



1. Application details

1.1. Permit application details

Permit application No.: 1145/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Nannup

1.3. Property details

Property: STATE FOREST 58 (SCOTT RIVER EAST 6275)
Local Government Area: Shire Of Nannup
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
12.18		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
Milyeanup (MP) - Open forest to tall open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla-Allocasuarina fraseriana with some Agonis flexuosa on less undulating slopes in perhumid and humid zones.	A site visit was undertaken by DEC officers on the 15 June 2006. The officers determined the vegetation condition to be 'very good' (Keighery BJ, 1994). The area is Eucalyptus marginata-Corymbia calophylla forest, with many mature trees with lignotubers. There is high species diversity in the understorey with very little weed invasion.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Aerial photography shows the site is part of an extensive area of intact vegetation. The north eastern perimeter of the site is in close proximity to a track (Bird Road) so there is possibly some disturbance in that area. There is also a small cleared area approximately 150 metres to the south east of the site.
Bidella (BD) - Low woodland of Melaleuca preissiana-Banksia littoralis-Hakea lasianthoides on valley floors and open forest to woodland of Eucalyptus marginata subsp. marginata-Corymbia calophylla-Eucalyptus patens on slopes in perhumid and humid zones.	Understorey and groundcover species include Persoonia longifolia, Xylomelum occidentale, Macrozamia riedlei, Xanthorrhoea preissii, Kingia australis and Drosera spp. Site photographs were taken.		
Kingia (KI) - Open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla-Allocasuarina fraseriana-Banksia grandis-Xylomelum occidentale on lateritic uplands in perhumid and humid zones (Mattiske Consulting 1998).	John Firth (DAFWA) undertook a site visit and confirmed the vegetation types; Milyeanup, and to a lesser extent Bidella and Kingia. John Firth advised that the vegetation was in good to excellent condition and he provided site photographs.		

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 proposal is for clearing of 12.18 hectares of native vegetation within the Milyeanup State Forest. The area is remnant vegetation in its natural state where the condition of the vegetation is good to excellent. Of the three native vegetation types present within the proposed area to be cleared; Milyeanup and to a lesser extent Bidella and Kingia, there is over 96% of these types remaining (Mattiske Consulting 1998). Aerial photography and site photographs of the area show the vegetation under application appears to have high biodiversity, however, it is within an area of reserves that are extensively vegetated. Conditions have been placed on the permit relating to revegetation, and dieback and weed control to minimise loss of biodiversity values in the long term. Therefore, the proposal is not likely to be at variance with this principle. Additionally, the Shire has prepared a Pit Management Plan for the site including revegetation and dieback measures which has been approved by DEC's Blackwood Region.

Methodology Application for a Purpose permit (DEC TRIM Ref IN25059)
Pit Management Plan (DEC TRIM Ref DOC5962)
GIS datasets:
- Pemberton 1.4m Orthomosaic
- DOLA 99, CALM Managed Lands and Waters - CALM 1/07/05_1

(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 area to be cleared is within a larger area of intact native vegetation. It is unlikely that the proposed clearing would have a significant impact on native fauna species as this habitat type is well represented in the local area. Therefore, the proposal is not likely to be at variance to this Principle. Additionally, the Shire has prepared a Pit Management Plan for the site involving the protection of fauna 'habitat trees'.

Methodology Pit Management Plan (DEC TRIM Ref DOC5962)
GIS datasets:
- Pemberton 1.4m Orthomosaic - DOLA 99

(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 occurrences of declared rare flora (DRF) within the local area (10 Kilometres of the proposal area). There are eight priority species within 10 kilometres of the area proposed to be cleared. While two of the priority species (*Stylidium barleei* and *Jacksonia sparsa*) occur in the same vegetation type (*Bidella*) as the proposed cleared area, this vegetation type typically occurs lower in the landscape than the area proposed to be cleared so it is unlikely that these species would be present. This vegetation type is also a relatively small portion of the site. Additionally, the site was surveyed by GHD consultants in the preparation of the Pit Management Plan and no currently listed DRF or priority species were found within the area. Therefore, the clearing is not likely to be at variance with this principle.

Methodology Pit Management Plan (DEC TRIM Ref DOC5962)
GIS Datasets:
- Declared Rare and Priority Flora List - CALM 1/7/05
- Mattiske Vegetation - CALM 24/3/98

(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 known occurrences of Threatened Ecological Communities (TEC) within a 10 km radius of the proposed clearing. It is unlikely that the proposed clearing is at variance with this principle.

Methodology GIS Database:
- Threatened Ecological Communities - CALM 12/04/05

(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 not likely to be at variance to this Principle**
The vegetation occurs within the IBRA Jarrah Forest Region, where 58.7% of the area is vegetated and 58.3% of this area occurs in an intensive landuse zone. The vegetation is a component of Beard Vegetation Association No. 3 of which there is 72.1% of the pre-European extent remaining and therefore of 'least concern' status for biodiversity conservation (Department of Natural Resources and Environment 2002). Of the three

vegetation types identified for the site; Milyeanup, Bidella and Kingia, there is 96.8%, 96.4% and 97.3% remaining respectively (Mattiske Consulting 1998). On the basis that the extent remaining of the Mattiske vegetation types, the Beard vegetation association and more generally the IBRA Jarrah Forest Region meets the National Objectives Target for Biodiversity Conservation of 30%, this proposal is not likely to be at variance to this principle.

Methodology Shepherd et al. (2002), Department of Natural Resources and Environment (2002).
GIS Databases:
- Mattiske Vegetation - CALM 24/3/98
- Pre-European Vegetation - DA 01/01
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00.

(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

The site of proposed clearing does not contain a wetland or watercourse. Within the vicinity, the closest water courses are two minor perennial water courses within one kilometre of the area to the north east and south west. Additionally, the Pit Management Plan states the site does not intersect any watercourses. As the site does not contain a wetland or watercourse within close proximity, the proposal is not likely to be at variance to this principle.

Methodology Pit Management Plan (DEC TRIM Ref DOC5962)
GIS datasets:
- Hydrography, linear - DEO 01/02/04
- Geomorphic Wetlands, Augusta to Walpole - DOE 18/6/03
- ANCA Wetlands - CALM 08/01

(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 DAFWA Land Degradation Assessment Report indicates that the overall risk of the proposed clearing causing land degradation is low with the risk of salinity, eutrophication, wind erosion, waterlogging and flooding being low. The DAFWA advice indicates there is some risk of water erosion and sediment transfer off-site when the entire area has been cleared and the gravel extracted. A condition has been imposed on the permit requiring revegetation of the gravel pits on completion of the extraction. This should minimise the risk of water erosion and sedimentation in the long term. Therefore, the proposal is unlikely to be at variance to this principle.

Methodology DAFWA Land Degradation Assessment Report (DoE TRIM Ref DOC1787). GIS datasets:
- Salinity Mapping LM 25m - DOLA 00
- Salinity Monitoring LM 50m - DOLA 00
- Salinity Risk LM 25m - DOLA 001

(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 proposed clearing is within the Milyeanup State Forest. The area is also with two kilometres of an area that is included on the Register of the National Estate and identified as Milyeanup Management Priority Area. However, the area is relatively small in size compared to the extent of the conservation area surrounding the site. A condition has been imposed on the permit requiring revegetation on completion of the gravel extraction to minimise long term impacts on adjacent conservation areas. Therefore, the proposal is not likely to be at variance with this principle.

Methodology GIS Database:
- CALM Managed Lands and Waters - CALM 1/07/05_1
- Register of National Estate - EA 28/01/03.

(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

A ground water monitoring well situated 1.8 kilometres north west of the area under application showed a groundwater depth of approximately 35 metres, the topography of the monitoring well was 65 metres AHD. The proposed clearing is in an area that is 115 AHD, therefore it is likely that depth to ground water is greater than 35 metres. The mean annual rainfall in this area is 1000 millimetres per year. Due to the size of the proposed clearing, the depth to groundwater and high rainfall in the area the proposal is not likely to be at variance with this principle. Additionally, the Pit Management Plan states that drainage will be constructed in the pits during

works and pits will then be rehabilitated which will minimise the impact of the clearing on surface and groundwater.

- Methodology** Pit Management Plan (DEC TRIM Ref DOC5962)
 GIS Database:
 - Public Drinking Water Source Areas (PDWSAs) - DOE 4/11/04
 - WIN Groundwater Sites, monitoring - DEWCP (current)
 - Topographic contours
 - Statewide - DOLA 12/09/02
 - Rainfall, Mean Annual - BOM 30/09/01

(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

There is a 5 metre gradient from the site to the minor watercourse to the north east and a 10 metre gradient to the south west watercourse. The DAFWA Land Degradation Assessment Report indicates that while clearing of the vegetation on the site could increase surface runoff and contribute to increased stream flows it is unlikely to cause extensive flooding due to the size of the catchment. Therefore, the proposal is not likely to be at variance to this principle. Additionally, the Pit Management Plan states that drainage will be constructed in the pits during works and the pits will be rehabilitated to minimise the impact of the clearing on surface runoff.

- Methodology** DAFWA Land Degradation Assessment Report (DoE TRIM Ref DOC1787).
 Pit Management Plan (DEC TRIM Ref DOC5962)
 GIS Database:
 - Hydrography, linear - DEO 01/02/04
 - Topographic contours, Statewide - DOLA 12/09/02

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

Comments

The Shire of Nannup's access to State Forest 58 for the purpose of gravel extraction was subject to DEC Blackwood Region's approval of a Pit Management Plan for the area to be cleared. The management plan has been approved by the Blackwood Region.

No submissions related to the proposal have been received.

There is a Native Title Claim over the area under application. The Department of Environment and Conservation's advertising of the application in the West Australian newspaper constitutes legal notification of the native title representative body for the purpose of the future act procedures under the Native Title Act 1993. No response was received from the representative body.

There are no Aboriginal Sites of significance listed within the area under application.

There is no RIWI Act Licence or Works approval required for the proposed works.

- Methodology** CALM email correspondence (TRIM Ref HD28214)
 Pit Management Plan (DEC TRIM Ref DOC5962)
 GIS Database:
 - Native Title Claims - DLI 7/11/05
 - Aboriginal Sites of Significance - DIA 28/02/03
 - RIWI Act, Groundwater Areas - WRC 13/06/00
 - RIWI Act Surface Water Areas - WRC 18/10/02
 - Environmental Impact Assessments - DOE 24/02/06.

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Extractive Industry	Mechanical Removal	12.18	Grant	The assessable criteria have been addressed and no objections were raised. The assessment identified the proposal is not likely to be at variance to any of the clearing principles. The assessing officer therefore recommends that the permit be granted.

5. References

Bird Road Gravel Pit - Pit Management Plan (2006), Civi Test Sou-West, DEC TRIM Ref DOC5962.
 Department of Agriculture and Food WA (2006) Land degradation assessment report, Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food WA, DEC TRIM Ref. DOC1787
 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.

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.

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.

Site Visit Report (2006), Department of Environment and Conservation, Western Australia, DEC TRIM ref DOC2309

6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
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 DoE)

