



1. Application details

1.1. Permit application details

Permit application No.: 3112/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Frank Seidler

1.3. Property details

Property: LOT 10167 ON PLAN 206424 ( YALLABATHARRA 6535)
Local Government Area: Shire Of Northampton
Colloquial name:

1.4. Application

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

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Table with 4 columns: Vegetation Description, Clearing Description, Vegetation Condition, Comment. Contains detailed site information and clearing details.

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 original proposal was to clear 200 ha of native vegetation for the purpose of establishing a native flora plantation. The applicant subsequently amended the application to remove 30 ha of excellent (Keighery, 1994) condition vegetation.

The vegetation under application is divided into 3 cells; all cells have been impacted by a clearing disturbance approximately 10 years ago (Seidler, 2009). The vegetation ranges from degraded to very good (Keighery, 1994) condition (DEC, 2009a). A site visit of the application areas identified that a fire event has impacted much of cell 2 (and some adjoining areas not under application) (DEC, 2009). It is expected that, if left undisturbed, vegetation under application will regenerate to a similar condition as nearby vegetation to the south of the application area which is in excellent (Keighery, 1994) condition (DEC, 2009a).

The local area (10 km radius) retains approximately 45 % native vegetation and the mapped vegetation type retains approximately 43.29% of its pre-European extent within the Geraldton Sandplains bioregion (Shepherd, 2007).

The application area is within the EPA defined agricultural area and while the local area has a higher percentage of remaining vegetation than other agricultural areas it is one of few remnant vegetation patches of the agricultural area that preserves a reasonable representation of the intricate soil landscape that once characterised much of the agricultural area (EPA, 2000).

The vegetation under application is within a larger remnant of native vegetation which is part of an ecological linkage. Much of the vegetation within this linkage is in similar condition to the application area.

There are five priority flora species recorded within the local area (10 km radius) on the same mapped soil and vegetation types as the applied area. Given that the environmental values of the application area is similar to Kalbarri National Park (DEC, 2009a) the clearing as proposed is not likely to adversely impact on the continued existence of these species.

Given the removal of the vegetation under application, particularly portions of very good (Keighery, 1994) condition will incrementally degrade the environmental linkage of which the application area is a part, and the possibility of priority flora occurring within the applied area, the clearing as proposed is at variance to this principle.

**Methodology** References:  
DEC (2009a)  
EPA (2000)  
Keighery (1994)  
Seidler (2009)  
Shepherd (2007)

GIS Database:  
CALM Managed Lands and Waters - CALM 01/06/05  
SAC Biodatasets - accessed 14 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 at variance to this Principle**

The local area (10 km radius) retains approximately 45% native vegetation however the application area is within the EPA defined agricultural region (EPA, 2000) and is part of a regionally significant ecological linkage.

There is one known occurrence of threatened or priority fauna species occurring within the local area (10km radius), namely the Australia Bustard (*Ardeotis australis*).

The proposal to chain and burn approximately 170 ha of native vegetation may result in the disruption of the ecological linkage of which the vegetation under application is a part. This ecological linkage connects areas of DEC managed lands (Kalbarri National Park) with the Western Australian coastline.

The application area has been impacted by a clearing disturbance approximately 10 years ago however still retain basic vegetation structure and value as habitat for native fauna (Seidler, 2009).

A site inspection of the application area identified that applied area has regenerated to degraded to very good (Keighery, 1994) condition (DEC, 2009a). If the vegetation is left undisturbed it will return to a similar condition as nearby vegetation to the south of the application area which is in excellent (Keighery, 1994) condition (DEC, 2009a).

Given the above, clearing of the application area is at variance to this principle as the clearing will cause deterioration of a regional ecological linkage and result in the loss of significant fauna habitat within the agricultural area.

**Methodology** References:  
 DEC (2009a)  
 EPA (2000)  
 Keighery (1994)  
 Seidler (2009)

GIS Database:  
 NLWRA, Current Extent of Native Vegetation 20 Jan 2001  
 Pre European Vegetation - DA 01/01  
 SAC Biodatasets - accessed 14 May 2009

**(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 seven known records of rare flora recorded within the 20 km of the application area.

Of these on rare flora, namely *Caladenia bryceana* subsp. *Cracens*, occurs within the same mapped soil and vegetation types as the applied area. This species is known to occur on sand over limestone and within 20km of the applied area on low heath on limestone hills and further north in winter-moist flats (WA Herbarium, 1998).

A site visit noted that the vegetation under application was open shrubland (DEC, 2009a) and was gently undulating sandplain on aeolian sand over laterite (DAFWA, 2009). The closest known wetland or watercourse is approximately 1.1km west of the application area.

Given the above the clearing as proposed is not likely to be at variance to this principle as the application area does not contain suitable vegetation or soils for this rare flora.

**Methodology** References:  
 DEC (2009a)  
 DAFWA (2009)  
 WA Herbarium (1998-)

GIS Database:  
 SAC Bio Datasets accessed 14 May 2009

**(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 records of threatened ecological communities within the local area (10 km radius).

Given the above the clearing as proposed is not likely to be at variance to this principle.

**Methodology** GIS Database:  
 SAC Bio Datasets accessed 14 May 2009

**(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**

	Pre-European (ha)	Current extent (ha)	Remaining (%)	% In reserves DEC Managed Land
IBRA Bioregions* Geraldton Sandplains^	252,586	234,367	92.79	10.77
Shire* Northampton	1,258,676	909,535	72.26	25.38
Beard Vegetation Association* 408^	328,527	142,230	43.29	70.00
Beard Vegetation Association with Bioregion* 408^	328,527	142,230	43.29	70.00

\* (Shepherd et al. 2007)  
^ Area within Intensive Land Use Zone

The vegetation under application is significant as part of an ecological linkage which may be fragmented by clearing of the vegetation under application, removal of the vegetation under application will further fragment the remnant of which it is a part.

Although the Beard Vegetation associations mapped within the vegetation under application are above the 30% biodiversity conservation target, 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 170 hectares located within an extensively cleared agricultural area (EPA 2000), and the value of the vegetation as part of an ecological linkage within the bioregion, the proposal is at variance to this principle.

**Methodology** References:  
EPA (2000)  
Shepherd et al. (2007)

GIS Database:  
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 14 May 2009  
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**  
The closest wetland or watercourse to the applied area is a minor non-perennial watercourse approximately 1.1 km west.

Given the distance between the application area and the closest riparian vegetation, the clearing as proposed is not likely to be at variance to this principle.

**Methodology** GIS Database:  
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

**(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.**

**Comments** **Proposal is at variance to this Principle**  
The mapped soil type of the applied area, Ca28, is described as gently undulating sand plain with occasional low lateritic residuals: chief soils are leached sands and yellow siliceous sands (Northcote et al, 1968). This soil type is highly erodible and removal of the vegetation under application will likely cause appreciable soil wind erosion if a vegetation cover is not successfully established (DAFWA, 2009).

Clearing of the vegetation under application will cause appreciable land degradation in the form of salinity from increased recharge and groundwater seepage and serious soil wind erosion if protective vegetation is not re-established (DAFWA, 2009).

The clearing of 170ha of native vegetation on these soil types is at variance to this principle as, given the highly erodible soils under application; clearing would result in serious wind erosion.

**Methodology** References:  
DAFWA (2009)  
Northcote et al (1968)

GIS Database:  
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 may be at variance to this Principle**

The closest conservation area is located approximately 5.9km south west of the application area, namely Utcha Well Nature Reserve.

The proposal to chain and burn approximately 170ha of native vegetation will likely result in the disruption of the ecological linkage of which the vegetation under application is a part. This ecological linkage connects areas of DEC managed lands (Kalbarri National Park) with the Western Australian coastline. The vegetation under application is part of habitat supporting conservation areas and removal of this vegetation may impact on the environmental values of this conservation area.

Given the above the clearing as proposed may be at variance to this principle.

**Methodology** GIS Database:  
CALM Managed Lands and Waters - CALM 01/06/05  
Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02  
SAC Bio Datasets accessed 14 May 2005  
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 may be at variance to this Principle**

The closest surface water expression is located approximately 1.1 km west of the application area. Given this it is unlikely that the clearing as proposed will impact on the quantity or quality of surface water in the vicinity of the applied area.

The proposal to clear 170ha of native vegetation may expose the land to wind erosion and salinity from increased recharge and groundwater seepage if protective vegetation is not re-established (DAFWA, 2009).

Given the above, the clearing as proposed may be at variance to this principle.

**Methodology** References:  
DAFWA (2009)

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 Isohyets (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 soils of the application area are mapped as chiefly leached sands and yellow siliceous sands which are known to have high permeability.

Mapping identifies the applied area as having approximately 500mm rainfall and 400mm evapotranspiration annually.

Given the above the clearing as proposed is not likely to cause or exacerbate the incidence or intensity of flooding as water is not likely to persist on A horizon soils.

**Methodology** GIS Database:  
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 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.

There are currently no Mallee and /or Sandalwood plantations as far north as the application area (NACC, 2009; DEC, 2009c; DAFWA, 2009).

**Methodology** References:  
DAFWA (2009)  
DEC (2009c)  
EPA (2000)  
NACC (2009)

#### **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 Principle (a), (b), (e) and (g), may be at variance to Principles (h) and (i) and is not likely to be at variance to the remaining clearing Principles.

#### **5. References**

- DEC (2009a) Site Inspection Report for Clearing Permit Application CPS 3112/1, Lot 10167 Ogilvie Road, Northampton. Site inspection undertaken 26/05/2009. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC85866).
- DEC (2009b) Advice to Assessing Officer regarding Commercial Producers Licence, Department of Environment and Conservation, DOC86314
- DEC (2009c) Advice to assessing officer from Natural Resource Management Branch, Department of Environment and Conservation, DOC86315
- Department of Agriculture and Food (2009) Advice. Commissioner of Soil and Land Conservation. DEC TRIM Ref: DOC86312 and DOC90626.
- 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.
- NACC (2009) Advice to assessing officer from Northern Agricultural Catchment Council, DOC86345
- 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.
- Seidler (2009) Application for clearing permit CPS 3112/1, Mr F Seidler, DOC83408
- 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.
- Western Australian Herbarium (1998). FloraBase The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> Accessed on Tuesday, 21 July 2009.

#### **6. Glossary**

Term	Meaning
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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)

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