



1. Application details

1.1. Permit application details

Permit application No.: 1252/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Moora

1.3. Property details

Property: MOORA TOWNSITE LOT 164 (Lot No. 164 DANDARAGAN MOORA 6510)
MOORA SUBURBAN LOT 62 (Lot No. 62 MOORE MOORA 6510)
LOT 113 ON PLAN 139022 (Lot No. 113 DANDARAGAN MOORA 6510)
ROAD RESERVE (MOORA 6510)
MOORA TOWNSITE LOT 340 (Lot No. 340 MOORE MOORA 6510)
MOORA SUBURBAN LOT 118 (Lot No. 112 DIX MOORA 6510)
ROAD RESERVE (MOORA 6510)
MOORA SUBURBAN LOT 111 (Lot No. 111 ROBERTS MOORA 6510)
LOT 434 ON PLAN 221287 (Lot No. 434 PADBURY MOORA 6510)
LOT 436 ON PLAN 221287 (Lot No. 436 GARDINER MOORA 6510)
ROAD RESERVE (MOORA 6510)
ROAD RESERVE (MOORA 6510)

Local Government Area:
Colloquial name: Moore River between Gardiner and Dandaragan Streets.

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
	300	Cutting	Restoration

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 142: Medium woodland; york gum and salmon gum. Shepherd et al. 2001	The clearing application is for the removal of up to 300 sheoak saplings that have germinated in the bed of the Moore River. The section of the Moore River that is subject to this clearing lies between Gardiner Street and Dandaragan Street in the town of Moora. The removal of the saplings has been proposed to assist with the revegetation works of nearby eroded banks. During a medium flow event, the saplings have the potential to redirect water to the banks increasing the risk of erosion. From the adult trees around the river the sheoak saplings are most likely to be <i>Casuarina obesa</i> , but potentially could also include <i>Allocasuarina huegeliana</i> . There are quite a number of saplings that have germinated in the river, and mostly they are no more than 2m in height with a trunk of less than a 10cm diameter.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	This section of the Moore River has obviously experienced a range of disturbances and currently has a high incidence of weed invasion, badly eroded banks and rubbish scattered throughout. The condition rating of the area would best be described as degraded. Site Visit DEC Officer, 21/9/2006

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

While the section of the Moore River that lies between Gardiner Street and Dandaragan Street is perhaps one

of the better vegetated areas remaining within the Moora townsite, the proposal is targeting specific species of native vegetation. Although up to 300 saplings of *Casuarina obesa* or *Allocasuarina huegeliana* would be removed, mature specimens remain along the banks and thus would still be present in the area. It is not likely that a reduction in the number of these trees occurring within the Moore River would reduce the biodiversity of the local area.

Methodology Site visit, DEC Officer 2006

(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 proposal would result in up to 300 saplings of *Casuarina obesa* or *Allocasuarina huegeliana* being removed from the bed of the Moore River. These specimens could provide some habitat value to local fauna. However, the proposed clearing will take the form of selective removal of these specimens along a 1km section of the river where other habitat will remain, including representatives of these species. The planned revegetation works that could benefit from this proposal would compensate for loss of this vegetation, and aims to introduce understorey species to diversify the habitat available. Given that the amount of clearing proposed is small and that alternative habitat will remain, the proposal is not likely to be at variance to this Principle.

Methodology Site visit, DEC Officer 2006

(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 a number of Declared Rare and Priority flora that occur within the Moora townsite. However, as the proposal would only remove specimens of *Casuarina obesa* or *Allocasuarina huegeliana*, no DRF or Priority flora would be directly affected. Therefore the proposal is not likely to be at variance to this Principle.

Methodology GIS Databases: Declared Rare and Priority Flora list - CALM 01/07/05.
Site visit, DoE Officer 2006.

(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 a number of Threatened Ecological Communities within 5km of the section of river that is subject to this application. The closest of these occurs some 900m from the Moore River, but requires a buffer of only 500m. Indeed all of the TECs and their required buffers, fall well outside of the Moore River. Therefore the proposal is not likely to be at variance with this Principle.

Methodology GIS Databases: 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 may be at variance to this Principle**

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation status**	Reserves/CALM-managed land %
IBRA Bioregion - Avon Wheatbelt***	8,967,527	924,828	10.3	Vulnerable	Not available
Shire - Moora***	373,148	50,212	13.5	Vulnerable	Not available
Beard veg type - 142	1,134,385	281,570	24.8	Vulnerable	14.5

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

***Within the Intensive Landuse Zone

The Avon Wheatbelt IBRA bioregion, Shire of Moora and Beard Vegetation Association 142 all have a vulnerable status for biodiversity conservation (Department of Natural Resources and Environment 2002). However the clearing is to be the selective removal of individual saplings as opposed to a block of remnant vegetation, and would be compensated for by the planned revegetation works. Thus while the proposal does occur within an extensively cleared area, the loss of this vegetation would be offset by rehabilitation works that will involve planting along the banks of the river. The proposal may be at variance to this Principle.

Methodology Shepherd et al, 2001.

Methodology GIS Databases:
 - Public Drinking Water Sources (PDWSAs) - DOE 09/08/05
 - Hydrography, linear - DOE 1/2/04

(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 vegetation under application lies within the Moore River. As the natural drain of the landscape, the Moore River does accumulate water and can flood, however this is as a result of what occurs in the wider landscape. As the greatest influence on the river's water levels is the catchment, it is not expected that the removal of this relatively small amount of vegetation would increase flooding. The proposal is not likely to be at variance to this Principle.

Methodology GIS Databases : Hydrography, linear - DoE 01/02/04

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

Comments

There are no Works Approvals or EP Act Licences required. Although the clearing is to occur in the Moore River which is proclaimed, as the method of clearing will not interfere directly with the bed or banks, a licence under the RIWI Act is not required.

There is one Native Title Claim over the area under application. Most of the area occurs on Crown Reserves vested with the Shire of Moora prior to 23 December 1996, therefore it is likely native title has been extinguished. Native title may persist in those few Crown Reserves and Road Reserves that are not vested with the Shire, therefore the grant of the clearing permit may constitute a future act. In this instance 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.

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Restoration	Cutting	300	Grant	The assessable criteria have been addressed and it was found that the proposal may be at variance to Principles (e) and (f). However, the proposal has the potential to enhance rehabilitation works planned for the river; it is a condition of the permit that the Shire of Moora undertake planting along the banks of this section of the Moore River. Therefore it is recommended that the clearing permit be granted.

5. References

DAFWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. DoE TRIM ref DOC1771.

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.

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.

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

Department of Natural Resources and Environment, 2002

GIS Databases:

- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Pre-European Vegetation - DA 01/01
- Local Government Authorities - DLI 08/07/04.

(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**

Riparian vegetation is responsible for a range of functions that keep waterways healthy, including stabilising the banks, nutrient cycling and providing habitat. In this instance the proposed clearing would take place within the Moore River, which places the application at variance to this Principle. However, the selective removal of these saplings aims to prevent further erosion of banks. This could occur in a medium flow event where groups of these saplings have the potential to redirect the flow of water to the banks (DoW). Where vegetation exists on the banks, this redirection of the water would not have any adverse consequences. However there are many sections of the river which are already eroded and denuded of vegetation. The proposal aims to reduce the risk of further erosion at these sites while revegetation works are undertaken as a long term solution to this problem.

Methodology GIS Databases: Hydrography, linear - DoE 01/02/04
Site visit, DoE Officer 2006.
DoW Rivercare Officer 2006.

(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**

DAFWA (2006) has advised that that the proposal is unlikely to cause appreciable land degradation as long as the clearing is carried out as specified. That is; only *Casuarina obesa* or *Allocasuarina huegeliana* occurring within the riverbed will be removed and that the trees are to be cut above the level of the soil, so there is no disturbance of the riverbed itself. These points will be covered by conditions on the permit. The proposal is not likely to be at variance to this Principle.

Methodology DAFWA, 2006.

(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 Karamarra Nature Reserve, consisting of some 43ha and another un-named nature reserve of 152ha, are located approximately 6km and 10km respectively from the Moore River. It is possible that these conservation areas could be linked to the Moore River through corridors provided by road reserves and other remnant vegetation. However, if the vegetation of the Moore River is contributing to the ecological values of these reserves, it is unlikely that limited clearing of *Casuarina obesa* or *Allocasuarina huegeliana* specimens would impact upon this. The proposal is not likely to be at variance to this Principle.

Methodology Site visit, DoE Officer 2006.
GIS Databases:
- CALM Regional Parks - CALM 12/04/02
- CALM Managed Lands & Waters - CALM 01/07/05
- Proposed National Parks FMP-CALM 19/03/03
- 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**

The vegetation under application lies within the Moore River. There is a P2 Public Drinking Water Source Area to the east of the Moora townsite, over which the Moore River runs. However, this application would only involve the section of the river that is between Gardiner Street and Dandaragan Street and thus does not fall within the P2 area. The amount of clearing proposed is relatively small given that the saplings are young and only 300 would be removed. In addition the vegetation occurs within a river; an area where the water quality is more likely to be influenced by seasonal flows and activities that are occurring within the surrounding catchment. Therefore it is unlikely that this proposal will affect the surface or underground water of the area.

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)

