



1. Application details

1.1. Permit application details

Permit application No.: 3136/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: Richard Thomas Bush

1.3. Property details

Property: LOT 5704 ON PLAN 206374 (House No. 1064 MOUNT BARKER-PORONGURUP PORONGURUP 6324)

Local Government Area: Shire Of Plantagenet

Colloquial name:

1.4. Application

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

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; Eucalyptus marginata (Jarrah) - Corymbia calophylla (Marri).	The proposal is for the clearing of 3ha of native vegetation for establishment of Eucalyptus globulus plantation. The vegetation is in degraded condition as a result of previous clearing and agricultural practices, and is mostly parkland cleared.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The vegetation description and condition was determined from orthomosaic imagery Albany Mount Barker 1.4m (Landgate 2002).

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 may be at variance to this Principle

The proposal is for the clearing of 3ha of native vegetation for the establishment of a Eucalyptus globulus plantation. The vegetation is in degraded (Keighery 1994) condition and is partially parkland cleared as a result of stock access.

Four priority flora species have been recorded in the local area (10km radius). Given the degraded condition of the vegetation under application, however, it is unlikely this area contains or is necessary for the continued existence of these species.

The proposed clearing has the potential to spread weeds and dieback into this neighbouring remnant, and as such may have an indirect impact on biodiversity in the area. In order to reduce the risks of weed and dieback introduction or spread into neighbouring vegetation, conditions will be imposed on the permit.

Methodology Keighery (1994)

GIS database:

- CALM Managed Lands and Waters - CALM 01/06/05
- SAC Biodatasets - accessed 28 May 09
- Pre European Vegetation - DA 01/01
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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

Three threatened and 3 priority fauna species have been recorded within the local area (10km radius). However, the area under application has a history of disturbance from previous clearing and stock access, and is in degraded (Keighery 1994) condition, being partially parkland cleared. Additionally, large areas of better

condition vegetation exist within the local area, reducing the significance of the vegetation under application as fauna habitat.

The clearing as proposed is not likely to have a significant impact on habitat for indigenous fauna, and as such is not likely to be at variance to this principle.

Methodology GIS database:
- CALM Managed Lands and Waters - CALM 01/06/05
- SAC Biodatasets - accessed 28 May 09
- Hydrography linear - DOW 13/7/06

(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 records of rare flora within the local area (10km radius) of the area under application. The vegetation is in degraded condition (Keighery 1994) with a history of disturbance through agricultural practices. The vegetation under application is therefore not likely to include rare flora, and the proposed clearing is not likely to be at variance to this principle.

Methodology Keighery (1994)

GIS database:
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 28 May 09
- 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 records of threatened or priority ecological communities within the local area (10km radius) of the area under application. Therefore, the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Database:
- SAC Biodatasets - accessed 28 May 09
- Pre European Vegetation - DA 01/01
- 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 application lies within the Shire of Plantagenet and the Jarrah Forest IBRA Bioregion, which retains 47.78% and 54.16% native vegetation respectively (Shepherd 2007). Orthomosaic imagery suggests the local area (10km radius) is approximately 25% vegetated.

The vegetation under application is of Beard Vegetation Association 3, of which 69.32% of the pre-European extent remains within the Jarrah Forest Bioregion (Shepherd 2007).

The local area retains less than the recommended 30% (EPA 2000), and as such the proposed clearing may be at variance to this principle. However, the vegetation under application is in degraded condition (Keighery 1994) with a history of disturbance including livestock grazing, and this reduces its significance as a remnant of native vegetation. The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology EPA (2000)
Keighery (1994)
Shepherd (2007)

GIS Databases:
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Local Government Authorities - DLI 8/07/04
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 28 May 09
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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 likely to be at variance to this Principle

A minor non-perennial watercourse is mapped as 20m south of the southern end of the application area. However, this watercourse is not a tributary for any larger watercourses. The application area is 560m north west and 700m east of other minor non-perennial watercourses, and 1.5km north of a minor river. The vegetation under application is in degraded (Keighery 1994) condition resulting from a history of clearing and stock access. The vegetation is therefore not considered to be riparian, and the proposed clearing is not likely to be at variance to this principle.

Methodology Keighery (1994)

GIS Databases:

- ANCA wetlands - Environment Australia 26/3/99
- CALM Managed Lands and Waters - CALM 01/06/05
- EPP Lakes Policy Area - DEP 14/05/97
- EPP, Wetlands 2004 (DRAFT) - EPA 21/7/04
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- Hydrography linear - DOW 13/7/06
- Hydrography linear (hierarchy) - DoW 13/7/06
- Ramsar wetlands - DEC 03
- South Coast Significant Wetlands - WRC 10/06/2003

(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 chief soil types within the application area are mapped as hard acidic and neutral yellow mottled soils containing ironstone gravels (Northcote et al. 1968). These soils are considered to have low risks of wind and water erosion. The topography slopes from 230 to 250 m AHD, and is of medium relief. The application area is surrounded by Eucalyptus globulus plantations and intact remnants of native vegetation. The area under application is in degraded (Keighery 1994) condition, and already partially parkland cleared. Additionally, given the small area under application (3ha), the likelihood of appreciable land degradation resulting from the clearing is further reduced. The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology Northcote et al. (1968)

GIS database:

- Acid Sulfate Soil Risk Map, Swan coastal Plain - DEC 07/08/06
- Average Annual Rainfall Isohyets - WRC 29/09/98
- Annual Evaporation Contours (Isopleths) - WRC 29/09/98
- Hydrogeology, statewide - DOW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Salinity Risk LM 25m - DOLA 00
- Soils, Statewide DA 11/99
- Topographic contours statewide - DOLA and ARMY 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 likely to be at variance to this Principle

The application area lies between Porongurup National Park 2.3km east, and an unnamed conservation commission nature reserve 7km west. The vegetation under application is in degraded condition with little to no understorey as a result of agricultural practices, and as such its significance as an ecological linkage between conservation areas is reduced. Additionally, the application area neighbours an intact remnant of native vegetation in good or better condition (Keighery 1994).

Therefore, the clearing as proposed is not likely to have an impact on the environmental values of nearby conservation areas.

Methodology Keighery (1994)

GIS Databases:

- CALM Managed Lands and Waters - CALM 01/06/05
- Hydrography, linear - DOW 13/7/06
- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02
- System 1 to 5 and 7 to 12 areas - DEC 11/7/06

(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

A minor non-perennial watercourse is mapped as 20m south of the southern end of the application area. However, this watercourse is not a tributary for any larger watercourses. The application area is 560m north west and 700m east of other minor non-perennial watercourses, and 1.5km north of a minor river. The vegetation under application is in degraded (Keighery 1994) condition resulting from a history of clearing and stock access. The proposed clearing is therefore not likely to have a significant impact on the quality of surface water in the area. Additionally, as the purpose for clearing is to establishment of Eucalyptus globulus plantation, the ground water recharge is likely to be not affected, or even reduced, as a result.

The clearing as proposed is therefore not likely to cause deterioration in the quality of surface or underground water.

Methodology Keighery (1994)

GIS database:

- Evapotranspiration Isopleths - WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05
- Salinity Risk LM 25m - DOLA 00
- Topographic Contours, Statewide - DOLA 12/09/02

(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 application area is surrounded by Eucalyptus plantations and native vegetation and, as the purpose for clearing is to establishment of Eucalyptus globulus plantation, the ground water recharge is likely to be not affected, or even reduced, as a result. The incidence or intensity of flooding is therefore not likely to be exacerbated as a result of the proposed clearing.

Methodology GIS database:

- Environmental Impact Assessments - EPA 22/2/07
- Evaporation Isopleths - WRC 29/09/98
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrography, linear - DoW 13/7/06
- 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 property is located within the Special Control Area 5: Porongurup of the Shire of Plantagenet Town Planning Scheme No. 3, within which planning consent is required from the Shire for plantations (Shire of Plantagenet 2006). A copy of the shire planning approval has not been received.

Methodology Shire of Plantagenet (2006)

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 may be at variance to Principle (a) and is not likely to be at variance to the remaining clearing Principles.

5. References

- 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.
- 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. (2007). 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

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)

