical logging activities.

The vegetation is comprised of Beard vegetation association 3 (Hopkins et al. 2001) of which there is over 70% (Shepherd et al. 2001) of the pre-European extent remaining.

Regional Biodiversity advice (DEC 2007) stated that it is unlikely that the area comprises a higher level of biological diversity that would buffer the high nature conservation values that are in close proximity to the area. However dieback hygiene and weed control conditions will be imposed on the permit to mitigate any potential risk of dieback and weed introduction into these areas.

Therefore, it is unlikely this proposal is at variance with this Principle.

Methodology

Regional Biodiversity advice, DEC (2007);
DEC Site Visit Report (2007);
Hopkins et al. (2001);
Shepherd et al. (2001);
GIS Databases:
- Busselton 50cm ORTHOMOSAIC - DLI03

(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 vegetation under application provides a wildlife corridor for fauna in the local area between areas of state forest 32 to the west, south and south-east of the property.

Within the local area (10km radius of the proposed clearing) there are three records of Threatened fauna. The fauna includes Galaxiella munda (Western Mud Minnow, Threatened), Leipoa ocellata (Malleefowl, Threatened) and the Nannatherina balstoni (Balston's Pygmy Perch), the malleefowl is a historical record and there have been no current records of the species within a 10km radius. Due to this it is unlikely species exits within the area under application.

The Vasse River is 440m east of the area under application. Current records of two of the Threatened fauna (Western Mud Minnow and Balston's Pygmy Perch) are fish and were recorded 4km south in Margaret River, however, the clearing will have no impact on the fauna species since the two rivers are separate. One record of the Western Mud Minnow was recorded within the Vasse River tributary; however this is a historical record and is unlikely to occur within the area.

Therefore the area under application is unlikely to be at variance to this Principle.

Methodology

DEWHA (2006)
GIS Database:
- Threatened Fauna, SAC Bio Dataset (22/04/08)
- CALM Managed Lands and Waters
- Bussleton 50cm ORTHOMOSAIC - DLI04

(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 many occurrences of rare flora within a 10km radius of the proposed clearing. These rare flora are within the same soil and vegetation type (Treeton) as the area under application.

Regional DEC Biodiversity advice outlines the area comprises the same soil and vegetation complex (Mattiske and Havel) Treeton (T) as a known (threatened ecological communities) (SCP 10b TEC is critically endangered).

Associated with this TEC are declared rare flora; however further regional advice confirms the area under application is degraded containing 'no assets of value', and the area under application is well clear of any threatened flora values.

Therefore, it is unlikely the proposal is at variance to this Principle.

Methodology

Regional Biodiversity Advice (2007);
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

Known occurrences of the SCP 10b TEC - Shrublands on southern Swan Coastal Plain Ironstones within 1km of the area under application.

The area under application is comprised of the same vegetation complex (Mattiske and Havel) Treeton (T) as the known TEC (SCP 10b TEC is critically endangered, and has many declared rare and priority flora species associations).

Further regional advice confirms Lot 2991 having ironstone associations but not within the area under application (the owner has fenced off the area).

Associated with this TEC are rare flora; however further regional advice confirms the area under application is degraded containing 'no assets of value', and the area under application is well clear of any threatened flora values.

Therefore, it is unlikely the proposal is at variance to this Principle.

Methodology Regional Biodiversity Advice (2007);
GIS databases:
- Threatened Ecological Communities - CALM 15/7/03
- Threatened Plant Communities - DEP 06/95

(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 may be at variance to this Principle

The vegetation proposed to be cleared is a component of Beard Vegetation Association 3 (Hopkins et al. 2001) of which there is 72.1% (Shepherd et al. 2001) of the pre-European extent remaining. The vegetation under application is also within the Busselton Shire of which there is 44.5% of pre-European extent remaining.

The vegetation at the site is a component of Mattiske Vegetation Complex Treeton (T) (Havel 2002) of which there is 29.0% of the pre-European extent remaining. The vegetation is below the recommended threshold to clear land (30%) (Commonwealth Australia 2001), however the vegetation is degraded and is not a representative of this vegetation type.

The proponent has agreed to retain the vegetation within the eastern portion of the property in order to preserve an existing vegetation link between the property and the state forest. In addition, the total area cleared will be revegetated once extraction is completed as conditions of the clearing permit to mitigate any potential impacts which the clearing has on the linkage.

Therefore, it is unlikely this proposal is at variance to this Principle.

Methodology Commonwealth Australia (2001)
Havel (2002);
Hopkins et al. (2001);
Shepherd et al. (2001);
GIS databases:
- Mattiske Vegetation - CALM 24/3/98
- Interim Biogeographic Regionalisation of Australia - EM 18/10/00
- Local Government Authorities - DLI 8/07/04
- 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 not at variance to this Principle

There are no watercourses or wetlands within the area under application.

The Vasse River is located approximately 440m east from the area under application. The river is considered to be a fourth order stream and therefore requires a 50 to 75m buffer, however, the area under application is not within the buffer zone (WRC, 1996). Although the buffer is not completely vegetated there is approximately 200m of vegetation within the buffer. The site is not considered to be in association with the major water course and therefore clearing will have no impact on the tributary banks, habitat for aquatic fauna or water quality.

The proposal is therefore is not at variance to this principle.

Methodology WRC, 1996
GIS databases:
- Hydrography Linear 3
- Rivers
- Busselton 50cm ORTHOMOSAIC - DLI03

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

Comments

Proposal may be at variance to this Principle

The soils of the area under application are described as hard acidic yellow mottled soils containing small to very large amounts of ironstone gravels. (Northcote et al. 1960-68).

The topography of the site is between 80m to 110m AHD (Australian Height Datum), creating medium relief.

The groundwater salinity is <500 mg/L (low). According to DAFWA advice no salinity is occurring on the property and no offsite salinity was observed. The hydrogeology consists of sedimentary rocks with extensive and deep aquifers. The mean annual rainfall is 1000mm per anum and the evapotranspiration rate is 800 mm. The proposed site is made up of gentle undulating hills to flat terrain. As the land consists of gentle undulating hills and the soil type present on site, water erosion possibilities are very low (DAFWA 2008). DAFWA advice states there is a risk of water logging which may occur off-site, due to the clearing.

Given the risk of water logging that may occur off site due to clearing, the proposed clearing may cause appreciable land degradation and therefore may be at variance to this principle.

Methodology

DAFWA 2008
Northcote et al. (1960-68)
GIS Database:
- Evapotranpiration Areal Actual
- Hydrogeology, Statewide
- Groundwater Salinity, Statewide
- Rainfall Mean Annual
- Topographic Contours, Statewide

(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

The Donnybrook sunklands areas and rapids management priority area (Register of National Estate) are located approximately 6km south of the area under application.

The Blackwood (Treeton) State Forest abuts the western boundary of the area under application, and surrounds the area to the south and south-east. The area under application functions as a buffer to the state forest, reducing impacts such as dieback. The clearing may impact the Blackwood state forest as the process of clearing may spread diseases such as pathogens (e.g Phytophthora cinnamomi) and spread weeds. It also provides a linkage to fauna habitat.

Revegetation, dieback and weed prevention conditions will be placed on the permit to mitigate the spread of weeds and dieback on site. Therefore this proposal may be at variance to this principle.

Methodology

GIS databases:
- CALM Managed Lands and Waters - CALM 1/06/04
- Busselton 50cm Orthomosaic - DLI 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 proposed to be cleared is within the southern part of the upstream Vasse-Sabina hydrographic catchment area and not within a Public Drinking Water Source Area. The site is 440m east of the Vasse River. The river is considered to be a fourth order stream and therefore requires a 50 to 75m buffer. The area under application is not within the buffer zone (WRC, 1996). Therefore will not significantly reduce water quality.

The area proposed to be cleared is within the Busselton-Capel RIWI Ground Water Area. The quality of this groundwater resource is not likely to deteriorate as a result of the proposed clearing due to it's size.

Methodology

WRC, 1996
GIS databases:
- Hydrographic Catchments, Catchments - DoE 3/4/03
- Public Drinking Water Source Areas (PDWSAs) - DOE 29/11/04
- RIWI Act Groundwater Areas WRC 13/06/00

(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

Flooding impacts are unlikely to occur as a result of the proposed clearing due to its size and location. Lot 914 is located approximately 440m west of the Vasse River, a major river, at an elevation of 110m. It is considered that the removal of vegetation from this site will increase runoff, not likely to increase flooding.
Therefore, this proposal is not likely at variance with this Principle.

Methodology

GIS databases:
- Topographic Contours, Statewide - DOLA 12/09/02
- Hydrographical Linear 3

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

Comments

The area under application is zoned General Farming in the Shire of Busselton Town Planning Scheme.

The Shire of Busselton advice they do not agree with total removal of vegetation under application, however depending on the condition and presence of significant flora, may not object to clearing the western portion if the eastern portion is placed under a conservation covenant and several areas rehabilitated to re-instate existing linkages within the nearby state forest.

In negotiations with the applicant, several areas have been omitted from the original application; with the applicant agreeing to fence and retain a majority of the eastern portion of the site and revegetating all cleared areas after extraction activities, thereby re-instating the vegetation link to the state forest. The revegetation will be a condition on the permit. TRIM Ref: DOC18586.

The Shire of Busselton advices, they have received an application for an Extractive Industries Licence for the property. The application has been approved, Refer to TRIM Ref DOC54720.

Methodology

Shire of Busselton submission (2007);
GIS Database:
- Town Planning Scheme Zones - MFP 08-98

4. Assessor's comments

Comment

The proposal is may be at variance to principles (e), (g) and (h).
Principle (f) is not at variance.
The remaining principles are unlikely to be at variance.

5. References

Commonwealth of Australia (2001) National Targets and Objectives for Biodiversity Conservation 2001-2005, AGPS, 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 DOC21623.

DEC Site Visit Report (2007). Department of Environment and Conservation, Western Australia. TRIM Ref: DOC16702

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.

Department of the Environment, Water, Heritage and the Arts (DEWHA), (2006), Species Profile and Threats Database, Leipoa ocellata - Malleefowl.

Havel, J.J. and Mattiske Consulting Pty Ltd (2002) Review of management options for poorly represented vegetation complexes, Conservation Commission.

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.

Mattiske Consulting (1998) Mapping of vegetation complexes in the South West forest region of Western Australia, CALM.

National Objectives and Targets for Biodiversity Conservation (NOTBC) 2001-2005, (2001)Canberra

Regional Biodiversity advice (2007). Department of Environment and Conservation, Western Australia. TRIM Ref: DOC164844; DOC16845

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 Busselton submission (2007), Shire of Busselton. TRIM Ref: DOC15550

WRC (1996) Policy and Guidelines: Granting of Licences to Clear Indigenous Vegetation in Catchments Subject to Clearing Control Legislation. Water and Rivers Commission, 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)