



**1. Application details**

**1.1. Permit application details**

Permit application No.: 3041/1

Permit type: Area Permit

**1.2. Proponent details**

Proponent's name: Dane Leslie Sieber

**1.3. Property details**

Property: LOT 7053 ON PLAN 126724 ( YILLIMINNING 6312)

Local Government Area: Shire Of Narrogin

Colloquial name:

**1.4. Application**

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
32		Mechanical Removal	Grazing & Pasture

**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
Mapped Beard (1980) vegetation association 1023 is described as medium woodland; York gum, wandoo & salmon gum (Eucalyptus salmonophloia)	The area under application is very open, consisting predominantly of Eucalyptus wandoo (White Gums), and Acacia acuminata (Jam trees). There is no ground cover layer present as grazing occurs within the application area, and a low incidence of weeds. Soil varied from white sand to lateritic soils. Rosellas were observed utilising the mature trees within the application area. Many dead and fallen trees were also observed (DEC, 2009).	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation description was assessed through aerial photography and a site inspection (DEC, 2009).

**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 at variance to this Principle**

The proposal is to clear 32 ha for agricultural purposes. The vegetation under application has been historically grazed and is in degraded (Keighery 1994) condition (DEC 2009).

The local area is highly cleared with approximately 10% of vegetation remaining within a 20 km radius. The vegetation under application is part of the largest remnant in a 10 km radius which includes Birdwhistle Nature Reserve to the north. This remnant is a significant stepping stone to other nature reserves in the local area. Further clearing of the remnant would further degrade the biodiversity values of the vegetation through the increased introduction of disturbance factors such as weeds, feral animals and human activities.

There are a number of priority flora species that have been recorded in the local area (10 km radius). The following species are in close proximity to the area under application (2.5km away) Acacia deflexa (within road reserve) (P3), Eucalyptus ioxophleba x wandoo (on the adjacent shire land) (P4), and Caladenia integra (on the adjacent shire land) (P4). The two species found on adjacent shire land and seed dispersal into the application area is likely. A flora survey is the only way to determine the presence or absence of these species.

As the local area is highly cleared the vegetation under application, although considered to be in a degraded (Keighery, 1994) condition, is biodiverse in comparison to the surrounding highly cleared agricultural landscape.

Additionally, the vegetation under application is supporting a larger remnant which is significant as a stepping stone for flora and fauna.

Therefore, the proposed clearing is considered to be at variance to this principle.

**Methodology** DEC (2009)  
Keighery (1994)

GIS Databases:

- CALM Managed Lands and Waters - CALM 01/06/05
- Corrigin South 1.4m Orthomosaic - Landgate 2000
- Dumbleyung Kukerin 1.4m Orthomosaic - Landgate 2002
- Narrogin 80cm Orthomosaic - Landgate 2005
- Wagin 50cm Orthomosaic - Landgate 2006
- SAC Biodatasets - accessed 3 Apr 09

**(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 may be at variance to this Principle**

The local area is highly cleared with approximately 10% of vegetation remaining within a 20 km radius. The vegetation under application is part of the largest remnant in a 10 km radius which includes Birdwhistle Nature Reserve to the north. This remnant is a significant stepping stone for fauna to other nature reserves in the local area.

Fauna species of conservation significance recorded in the local area have been recorded within the nearby nature reserves and are likely to use the area under application as part of their home range.

As the local area (20 km radius) is highly cleared, any fauna that inhabits in the local area is likely to be utilising the vegetation under application or the remnant it is part of, therefore, the vegetation under application is considered to be significant habitat for indigenous fauna.

The proposed clearing of 32 ha in this landscape is likely to reduce significant habitat for fauna and may be at variance to this principle.

**Methodology** DEC (2009)

GIS Databases:

- CALM Managed Lands and Waters - CALM 01/06/05
- Corrigin South 1.4m Orthomosaic - Landgate 2000
- Dumbleyung Kukerin 1.4m Orthomosaic - Landgate 2002
- Narrogin 80cm Orthomosaic - Landgate 2005
- Wagin 50cm Orthomosaic - Landgate 2006
- SAC Biodatasets - accessed 3 Apr 09

**(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 immediate proximity of the area under application.

The proposed clearing is not likely to be at variance to this principle.

**Methodology** GIS Databases:  
- SAC Biodatasets - accessed 3 Apr 09

**(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 may be at variance to this Principle**

The vegetation under application is within the buffer of three TEC's (critically endangered) being perched wetlands of the wheatbelt region.

These TEC's are on different soil and vegetation types to the area under application.

The clearing of 32ha in this highly cleared landscape may incrementally increase recharge to these wetlands as the land slopes down to the wetlands. The impact is unlikely to be significant, however, the cumulative impacts of clearing in this landscape may impact on these TEC's.

The proposed clearing may be at variance to this principle.

**Methodology** TEC Database (Accessed 4 April 09)

GIS Database:

- SAC Biodatasets - accessed 4 Apr 09
- Mattiske Vegetation (01/03/1998)
- Heddle Vegetation Complexes - DEP 22/06/95
- Pre European Vegetation - DA 01/01
- Soils, Statewide DA 11/99
- Topographic contours statewide - DOLA and ARMY 12/09/02

**(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 at variance to this Principle**

The local area is highly cleared with approximately 10% of vegetation remaining in a 20 km radius.

The following table details the extent of vegetation remaining for the Shire, Bioregion and vegetation associations:

	Pre-European (ha)	Current extent (ha)	Remaining (%)	% In reserves DEC Managed Land
IBRA Bioregions*				
Avon Wheatbelt	9 517 109	1 443 690	15.17	7.6
Shire*				
Narrogin	161 815	19 631	12.13	14.93
Beard Vegetation Association in the Bioregion*				
1023	1 522 675	97 440	6.10	0.78
Beard Vegetation Association *				
1023	133 801	12 105	9.05	1.29

\* (Shepherd et al. 2007)

Lot 7053 on Plan 126724  
 1023 (currently) 19.5 (~166ha)  
 1023 (after clearing) 15.72 (~134ha)

As the vegetation associations within the area proposed to be cleared are below 30% in the bioregion, the vegetation is considered to be a critical asset for the State.

The area under application is located within the Intensive Land-use Zone (Shepherd et al. 2001) and is located in the area defined in EPA Position Statement No. 2 (EPA, 2000). Significant clearing of native vegetation has already occurred in this area and any further reduction through clearing for agriculture is not supported (EPA 2000).

Given that the area under application comprises 32 hectares located within an extensively cleared agricultural area (EPA 2000), the limited amount of vegetation remaining in the Bioregion, Shire and vegetation association and the significant biological value within the bioregion, it is therefore considered that the vegetation under application is significant as a remnant in an area that has been extensively cleared and is at variance to this principle.

**Methodology** EPA (2000)  
 Shepherd (2007)  
 Shepherd et al (2001)

GIS Databases:

- Corrigin South 1.4m Orthomosaic - Landgate 2000
- Dumbleyung Kukerin 1.4m Orthomosaic - Landgate 2002
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Local Government Authorities - DLI 8/07/04
- Narrogin 80cm Orthomosaic - Landgate 2005
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001
- Wagin 50cm Orthomosaic - Landgate 2006
- SAC Biodatasets - accessed 3 Apr 09

**(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**

There is a non perennial watercourse running through the vegetation under application to the east. Some of this water is being captured in a dam just north of the application area.

The proposed clearing will therefore remove riparian vegetation which serves to filter water, provide habitat for fauna and stabilise banks. However, the applicant has stated that the watercourse will be left uncleared to assist in the prevention of erosion and maintenance of habitats.

Given this, the proposal may be at variance to this principle.

**Methodology DEC (2009)**

GIS Databases:

- Corrigin South 1.4m Orthomosaic - Landgate 2000
- Dumbleyung Kukerin 1.4m Orthomosaic - Landgate 2002
- Hydrography linear - DOW 13/7/06
- Narrogin 80cm Orthomosaic - Landgate 2005
- Wagin 50cm Orthomosaic - Landgate 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**

The soil type for the area under application is mapped as CaS128 which is described as broad flat valleys with small clay pans and salt-lake remnants in some localities with chief soils being hard alkaline yellow soils underlain by acid lateritic clays below depths of from 2 to 4 ft.

The Department of Food and Agriculture (DAFWA 2009) have advised that 'there is a saline hillside seep of 5 ha within the holding but this is not near the area under application. The depth to groundwater is unknown and as the application area is mid slope there is no evidence of salinity or groundwater. The risk of on site and offsite salinity from clearing 32 ha is low'. 'The risk of on and off site eutrophication, wind erosion, water erosion and waterlogging is low'.

The proposed clearing is unlikely to be at variance to this principle.

**Methodology DAFWA (2009)**

GIS database:

- Soils, Statewide DA 11/99

**(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 at variance to this Principle**

The local area is highly cleared with approximately 10% of vegetation remaining in a 20 km radius.

The vegetation under application is part of the largest remnant in a 10 km radius which includes Birdwhistle Nature Reserve to the north. This remnant is a significant stepping stone to other nature reserves to the north and south such as Borkan, Taarblin Lake and Yarling Nature Reserves. This 'stepping stone' is likely to be of importance to fauna, particularly avifauna, and flora genetic movement in the landscape.

As the local area is highly cleared the vegetation under application, although considered to be in a degraded (Keighery, 1994) condition, is biodiverse in comparison to the significant amount of surrounding cleared agricultural land. Further clearing of the remnant would degrade the biodiversity values of the vegetation through the increased introduction of disturbance factors such as weeds, feral animals and human activities. This would therefore decrease the quality of the remnant as a stepping stone and compromise the connectivity to nearby nature reserves.

The proposed clearing is therefore considered to be at variance to this principle.

**Methodology GIS Databases:**

- CALM Managed Lands and Waters - CALM 01/06/05
- Corrigin South 1.4m Orthomosaic - Landgate 2000
- Dumbleyung Kukerin 1.4m Orthomosaic - Landgate 2002
- Narrogin 80cm Orthomosaic - Landgate 2005
- Wagin 50cm Orthomosaic - Landgate 2006

**(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 Department of Food and Agriculture (DAFWA 2009) have advised that 'there is a saline hillside seep of 5 ha within the holding but this is not near the area under application. The depth to groundwater is unknown and as the application area is mid slope there is no evidence of salinity or groundwater. The risk of on site and offsite salinity and eutrophication from clearing 32 ha is low'.

There is a non perennial watercourse running through the vegetation under application to the east. Some of this water is being captured in a dam just north of the application area.

The proposed clearing will therefore remove riparian vegetation which serves to filter water, provide habitat for fauna and stabilise banks. This is likely to cause turbidity and deteriorate the quality of water when the watercourse is flowing. However, the applicant has stated that the watercourse will be left uncleared to assist in the prevention of erosion and maintenance of habitats.

**Methodology DAFWA (2009)**

GIS database:

- Hydrography, linear - DOW 13/7/06
- Salinity Risk LM 25m - DOLA 00

**(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 Department of Food and Agriculture (DAFWA 2009) have advised that 'as there is a sandy surfaced duplex soil the degradation risk of waterlogging and flooding is low'.

The proposed clearing is not likely to be at variance to this principle.

**Methodology DAFWA (2009)**

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

**Comments**

The vegetation is within the agricultural area defined in EPA Position Statement No. 2 (EPA 2000). EPA Position Statement No. 2 (EPA 2000) states that significant clearing of native vegetation has already occurred on agricultural land, leading to a reduction in biodiversity and increase in land salinisation, and therefore any further reduction in native vegetation through clearing for agriculture cannot be supported. The EPA (2000) recommends that all existing native vegetation be protected from passive clearing through, for example, grazing by stock or clearing by other means.

Reasonable steps have not been taken to avoid clearing native vegetation and the vegetation associations are below 30% as is the remaining vegetation in the Shire and bioregion.

The Department sent a letter to the applicant on the 11 May 2009. A response letter was received from the applicant on 10 June 2009. The applicant outlined the following:

- the vegetation on the property was predominately White Gums not Salmon Gums;
- the extent of vegetation remaining on the property after clearing would be 15.72% not 8.25%; and
- he is prepared to leave the perennial watercourse uncleared.

The applicant's comments have been addressed in the principles where appropriate.

**Methodology Application area is zoned farming under Town Planning Scheme.  
EPA (2000)**

GIS database:

- 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 at variance to Principles (a), (e) and (h), may be at variance to Principle (b), (d) and (f) and is not likely to be at variance to the remaining clearing Principles

## 5. References

- DEC (2009) Site Inspection Report for Clearing Permit Application CPS 3041/1, Lot 7053 on Deposited Plan 126724, Yilliminning. Site inspection undertaken 24/4/09. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC83776).
- Department of Agriculture and Food (2009) Advice. Commissioner of Soil and Land Conservation. DEC TRIM Ref: DOC83697.
- 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.
- 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 subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.
- 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
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)