



1. Application details

1.1. Permit application details

Permit application No.: 2613/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: Ronald George Vidler

1.3. Property details

Property: LOT 1164 ON PLAN 81984 (House No. 88 VIDLER NATURALISTE 6281)
 LOT 1164 ON PLAN 81984 (House No. 88 VIDLER NATURALISTE 6281)
 Local Government Area: Shire Of Busselton
 Colloquial name:

1.4. Application

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

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 1.1ha for the purpose of growing an avocado orchard and vineyard.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	
Mattiske Vegetation Complex: Cowaramup (Cw2) Woodland of Eucalyptus marginata subsp. marginata-Corymbia calophylla on slopes and low woodland of Melaleuca preissiana- Banksia littoralis on depressions in perhumid and humid zones (Mattiske Consulting 1998).	The vegetation under the application has been previously cleared and now the area consists of re-growth.		

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 involves selectively removing 1.1 hectares of native vegetation for the purpose of growing avocado orchard and vineyard. The area under application is described as being in a degraded (Keighery 1994) condition, consisting of a small cluster of trees and shrubs with little to no understorey.

Within the local area (10km radius) there are three Priority Ecological Communities (PECs). The soil type, vegetation type and the degraded (Keighery, 1994) nature of the applied area, it is not consistent with those of local PECs.

There are 32 records of a priority flora species of which there are 14 different species of the 32 records present within a 10km radius of the area under application.

Caladenia longicauda subsp. clivicola (Priority 4) grows in the same mapped soil type as the area in question. Acacia semitrullata (Priority 3) grows in the same mapped vegetation type as the area in question.

As the vegetation has been previously cleared, the area in question consists predominately of Xanthorrhoea's and the vegetation type is well represented in the local area (10km radius); it is not considered to hold significant biodiversity values and is therefore not likely to be at variance to this principle.

Methodology Western Australian Herbarium (1998-)
Keighery (1994)
Northcote et al. (1968)
GIS Database:
- Busselton 50cm - Landgate04
- CALM Managed Lands and Waters - CALM 01/06/05
- DEFL, SAC Biodataset (31/07/08)
- TEC Database, SAC Biodatasets - accessed 31/07/08

(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**
Within the local area (10km radius from the proposed clearing) there are nine records of threatened fauna and four records of priority species, of which there are two historical records.

The area under application is small (1.1 ha) and has previously been cleared. Within the local area (10km radius) there is 70% remaining native vegetation with well represented fauna habitat. Given these factors proposed clearing is not considered to be significant habitat for the fauna, therefore not likely to be at variance to this principle.

Methodology GIS Database:
- Busselton 50cm - Landgate04
- CALM Managed Lands and Waters - CALM 01/06/05
- Threatened Fauna, SAC Bio Dataset (31/07/08)

(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**
Within the local area (10km radius) of the site under application there are seven records of rare flora.

All rare flora grow in different vegetation and soil type to the area under application.

The area under application comprises of ironstone gravels, acid grey earths and leached sands. The area under application is not likely to contain suitable habitat for the rare flora species. Therefore the proposed clearing is not likely to be at variance to this Principle.

Methodology Keighery (1993)
Northcote et al. (1968)
Shepherd et al. (2001)
GIS Database:
- Busselton 50cm - Landgate04
- DEFL, SAC Bio Dataset (31/07/08)

(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 at variance to this Principle**
Within the local area (10km radius) there are four Threatened Ecological Communities (TECs).

Given the soil type, vegetation type and the degraded (Keighery, 1994) nature of the applied area, it is not consistent with those of local TECs, the proposed clearing is not likely to be necessary for the maintenance of a significant ecological community, and is therefore is not at variance to this Principle.

Methodology Keighery (1994)
GIS Database:
- Busselton 50cm - Landgate04
- DEFL, SAC Biodataset (31/07/08)
- TEC Database, SAC Biodatasets - accessed 31/07/08

(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

Pre-European IBRA Bioregion	Current Extent	Remaining	
Jarrah Forest Shire	4,506,654.28	2,405,331.40	53.4
Busselton Beard Vegetation	145,239.65	61,780.41	42.5
3 Mattiske Vegetation	2,661,403.29	1,846,588.90	69.4
Cowaramup (Cw2)	63,666	15,236	23.9

The area under application is located in the Jarrah Forest Bioregion and is in the Shire of Busselton. The extent of the Jarrah Forest is 53.4%. The extent of the pre-European vegetation (3) is 69.4% (Shepherd et al. 2001) and within the Shire of Busselton is 42.5% (Shepherd et al. 2001). The extent of the Mattiske Vegetation Complex, Cowaramup (Cw2) is 23.9%. Beard vegetation has not been extensively cleared within this region, and is higher than the desirable 30% threshold level target identified by the EPA (2000). Mattiske vegetation has been extensively cleared within this region and is below the desirable 30% threshold level target identified by the EPA (2000), however, due to the degraded condition it is not representative of this vegetation type.

Within a 10km radius 70% of native vegetation is remaining. The area under application is considered to be in a degraded (Keighery 1998) conditions, consisting of re-growth from a previous clearing and is not a significant remnant in a highly cleared area. Therefore is not likely to be at variance to this principle.

- Methodology** EPA (2000)
 Mattiske Consulting (1998)
 Shepherd (2006)
 Shepherd et al. (2001)
 GIS Database:
 - Busselton 50cm - Landgate04
 - Interim Biogeographic Regionalisation of Australia - EA 18/10/00
 - Mattiske Vegetation (01/03/1998)
 - Pre European Vegetation, SAC Bio Dataset (24/07/08)

(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 is one minor perennial water course 660m north of the proposed clearing site, one non-perennial swamp 500m north of the area in question and two earth dams 130m east of the area under application. The site is not considered to be in association with any water courses or wetlands 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** GIS Database:
 - Hydrography linear (hierarchy) - DoW 13/7/06

(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 proposed clearings topography is 95m AHD (Australian Height Datum). The soil type of the area is described as gently undulating terrain of broad shallow valleys and low ridges with moderate amounts of laterite and lateritic (ironstone) gravel, chief soils of the broad shallow valleys are acid grey earths sometimes containing ironstone gravels (Northcote et al. 1960-68). The mean annual rainfall is 900mm per annum and the evapotranspiration rate is 800mm. Given the high evaporation rate and low relief in topography, water erosion and water logging it is unlikely to occur on the site.

The area under application therefore is unlikely to be at variance to this principle.

- Methodology** Northcote et al. (1968)
 GIS Database:
 - Evapotranspiration Isopleths - WRC 29/09/98
 - Groundwater Salinity Statewide DoW 13/07/06
 - Hydrographic catchments, catchments - DoW 01/06/07
 - Hydrogeology, statewide DOW 13/07/06

- Mean Annual Rainfall Isohytes (1975 - 2003) DEC 02/08/05
- Topographic Contours, Statewide - DOLA 12/09/02

(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 at variance to this Principle

The proposed clearing is 1.7km west of the Leeuwin - Naturaliste national park. Leeuwin-Naturaliste National Park stretches for 120 kilometres along the coast between Cape Naturaliste and Cape Leeuwin. The Leeuwin-Naturaliste National Park is also classed as a Registered National Estate known as Leeuwin - Naturaliste Ridge Area.

The area proposed to clear is re-growth from previous clearing. Given the scale of the proposed clearing (1.1 ha), degraded (Keighery 1994) condition of the site and distance from the national park. Clearing within the area under application is unlikely to have any impact on the registered national estate or the national parks.

Methodology

- GIS Databases:
- Busselton 50cm - Landgate04
 - CALM Managed Lands and Waters - CALM 01/06/05
 - Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 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 is not likely to be at variance to this Principle

There is one minor perennial water course 660m north of the proposed clearing site, one non-perennial swamp 500m north of the area in question and two earth dams 130m east of the area under application.

Given that the small scale of the area under application (1.1ha) and the proposed clearing is not associated with any wetlands or water courses, the proposed clearing is not likely to cause deterioration in the quality of surface or underground water and therefore is not at variance to this principle.

Methodology

- GIS Database:
- Evapotranspiration Isopleths - WRC 29/09/98
 - Hydrographic catchments, catchments - DoW 01/06/07
 - Hydrogeology, statewide DOW 13/07/06
 - Mean Annual Rainfall Isohytes (1975 - 2003) DEC 02/08/05

(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 at variance to this Principle

The proposed clearings topography is 95m AHD (Australian Height Datum). The soil type of the area is described as gently undulating terrain of broad shallow valleys and low ridges with moderate amounts of laterite and lateritic (ironstone) gravel, chief soils of the broad shallow valleys are acid grey earths sometimes containing ironstone gravels (Northcote et al. 1960-68). The mean annual rainfall is 900mm per annum and the evapotranspiration rate is 800mm. Given the high evaporation rate and small area (1.1ha), flooding in the areas under application is unlikely to occur. The proposal is therefore is not at variance to this principle.

Methodology

- Northcote et al. (1968)
- GIS Database:
- Evapotranspiration Isopleths - WRC 29/09/98
 - Groundwater Salinity Statewide DoW 13/07/06
 - Hydrographic catchments, catchments - DoW 01/06/07
 - Hydrogeology, statewide DOW 13/07/06
 - Mean Annual Rainfall Isohytes (1975 - 2003) DEC 02/08/05
 - Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The area proposed to clear is zoned as general farming.

The area in question is within Rights in Water and Irrigation (RIWI) groundwater Area. In the proclaimed area under the Rights in Water and Irrigation Act 1914 a licence is required to take water from groundwater aquifers (DoW 2008). The water bodies (earth dams) on this property are excavations/soaks and are most likely intersecting the groundwater table. The applicant wrote to DEC (22/09/08) stating that as his agricultural ventures will not be of a commercial nature and therefore will not require a licence from The Department of Water as he will not need to reticulate (DOC63211).

The Shire of Busselton has indicated that Ron Vidler (Proponent) does not require development approval as the purpose of the clearing is zoned within the shire's town planning scheme (DOC61254).

Methodology DoW Advice (2008)
GIS Database:
- Native Title Claims - LA 2/5/07
- RIWI Act, Groundwater Areas - DoW 13/07/06
- Town Planning Scheme Zones - MFP 31/08/98

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 not likely to be at variance to principles (a), (b), (c), (e), (g) and (i) and the remaining principles are not at variance.

5. References

- Braithwaite, R.W. (1995). Southern Brown Bandicoot. In R. Strahan (Ed.) The Mammals of Australia. Australian Museum and Reed Books. Chatswood, NSW.
- Department of the Environment, Water, Heritage and the Arts (2008) Leeuwin - Naturaliste Ridge Area (RNE), Department of the Environment, Water, Heritage and the Arts, Canberra. Available from: <http://www.environment.gov.au/sprat>. Accessed July 2008
- Department of Water (2008), (DoW), RIWI Licence, <http://portal.water.wa.gov.au/portal/page/portal/LicensingWaterIndustryServices/Licensing> Accessed 1/08/08
- 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.
- 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, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- 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., 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.
- Western Australian Herbarium (1998-). FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/>. Accessed on 12/08/08
- Western Australian Herbarium (1998-). FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/>. Accessed on 31/07/08
- Western Australian Herbarium (1998-). FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/>. Accessed on 12/08/08

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)

