Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1982/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Smargiassi Nominees Pty Ltd

1.3. Property details

Property: LOT 104 ON DIAGRAM 96576 (PICTON EAST 6229)
Local Government Area: Shire Of Dardanup
Colloquial name: Lot 104 Columbus Drive, Picton East

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.5		Mechanical Removal	Industrial

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 1000: Mosaic: Medium forest; jarrah-marri / Low woodland; banksia / Low forest; tea-tree (Melalecua spp.) (Shepherd et al. 2001; Hopkins et al. 2001). Heddle Vegetation Complex: Southern River Complex: Open woodland of marri-jarrah-banksia on the elevated areas and a fringing woodland of E.rudis-M. rhaphiophylla along streams (Heddle et al. 1980).	The proposal involves clearing 2.5 ha of native vegetation for the purpose of constructing an industrial pad. The vegetation under application comprises scattered Banksia attenuata, Agonis flexuosa and Eucalyptus marginata, with the odd Nuytsia floribunda. Wetter areas comprise Melaleuca rhaphiophylla and isolated stands of Juncus spp. in amongst a thick understorey of introduced pasture species and weeds (DEC Site Visit, 2007). The area is in degraded to good (Keighery, 1994) condition as the site has a history of grazing / clearing, vehicle use and rubbish dumping.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The description of the clearing application area is based on a site inspection conducted by DEC officers on 5 September 2007 (DEC, 2007a; DEC, 2007b).

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 on Lot 104 is degraded to good (Keighery, 1994) condition, comprising scattered Banksia attenuata, Agonis flexuosa and Eucalyptus marginata, with isolated stands of Melaleuca rhaphiophylla in wetter areas (Keighery, 1994; DEC, 2007a).

The area under application has been identified by the Environmental Protection Authority as potentially being part of a regionally significant natural area of high value within the Preston Industrial Park (PIP) that should be retained due to its diversity (representative area of natural vegetation in degraded to good (Keighery, 1994) condition for the Guildford and Southern River vegetation complexes), rarity (location of one threatened bird species (Red tailed black cockatoo) and at least four bird species of conservation significance on the Swan

Coastal Plain) and maintenance of ecological processes (the area is part of an ecological linkage: McLarty/ Kermerton/ Twin Rivers/ Preston River/ Gwindinnup, north south ecological linkage). This area has been recognised as the best representation of the Guildford and Southern River complexes in the PIP (EPA, 2008a).

Although the vegetation under application is supporting vegetation that is biodiverse, the vegetation under application is in degraded to good condition. Therefore the proposal is not likely to be at variance to this Principle.

Methodology

DEC (2007a)
EPA (2008a)
Keighery (1994)
GIS Databases:
- CALM Managed Lands and Waters - CALM 1/06/04;
- Bunbury 50cm ORTHOMOSAIC - DLI04

(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 may be at variance to this Principle

The proposal is for the clearing of 2.5 ha for an industrial pad. The vegetation is considered to be in degraded to good condition (Keighery, 1994) with little to no native understorey (DEC, 2007a).

Within the local area (10km radius from the proposed area for clearing) there are several records of threatened and priority fauna, including but not limited to, Calyptorhynchus baudinii (Baudins Black Cockatoo; Threatened), Pseudocheirus occidentalis (Western Ringtail Possum; Threatened), Calyptorhynchus banksii naso (Naso Cockatoo; P3) and Macropus irma (Western Brush Wallaby; P4).

The area under application has been identified by the Environmental Protection Authority as being part of a regionally significant natural area of high value within the Preston Industrial Park (PIP) that should be retained due to its diversity (representative area of natural vegetation in degraded to completely degraded condition for the Guildford and Southern River vegetation complexes), rarity (location of one threatened bird species (Red tailed black cockatoo (Calyptorhynchus banksii naso) - listed as rare or likely to become extinct under the Wildlife Conservation (Specially Protected Fauna) Notice 2008) and at least four bird species of conservation significance on the Swan Coastal Plain) and maintenance of ecological processes (the area is part of an ecological linkage: McLarty/ Kermerton/ Twin Rivers/ Preston River/ Gwindinnup, north south ecological linkage). This area has been recognised as the best representation of the Guildford and Southern River complexes in the PIP (EPA, 2008a).

The EPA (2008b) has recognised the vegetation under application as being part of a significant remnant. Although the area is in degraded to good (Keighery, 1994) condition, clearing of this area is likely to compromise the linkage of which the applied area is a part and therefore decrease fauna movement and habitat, particularly for the Forest Red tailed Black Cockatoo which is known to utilise the applied area (EPA, 2008a).

The EPA advertisement for the level of assessment stated that the potential significant effects are that 'clearing will result in loss of regionally significant vegetation and fauna habitat'.

However the vegetation is in degraded to good condition and therefore the clearing may be at variance to this Principle.

Methodology

DEC (2007a)
EPA (2008a)
EPA (2008b)
Keighery (1994)

GIS Databases:
- Threatened Fauna SAC Bio Dataset - 05/06/07;
- Bunbury 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

A desktop study found several known populations of the rare flora (Diuris drummondii) surrounding the applied area, with populations 2.8 km north and 3 km south west.

An additional site inspection during flowering time for this species (November) found no obvious signs of this species although no flora surveys were undertaken. In addition given the degraded to good (Keighery, 1994) condition of the vegetation and the density of pasture / weeds, the applied area is unlikely to be sustaining flora species of conservation significance (DEC, 2007b).

Methodology Keighery (1994);
DEC (2007a);
DEC (2007b);

GIS Databases:
- Flora SAC Bio datasets 5/6/07

(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 are 17 occurrences of 6 Threatened Ecological Communities (TEC's) within the local area (10 km radius); however given the degraded to good (Keighery, 1994) condition of the applied area (DEC, 2007a), it is unlikely to be supporting, or be necessary for the maintenance or continued existence, of any known TEC.

Methodology Keighery (1994);
DEC (2007a);

GIS Databases:
- Threatened Ecological Communities - CALM 12/04/05;
- Threatened Plant Communities - DEP 06/95;
- Environmentally Sensitive Areas - DoE 30/05/05

(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 at variance to this Principle**
The IBRA and vegetation communities for the area under application are below the threshold to clear land (30%) (Commonwealth Australia 2001).

Vegetation within the area under application is identified as a component of Beard Vegetation Association 1000 and Heddle Vegetation Complex Southern River Complex. These vegetation communities are identified as having 24.6% and 19.8% respectively remaining of their pre-European extent (Shepherd 2006).

.	Pre-European area (ha)	Current extent (ha)	Remaining %	% in DEC managed lands
Swan Coastal Plain*	1,501,208	583,140	38.84	32.55
Shire of Dardanup*	52,843	25,663	48.57	81.12
Beard vegetation association*				
1000(statewide)**	99,800	28,541	28.60	15.74
1000 (in SCP)**	94,175	25,235	26.80	16.14
Heddle vegetation complex*** Southern River Complex	57,979	11,501	19.8	N/A

* (Shepherd et al. 2001)
** (Shepherd 2007)
*** (Heddle et al., 1980)

The proposed clearing of 2.5 ha is zoned Industrial under the Greater Bunbury Region Scheme (EPA 2003). The area is also within the Maidens / Preston River ecological linkage, as recognised by the EPA (2003) under the Greater Bunbury Region Scheme.

The area under application has been identified by the Environmental Protection Authority as being part of a regionally significant natural area of high value within the Preston Industrial Park (PIP) that should be retained due to its diversity (representative area of natural vegetation in degraded to completely degraded condition for the Guildford and Southern River vegetation complexes), rarity (location of one threatened bird species (Red tailed black cockatoo (Calyptorhynchus banksii naso) listed as rare or likely to become extinct under the Wildlife Conservation Act 1950) and at least four bird species of conservation significance on the Swan Coastal Plain) and maintenance of ecological processes (the area is part of an ecological linkage: McLarty/ Kermerton/ Twin Rivers/ Preston River/ Gwindinnup, north south ecological linkage). This area, of which the application is a part, has been recognised as the best representation of the Guildford and Southern River complexes in the PIP (EPA, 2008a; EPA, 2008b).

Approximately 30% of native vegetation remains within the local area (10 km radius). Given the area is recognised within a regionally significant ecological linkage the vegetation proposed for clearing is considered to be significant as a remnant within the Greater Bunbury Regional Scheme and Preston Industrial Park, and therefore the clearing is at variance to this Principle.

Methodology

Commonwealth Australia (2001)
EPA (2003)
EPA (2008a)
EPA (2008b)
Heddle et al. (1980)
Shepherd et al. (2001)
Shepherd (2007)

GIS databases:
- Heddle Vegetation Complexes - DEP 21/06/95
- Interim Biogeographic Regionalisation of Australia - EA 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 may be at variance to this Principle

The western section of the applied area is within a multiple-use palusplain wetland. This area has been highly modified and consists mainly of introduced grasses and annual weeds (DEC, 2007a), however, native species that are present include Juncus spp. and Melaleuca rhaphiophylla.

The degraded to good (Keighery, 1994) condition of the area has modified the value of the native vegetation and therefore the association with this geomorphic wetland. The proposed clearing therefore, may be at variance to this Principle.

Methodology

Keighery (1994)
DEC (2007a)

GIS Databases:
- ANCA, Wetlands - CALM 08/01;
- EPP Areas - DEP 06/95;
- EPP Lakes - DEP 28/07/03;
- Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain - DoE 15/9/04;
- Hydrography Linear - DoE 1/2/04;
- RAMSAR, Wetlands - CALM 21/10/02;
- Bunbury 50cm ORTHOMOSAIC - DLI04

(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 area proposed to be cleared has a low salinity risk and a groundwater salinity of 500-1000mg/L (salts in the soil is brackish).

The area under application has soils mapped as sandy acidic yellow mottled soils, some of which contain ironstone gravel. Associated are acid yellow earths. Other soils contain ironstone gravel low dunes and some swamps with variable soils (Northcote et al. 1968).

Surrounding the applied area and on the western section of the applied area is a multiple-use palusplain wetland. The topography of the area is 15m AHD (Australian Height Datum). This indicates the area under application is within a low lying area. As the area is surrounded by palusplains and is in a low relief area, there is a risk of waterlogging if the area is to be cleared.

A major drain adjoining the area under application is likely to mitigate any effects of waterlogging and therefore, the proposed clearing is not likely to be at variance to this Principle.

Methodology

Northcote et al. (1968)
GIS databases:
- Salinity Risk LM 25m - DOLA 00;
- Groundwater Salinity, Statewide - 22/02/00

(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 at variance to this Principle

DEC-managed lands located within the local area (10 km radius of the proposed clearing) include several small and isolated Nature Reserves and Timber Reserves (1.5km south). There area several System 6 conservation reserves within the local area.

The area under application is part of a recognised ecological linkage (EPA 2008a; EPA, 2008b; EPA 2003) called the McLarty/ Kermerton/ Twin Rivers/ Preston River/ Gwindinnup, north south ecological linkage. This links two System 6 areas to the north and south.

Although the vegetation is in degraded to good (Keighery, 1994) condition, the vegetation proposed to be cleared has be recognised as part of a regionally significant ecological linkage within the Greater Bunbury Regional Scheme and Preston Industrial Park, and is therefore at variance to this Principle.

Methodology

Keighery (1994);
DEC (2007a);
EPA (2008)
EPA (2003)

GIS Databases:
- CALM Managed Lands and Waters - CALM 1/6/04;
- System 6 Conservation Reserves - DEP 6/95;
- Bunbury 50cm ORTHOMOSAIC - DLI04

(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 is located within the Leschenault Estuary - Collie River catchment and does not include any Public Drinking Water Source Areas.

The application area is mapped as having a low to moderate Acid Sulphate Soils risk and a groundwater salinity of 1000-3000mg/L.

There is a major drain adjoining the area under application that flows into the end point of the Ferguson River. The Ferguson flows into the Preston River at this point which outlets to the ocean 800m away. This end of the water course is highly modified.

Given the small scale (2.5ha) and the degraded (Keighery, 1994) condition of the applied area and nearby watercourses, it is unlikely the proposed clearing will cause significant deterioration to water quality and is therefore not likely to be at variance to this principle.

Methodology

Keighery (1994)

GIS Databases:
- Hydrographic Catchments, Catchments - DoE 3/4/03;
- Public Drinking Water Source Areas (PDWSAs) - DOE 29/11/04;
- Acid Sulfate Soil Risk Map, Swan Coastal Plain - DEC;
- Salinity Risk LM 25m - DOLA 00;
- 250K Map Series, Groundwater Salinity - 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 has soils mapped as sandy acidic yellow mottled soils, some of which contain ironstone gravel. Associated are acid yellow earths. Other soils contain ironstone gravel, low dunes and some swamps with variable soils (Northcote et al. 1968).

Surrounding the applied area and on the western section of the applied area is a multiple-use palusplain wetland. The topography of the area is 15m AHD (Australian Height Datum). This indicates the area under application is within a low lying area. As the area is surrounded by palusplains and is in a low relief area waterlogging may result from the clearing as proposed. There is a major drain adjoining the area under application that is likely to mitigate any effects of flooding where they occur.

The proposal is, therefore, not likely to be at variance to this principle.

Methodology Northcote et al. (1968)
GIS databases:
- Hydrography Linear - DoE 1/2/04
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The property was recently re-zoned from rural to general industry within the Shire of Dardanup TPS No.3, and is foreseen as industrial under the Greater Bunbury Region Scheme (EPA, 2003). The Shire of Dardanup (2007) has advised they have received an application to develop Lot 104 for the purpose of storing heavy metals and machinery, however approval has not been granted.

A public submission received (2007) focuses mainly on land degradation associated with clearing the applied area for grazing and pasture (original stated clearing purpose); however given the change in purpose, the points raised are no longer applicable to this proposal (DOC39217)

The EPA set the level of assessment for this proposal at Not Assessed - Managed under Part V on the 10 March 2009 (DOC79280). No appeals were received with respect to the level of assessment set. The EPA advertisement stated that the potential significant effects are that 'clearing will result in loss of regionally significant vegetation and fauna habitat'.

Methodology EPA (2003)
Shire of Dardanup advice (2007);
Public submission (2007);

GIS Database:
- Town Planning Scheme Zones - MFP 08/98

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing is at variance to principles (e) and (h), may be at variance to principles (b) and (f) and is not likely to be at variance to the remaining principles.

5. References

DEC (2007a). Department of Environment and Conservation, Western Australia. TRIM Ref: DOC33221.

DEC (2007b). Regional comments provided on presence / absence of Diruis drummondii on Lot 104 Harris Rd. TRIM Ref: DOC40227.

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.

Environmental Protcetion Authority (2003). Report and Recommendation for the Greater Bunbury Regional Scheme - Bulletin No. 1108, September 2003.

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, Western Australia.

EPA (2006) Guidance for the Assessment of Environmental Factors - Level of Assessment for Proposals Affecting Natural Areas Within the System 6 Region and Swan Coastal Plain Portion of the System 1 Region. Guidance Statement No 10. Environmental Protection Authority, Western Australia.

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.

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.

Public submission (2007). Comments provided for clearing proposal on Lot 104 Harris Rd - Smargiassi Nominees Pty Ltd. TRIM Ref: DOC39217.

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 Dardanup advice (2007). Advice on planning application for Lot 104 Columbus Drive, Picton East. TRIM Ref: DOC37858.

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)