



1. Application details

1.1. Permit application details

Permit application No.: 1026/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Great Southern Olive Holdings Pty LTD

1.3. Property details

Property: LOT 10188 ON PLAN 126023
LOT 18759 ON PLAN 84418
LOT 7454 ON PLAN 119883
LOT 16114 ON PLAN 165028
LOT 7455 ON PLAN 119884
LOT 7372 ON PLAN 118919
Local Government Area: Shire Of Brookton
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
15.5		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 37: Shrublands; tea-tree thicket. Beard vegetation association 352: Medium woodland; York gum. Beard vegetation association 946: Medium woodland; wandoo. Beard vegetation association 949: Low woodland; banksia (Hopkins et al. 2001; Shepherd et al. 2001)	The area under proposal consists mainly of Eucalyptus wandoo (wandoo) and some Corymbia calophylla (marri), with no remaining understorey. The area has been degraded through historical grazing activity (Site Visit 20/2/2006).	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	There is no evidence of internal fences to prevent stock access to native vegetation. There is no York Gum, tea-tree thicket or banksia within the area to be cleared, making the reference to Beard vegetation types 37, 352 and 949 not applicable in this instance. Assessment of the condition of vegetation is based upon a site visit (20/2/2006) and refers to some larger clumps of primarily wandoo trees. Areas covering isolated paddock trees would be considered to be completely degraded due to the distance between trees and the existence of no understorey vegetation.

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 area under application contains mainly paddock trees being primarily Eucalyptus wandoo with some Corymbia calophylla. There was no native understorey vegetation present in the areas under application (Site Visit 20/2/2006). There are no internal fences, therefore stock have had access to the entire property for many decades (Site Visit 20/2/2006).

The vegetation under application, being almost monocultural, is not considered to contain a high level of biological diversity (Site Visit- 20/2/2006). Other native vegetation within the local area is well structured with shrub and groundcover layers and these include approximately 500ha of native vegetation on private land 3km to the north east and at Kokeby Water Reserve 10km to the north east (Site Visit 20/2/2006). Wills Nature Reserve is located 13km south west of the area under application, the Wandoo National Park less than 20km to the north west, and there are several nature reserves located a similar distance to the south and south east. Aerial photography indicates that the native vegetation in these CALM managed lands is also well structured. Therefore, the area under application does not comprise a high level of biodiversity, and certainly not in relation

to the proximal pockets of remnant vegetation and that in local reserves.

Methodology Site Visit (20/2/2006)
GIS Database:
- Brookton-Boddington 1m Orthomosaic - DLI 04

(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 under application contains mainly paddock trees being primarily Eucalyptus wandoo with some Corymbia calophylla. There was no native understorey vegetation present during the site visit (20/2/2006). Stock have access to the entire property and there are no internal fences restricting access to native vegetation with the area having been cleared for many decades.

Given the above information it is unlikely that the remaining paddock trees would provide habitat that is significant for native fauna, particularly when compared to well structured remnants of native vegetation locally. During the Site Visit (20/2/2006) the assessing officer was concerned that a few of the wandoo trees may have been of sufficient size to create hollows of a dimension suitable for the breeding of Carnabys Cockatoo (Calyptorhynchus latirostris). It is also likely that other bird species may use the trees for roosting and possibly nesting. Photos representative of the trees to be removed were forwarded to CALM who responded (CALM 2006) by advising that "the C. calophylla and E. wandoo depicted therein are unlikely to be sufficiently mature to offer nesting habitat to Carnaby's Cockatoos at this stage. However, if these trees were left undisturbed, in all probability they would eventually develop hollows that would become suitable nesting habitat for this taxon."

An observation from the site visit (20/2/2006) was that the condition of C. calophylla was generally deteriorating and there had been some recent tree deaths. The assessing officer has noted similar tree deaths throughout the Avon Valley. A significant portion of the E. wandoo is suffering from "wandoo crown decline" which affects the growth of the wandoo. With consideration given to CALM's(2006) comments and due to the current condition of the vegetation, fewer of these trees than would normally be expected are likely to develop suitable breeding hollows for Carnabys Cockatoo in the future.

The applicant has indicated a willingness to replant 20,000 trees (including E. wandoo) elsewhere on the property. Furthermore, in order to create immediate nesting opportunities for the Carnabys Cockatoo, the applicant has undertaken to erect 30 suitable nesting boxes. There is approximately 30 hectares of remnant vegetation located on the property that is not subject to this proposal. These proposed actions by the applicant will provide future habitat and will also provide immediate breeding habitat for native fauna.

Methodology Site Visit (20/2/2006)
CALM (2006) (DoE TRIM Ref ND 820)

(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**

Only two species of native vegetation (E. wandoo & C Calophylla) have been identified within the area under application with neither of these being declared rare or priority flora. There is no understorey due to historical grazing therefore it is highly unlikely that any significant flora would be found within the area under application (Site Visit - 20/2/2006).

Methodology Site Visit (20/2/2006)
GIS Databases:
- Declared Rare and Priority Flora List - CALM 13/08/03

(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**

Only two species of native vegetation (E. wandoo & C Calophylla) have been identified within the area under application with neither of these being a part of any Threatened Ecological Community. There is no understorey due to historical grazing therefore it is highly unlikely that any Threatened Ecological Communities would be found within the area under application (Site Visit - 20/2/2006).

Methodology Site Visit (20/2/2006)
GIS Databases:
- Threatened Ecological Community Database - CALM 15/07/03
- Environmentally Sensitive Areas - DOE 22/10/04

(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

The State Government is committed to the National Objectives Targets for Biodiversity Conservation which includes a target that prevents a clearance of ecological communities with an extent below 30% of that present pre-European settlement (Department of Natural Resources and Environment 2002, EPA 2000).

The vegetation at the site is mapped as components of Beard Vegetation Associations 37, 352, 946 and 949 (Hopkins et al. 2001) of which there is 55.9%, 15.2%, 17.9% and 82.6% (Shepherd et al. 2001) respectively of the pre-European extent remaining. There is however no vegetation within the area under application resembling the description of Beard Vegetation Associations 37, 352 and 949. Most of the vegetation remaining would appear to be fragments of Beard Vegetation Association 946 that has a status of 'vulnerable' for biodiversity conservation (Department of Natural Resources and Environment 2002). Given there is 17,000ha remaining of Beard Vegetation Type 946, of which 45.2% is held in reserve (Shepherd et al. 2001), clearing in this instance is not considered to be a significant conservation threat.

Although the extent of native vegetation remaining within the Avon Wheatbelt Bioregion is 16.0% (Shepherd et al. 2001) while the Shire of Brookton contains 15.6%, the applicant proposes to revegetate approximately 45ha elsewhere on the property with 20,000 trees. Given that the vegetation under application consists of paddock trees with no native understorey, this is not considered to be a serious conservation issue (Site Visit - 20/2/2006).

The property is located within the agricultural area as defined by EPA Position Statement No. 2 (EPA 2000). The EPA's position on 'clearing in the agricultural area for agricultural purposes' is that any further reduction in native vegetation through clearing for agriculture cannot be supported. However, again, the area under application is devoid of understorey and the composition is not representative of the pre-European descriptions of vegetation for the area. The proponent has also undertaken to revegetating approximately 45ha elsewhere on the property.

Methodology Site Visit (20/2/2006)
Shepherd et al. (2001)
Hopkins et al. (2001)
Department of Natural Resources and Environment (2002)
GIS Databases:
- Pre-European Vegetation - DA 01/01
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- EPA Position Paper No 2 Agriculture Region - DEP 12/00

(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 at variance to this Principle

There are no watercourses or wetlands within the area under application and none of the vegetation is considered to be wetland dependent vegetation. There are two watercourses rising elsewhere within the property under application however suitable buffers have been set aside for these watercourses. There is a minimum of 50m from the vegetation under application to the nearest watercourse and at least 70m between the wetland and the nearest vegetation to be cleared (Site Visit 20/2/2006).

Methodology Site Visit (20/2/2006)
GIS Databases:
- Hydrography, linear - DOE 01/02/04
- ANCA Wetlands - CALM 08/01
- Hydrographic Catchments - Catchments DOE 3/4/03
- RAMSAR Wetlands - CALM 21/10/02

(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 applicant is proposing to plant olive trees in the area under application. DAWA (2006) raises "no objection to the clearing proposal" and advises there is a low risk associated with land degradation issues of salinity, wind erosion and water erosion.

A meeting held on 17/3/2006 with the applicant discussed plans to revegetate 45 hectares or 20,000 trees of native vegetation elsewhere on the property. Given that there are 1,500 trees or less to be cleared as part of this proposal, the planting of a further 20,000 trees will contribute towards the local groundwater and surface water hydrology.

Methodology DAWA (2006) (DoE TRIM Ref IN 25977)
Site Visit (20/2/2006)

- GIS Databases:
- Salinity Mapping LM 25m - DOLA 00
 - Salinity Monitoring LM 50m - DOLA 00
 - Salinity Risk LM 25m - DOLA 01
 - 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 likely to be at variance to this Principle

Of the conservation areas in the local area, the nearest nature reserve (Wills Nature Reserve) is 13km south west of the area under application. Given the distance from the reserve and that the vegetation under application contains no native understorey, it is unlikely that clearing will have an adverse impact on the environmental values of nearby conservation areas (Site Visit 20/2/2006).

- Methodology** Site Visit (20/2/2006)
Shepherd et al. (2001)
Hopkins et al. (2001)
JANIS Forests Criteria (1997)
GIS Databases:
- CALM Managed Lands and Water - CALM 01/08/04
- Pre-European Vegetation - DA 01/01

(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 are two watercourses rising within the property under application. Suitable buffers (minimum 50m and average greater than 100m) have been set aside for these watercourses. Additionally there is a wetland that is at least 70m from any native vegetation under application (Site Visit - 20/2/2006).

DAWA (2006) advises "the removal of paddock trees is unlikely to have a major effect on groundwater in this situation, with these (paddock trees) being replaced by 133,000 olive trees, in actual fact it would be expected that recharge would be reduced from the existing agricultural practice."

Great Southern Olive Holdings has proposed to revegetate 45 hectares or 20 000 trees of native vegetation elsewhere within the property. This will contribute positively towards the local groundwater and surface water hydrology.

- Methodology** DAWA (2006) (DoE TRIM Ref IN 25977)
Site Visit (20/2/2006)
GIS Databases:
- Hydrography, linear - DOE 01/02/04
- Salinity Mapping LM 25m - DOLA 00
- Salinity Monitoring LM 50m - DOLA 00
- Salinity Risk LM 25m - DOLA 01
- 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

DAWA (2006) advises that the risk of flooding is low. The soils are of high porosity (sandy gravels) which do not allow for high surface runoff (Site Visit 20/2/2006).

Flooding impacts are unlikely to occur as a result of the proposed clearing due to its location, the lack of understorey vegetation and amount to be cleared. In this instance the native vegetation under application (approx 15ha) consists primarily of paddock trees and small clusters of trees that are distributed over a total area of greater than 400ha.

- Methodology** DAWA (2006)
Site Visit (20/2/2006)

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

Comments

The Shire of Brookton (2006) advises that "Council has previously granted planning approval for the establishment of a proposed olive farm over the subject land. As such, no objection is offered to the proposed area permit as necessary to facilitate the project."

The applicant is proposing to use groundwater to irrigate the olive plantation. Given that the water source is not artesian, and that the area under application is not in a proclaimed groundwater area, no licence is required for the extraction of groundwater in this instance. The applicant's also have a property under development in the Shire of Beverly which is not the subject of this application.

There is no other RIWI Act licence, Works Approval or EP Act Licence that will affect the area applied to clear.

Methodology Shire of Brookton (2006) Submission (DoE TRIM Ref EI 5354)

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Plantation	Mechanical Removal	15.5	Grant	<p>The application has been assessed and the clearing as proposed may be at variance to Principle e and not likely to be at variance to the remaining Clearing Principles. For Principle e the remaining few trees are devoid of understorey and the vegetation association is not representative of those mapped for the area. The vegetation remaining resembles Beard Vegetation association 946 of which 45.2% of the remaining 17,000 ha is held in reserve. This figure far exceeds the minimum required under the Janis criteria of 15% (JANIS Forests Criteria 1997). Similarly, in terms of not clearing vegetation in areas defined in EPA Position Statement No. 2, the remaining vegetation is not representative of that present pre European disturbance and therefore is not considered a significant conservation threat.</p> <p>The applicant has offered to plant 20,000 trees on the property. This is more than ten times the approximate number of 1,500 trees that are under application. The applicant has also agreed to the placement of 30 constructed nesting boxes on mature trees located on the property outside the area under application. This will create immediate breeding habitat for fauna and more specifically the Carnaby's Cockatoo.</p> <p>The applicant has agreed to the tree planting and placement of nesting boxes being imposed as conditions on the permit. The assessing officer therefore recommends that the permit should be granted.</p>

5. References

- CALM (2006) Correspondence. Department of Conservation and Land Management, Western Australia. DoE TRIM Ref ND 820.
- DAWA (2006) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM Ref IN 25977.
- 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.
- 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.
- 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.
- JANIS Forests Criteria (1997) Nationally agreed criteria for the establishment of a comprehensive, Adequate and Representative reserve System for Forests in Australia. A report by the Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-committee. Regional Forests Agreement process. Commonwealth of Australia, Canberra.
- 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
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)