



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 4276/1
File Number: 2011/002079-1
Duration of Permit: From 26 October 2012 to 26 October 2014

PERMIT HOLDER

Boundifull Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 584 on Deposited Plan 247913, Dandaragan
Lot 1158 on Deposited Plan 105382, Dandaragan
Lot 1156 on Deposited Plan 105385, Dandaragan
Lot 2373 on Deposited Plan 89783, Dandaragan
Lot 2346 on Deposited Plan 89367, Dandaragan

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 8 hectares of native vegetation within the area hatched yellow on attached Plan 4276/1.

CONDITIONS

1. Weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

2. Vegetation management

The Permit Holder shall not clear native vegetation within 20 metres of the *riparian vegetation* of any *watercourse* within and/or adjacent to the area cross-hatched yellow on attached Plan 4276/1.

Definitions

The following meanings are given to terms used in this Permit:

fill means material used to increase the ground level, or fill a hollow;

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

riparian vegetation has the meaning given to it in Regulation 3 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004;

watercourse has the meaning given to it in section 3 of the *Rights in Water and Irrigation Act 1914*;

weeds means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.

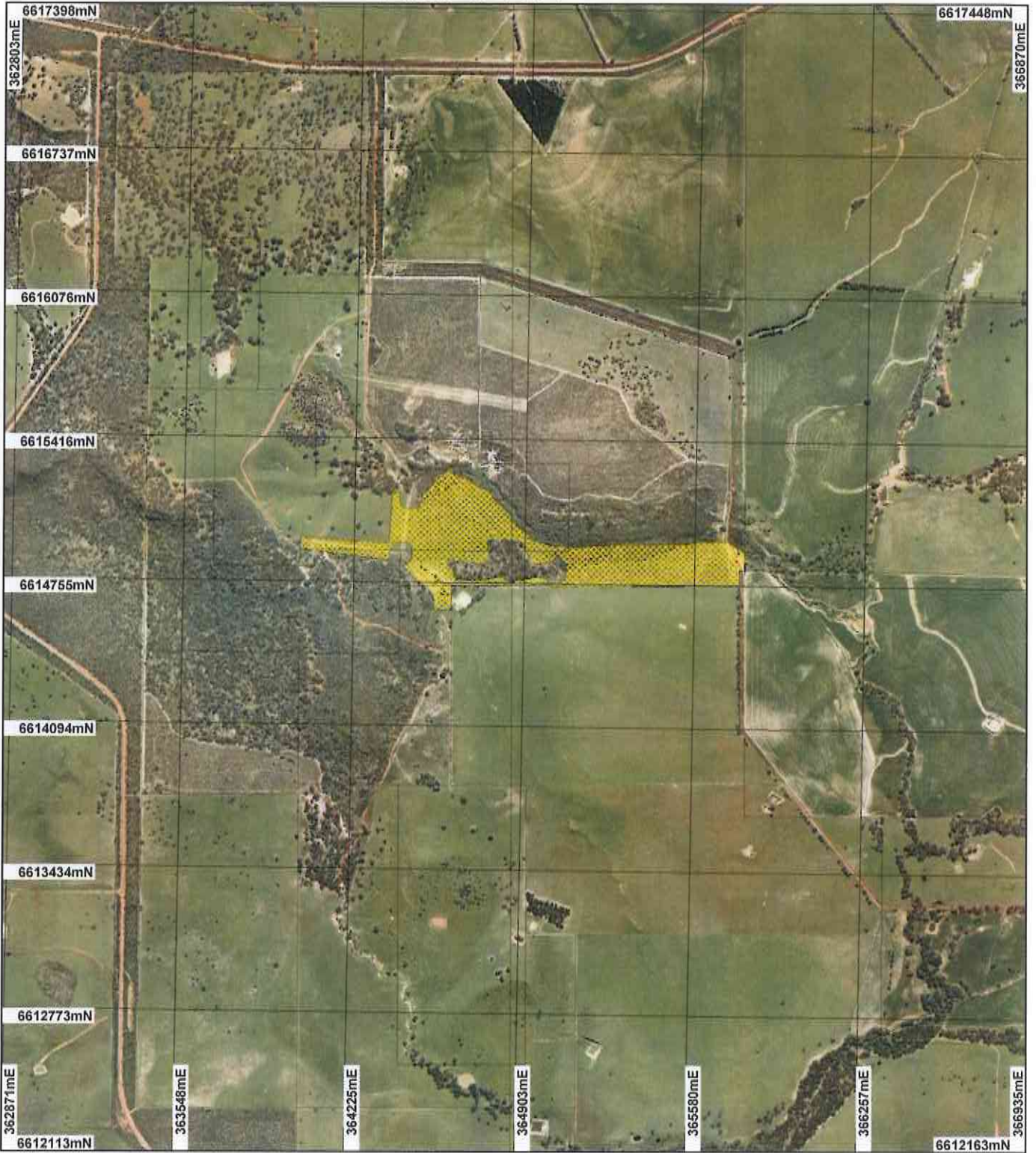
Handwritten signature of Roxane Shadbolt in black ink.

Roxane Shadbolt
A/MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

4 October 2012

Plan 4276/1





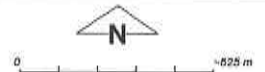
LEGEND

Clearing instruments

-  Areas Approved to Clear
-  Road Centrelines
-  Cadastre
-  -> Image Index

(cont)

-  Recently added
-  Coverage
- Dandaragan 50cm Orthomosaic - Landgate 2008**



Scale 1:23572

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

R. Shadbolt Date *4/10/11*
Roxane Shadbolt

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



Department of Environment and Conservation

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1. Application details

1.1. Permit application details

Permit application No.: 4276/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Boundifull Pty Ltd

1.3. Property details

Property: LOT 1156 ON PLAN 105385 (DANDARAGAN 6507)
LOT 584 ON PLAN 247913 (DANDARAGAN 6507)
LOT 1158 ON PLAN 105382 (DANDARAGAN 6507)
LOT 2346 ON PLAN 89367 (DANDARAGAN 6507)
LOT 2373 ON PLAN 89783 (DANDARAGAN 6507)
Local Government Area: Shire of Dandaragan
Colloquial name:

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 4 October 2012

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
The area under application is mapped as Beard Vegetation Association 1031 which is described as 'Mosaic: Shrublands; hakea scrub-heath / Shrublands; dryandra heath'(Shepherd et al. 2001).	This application proposes to clear up to 8 hectares of native vegetation within a footprint area of 35.08 hectares, on Waddy Waddy Farm, an approximately 762 hectare agricultural property off Waddi Road, in Dandaragan.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Vegetation condition was determined from site visit conducted 31 May 2011 (DEC, 2011).
	The eastern portion of the application area was cleared in 2005/2006. Approximately 10 hectares within the footprint is reported to have been re-cleared in 2009 and raked to encourage pasture growth.	To	
	The eastern section of the application area consists of approximately 4.5 hectares of regenerating Hakea and Banksia heath. This section of the application is in a very good (Keighery, 1994) condition.		Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)
	The remaining area under application consists of scattered paddock trees over weeds and is in a completely degraded (Keighery, 1994) condition.		

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 may be at variance to this Principle

The application is to clear up to 8 hectares of native vegetation within a footprint area of 35.08 hectares, for the purpose of increasing the area available for farming. The applicant has advised that no clear felling of overstorey vegetation will occur, rather pasture will be sown and eventually sheep will be grazed within the area.

The applicant modified the application area during assessment in order to remove the vegetated watercourse area, and the northern and southern areas of regenerating vegetation from the application area. These

modifications reduced the clearing footprint from 110 hectares to 35.08 hectares.

In 2005/2006, the eastern portion of the vegetation under application was unlawfully cleared by the previous owner of the property and was the subject of an investigation. In September 2009, approximately 10 hectares south of the watercourse (eastern portion of application area) was re-cleared by the previous owner and raked to encourage pasture growth.

The majority of the vegetation is in a completely degraded (Keighery, 1994) condition (DEC, 2011) and is not considered to retain the capacity to regenerate without intensive management.

A portion of the application area in the eastern section consists of regenerating vegetation is considered to be in very good (Keighery, 1994) condition, as it retains basic structure or the ability to regenerate it, and some areas of high species diversity and density (DEC, 2011). If vegetation in this area is left to regenerate, high biodiversity and environmental values are likely to recover.

There are 4 rare and 31 priority flora recorded within the local area (10 kilometre radius)(DEC, 2007-). Three rare and numerous priority flora have been recorded on the same mapped vegetation and soil types as the application area. A site inspection identified several rare flora individuals in three separate locations in the centre of the property (DEC, 2011). A 50m buffer from known occurrences of rare flora has been implemented into the application area.

The area eastern section of the application area is in a very good (Keighery, 1994) condition and if left to regenerate is likely to contain a high level of species diversity. Therefore, this application may be at variance to this principle.

Methodology

References:

-DEC, 2007-

-DEC, 2011

-Keighery, 1994

GIS Databases:

- Dandaragan 50cm Orthomosaic - Landgate 2008

- DEC Managed Lands

- Pre-European vegetation

- SAC Biodatasets (08/04/11)

- Soils, Statewide

(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

Three fauna species of conservation significance are known to occur within the local area (10 kilometre radius), the threatened Carnaby's cockatoo (*Calyptorhynchus latirostris*) (Endangered, Wildlife Conservation Act 1950; Endangered, Environment Protection and Biodiversity Conservation Act 1999), Baudin's cockatoo (*Calyptorhynchus baudinii*) (Endangered, Wildlife Conservation Act 1950; Vulnerable, Environment Protection and Biodiversity Conservation Act 1999), and the specially protected Peregrine falcon (*Falco peregrinus*)(DEC, 2007-).

Carnaby's cockatoo meets Criterion A for Endangered as it has suffered a population decline of at least 50% over the past 45 years (Cale, 2003). This species nests in large hollows of Eucalyptus trees and forages on the seeds and nectar from the flowers of the proteaceae family including Banksia, Hakea, and Grevillea as well as species from Allocasuarina and Eucalyptus (Valentine and Stock, 2008).

Baudin's cockatoo feeds on Marri, Jarrah, Banksia and Hakea plants and fruiting apple and pear trees (CALM, 2005) and the areas under application contain vegetation suitable as feeding habitat for this species (DEC, 2011).

Evidence of Carnaby's cockatoo feeding was observed on *Xanthorrhoea* sp outside of the application area (DEC, 2011).

The areas of regenerating Hakea and Banksia heath vegetation within the application area in very good (Keighery, 1994) condition in the east of the application area (~4.5ha) contains suitable species for foraging Carnaby's and Baudin's cockatoos and retains the capacity to return to a condition that is likely to provide habitat for a range of indigenous ground dwelling fauna. The vegetation within this area is currently too young to be utilised as a food source for black cockatoos.

Peregrine falcon requires abundant prey, secures nest sites, and prefers coastal and inland cliffs or open woodlands near water (Birds Australia, 2011). This species is unlikely to be impacted by the proposed clearing.

The majority of the vegetation under application is in a completely degraded (Keighery, 1994) condition (DEC, 2011) and is not considered to retain the capacity to regenerate without intensive management. These areas are unlikely to provide significant habitat for conservation significant fauna. In addition, the applicant has

committed to retaining overstorey vegetation.

Given the above the area under application is not likely to comprise of significant habitat for fauna indigenous to Western Australia and is therefore, not likely to be at variance to this principle.

- Methodology** **References:**
- Birds Australia, 2011
 - CALM, 2005
 - DEC, 2007-
 - DEC, 2009
 - DEC, 2011
 - Keighery, 1994
 - Valentine and Stock, 2008
- GIS Databases:**
- Dandaragan 50cm Orthomosaic - Landgate 2008
 - DEC Managed Lands
 - Pre-European vegetation
 - SAC Biodatasets - 08/04/11

(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 numerous occurrences of four rare flora species within the local area (10 kilometre radius), having been recorded on the same vegetation and soil types as the application area.
- A site inspection identified several rare flora individuals in three separate locations in the centre of the application area (DEC, 2011).
- A 50m buffer from known occurrences of rare flora will be retained to ensure the survival of these species.
- The proposed clearing is not likely to be at variance to this principle.

- Methodology** **References:**
- DEC, 2011
- GIS Databases:**
- Pre-European vegetation
 - SAC Biodatasets - 08/04/11
 - Soils, Statewide

(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 records of threatened ecological communities within the local area (10 kilometre radius) and as such the proposed clearing is not likely to be at variance to this principle.

- Methodology** **GIS Databases:**
- Dandaragan 50cm Orthomosaic - Landgate 2008
 - Pre-European vegetation
 - SAC Biodatasets - 08/04/11
 - Soils, Statewide

(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 area under application is mapped as Beard Vegetation Association 1031. This vegetation association retains approximately 34% of the pre-European extent in the Geraldton Sandplains IBRA bioregion (Government of Western Australia 2011).
- Beard Vegetation Association 1031 which is described as 'Mosaic: Shrublands; hakea scrub-heath / Shrublands; dryandra heath'(Shepherd et al. 2001).
- The area under application is located in an extensively cleared agricultural area, which retains less than 10% vegetation cover in the local area.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss

appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

The 4.5 hectare area of regenerating vegetation is representative of the mapped Beard vegetation type, however the remaining area is not.

Although the local area (10km radius) has been highly cleared, the Shire of Dandaragan, the bioregion and vegetation type 1031 all retain above the recommended threshold level.

Given the above the proposed clearing not likely to be at variance to this Principle.

	Pre-European (ha)	Current extent (ha)	Remaining (%)	DEC tenure (%)
IBRA Bioregion*				
Geraldton Sandplains	3,136,025	1,410,755	45	40 (561,943ha)
LGA*				
Shire of Dandaragan	670,531	295,859	44	39 (115,940ha)
Beard Vegetation Association within Bioregion*				
1031	241,350	83,413	34	43 (35,913ha)

* (Government of Western Australia 2011)

Methodology References:
-Keighery, 1994
-Government of Western Australia (2011)
GIS Databases:
- Dandaragan 50cm Orthomosaic - Landgate 2008
- DEC Managed Lands
- Pre-European vegetation
- SAC Biodatasets - 08/04/11

(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

A watercourse, mapped as a minor non-perennial stream, that drains in to the Minyulo Brook is located approximately 20 m north of the application area. The watercourse, which is not part of the application area, is surrounded by vegetation that is largely intact and contains several vegetation communities ranging from degraded to very good (Keighery, 1994) condition (DEC, 2011). A 20 metre buffer to the watercourse will protect its integrity as well as weed management.

A stream that branches off and rejoins the watercourse further downstream is reported by the applicant to have formed from runoff caused by the poor construction of an historic dam on the watercourse. This stream runs through a previously cleared part of the application area that is in completely degraded (Keighery, 1994) condition and is considered to lack regenerative capacity (DEC, 2011). The stream is not considered to support riparian vegetation and the applicant has advised that no clear felling of nearby remnant overstorey vegetation will occur.

Considering the above, the vegetation under application is not likely to include vegetation growing in association with a watercourse and is not likely to be at variance to this principle.

Vegetation management practices will assist to ensure that no riparian vegetation is cleared.

Methodology References:
-DEC, 2011
-Keighery, 1994
GIS Databases:
- Dandaragan 50cm Orthomosaic
- Hydrography, linear

(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 Commissioner of Soil and Land Conservation (CSLC) identified the soil within the application area as Boothendarra 4 Subsystem (224Bh_4), which is described as gently to very gently inclined hill slopes and foot slopes: sandy duplexes, deep sands and sandy gravels (CSLC, 2011).

Groundwater salinity on the property is mapped as 500-1000mg/L. No significant change is expected to occur as a result of the proposed clearing and the risk of salinity causing land degradation is low (CSLC, 2011).

Due to the nature of the soils and the steepness of the slopes, water erosion is occurring, especially where no native vegetation is present (CSLC, 2011). Pastures, if managed to maintain excellent ground cover, will limit the water erosion risk (CSLC, 2011).

Considering the above, the proposed clearing is not likely to be at variance to this principle.

Methodology References:
-CLSC, 2011
GIS Databases:
- Groundwater Salinity, statewide
- Salinity Risk LM 25m
- Topographic Contours, Statewide

(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

There is one conservation area in the local area (10 kilometre radius) of the application area, with the 195 hectare Minyulo Nature Reserve (R27219) located 3.8 kilometres south of the area under application.

The application area sits within an extensively cleared landscape that has less than 10% vegetation cover in the local area and is part of one of the largest remnants of native vegetation in the local area.

The application area is considered to retain some value as an ecological linkage, as it provides a degree of connectivity from a 260 hectare remnant to the south and to the large (122 hectare) remnant to the north of which includes a vegetated watercourse and regenerating vegetation.

The applicant has advised that no clear felling of overstorey vegetation will occur, rather pasture will be sown and eventually sheep will be grazed within the area. The retention of overstorey vegetation will ensure that this ecological link is not severed.

Considering the above, the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Databases:
- Dandaragan 50cm Orthomosaic - Landgate 2008
- DEC Managed Lands
- Hydrography, linear

(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

Groundwater salinity on the property is mapped as 500-1000mg/L. Due to the depth of the ground watertable, the proposed clearing is unlikely to cause a significant change in the watertable level of the area (CSLC, 2011). The risk of salinity causing deterioration in water quality is considered to be low.

Due to the nature of the soils and the steepness of the slopes, water erosion is occurring, especially where no native vegetation is present (CSLC, 2011). Pastures, if managed to maintain excellent ground cover, will limit the water erosion risk (CSLC, 2011).

The retained vegetation in the vicinity of the watercourse in the centre of the property is providing stability to the soils associated with the waterway (CSLC, 2011). The applicant has modified the application area in order to avoid clearing on this soil type and maintain at least a 50 metre buffer to the main branch of the watercourse.

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

Methodology References:
-CSLC, 2011
GIS Databases:
- Groundwater Salinity, statewide
- Hydrography, linear
- Topographic Contours, Statewide

(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 proposed clearing is not likely to cause, or exacerbate, the incidence or intensity of flooding (CLSC, 2011) and is not likely to be at variance to this principle.

Methodology References:
-CLSC, 2011

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

Comments

In response to DEC's letters and preliminary assessment reports of 27 May 2011 and 2 August 2011, the applicant removed the watercourse and a number of other areas from the application, significantly reducing the clearing footprint area from 110ha to 35.08ha. The majority of the vegetation under application is in a completely degraded (Keighery, 1994) condition.

The applicant advised that the stream that branches off and rejoins the watercourse further to the east formed as a result of a historic dam being poorly constructed on the watercourse, and that he intends to remove obstructions from the watercourse in order to return flow to the main branch only. The applicant intends to fill in and reclaim the southern stream area, which passes through a previously cleared section of the application for grazing purposes.

In 2010, the previous owner was convicted of unlawful clearing of native vegetation on the property (ICMS 16177) including a 9 ha portion of the application area.

The application area is within the EPA Position Statement No.2 which concludes that further clearing for agricultural purposes should not be considered. In exceptional circumstances the EPA would consider supporting clearing for agriculture within this region if:

(a) There are alternative mechanisms for protecting biodiversity.

(b) The area to be cleared is relatively small, depending on the scale at which biodiversity changes over the area, including extent of vegetation in the surrounding area and recognising that values will vary for different ecosystems.

(c) The proponent demonstrates that the elements set out in Section 4.3 of this Position Statement are being met. This will require extensive local and regional biodiversity work.

(d) Land degradation, including aquatic environments and threatening processes, such as dieback, salinisation or disruption of catchment processes, on-site and off-site would not be exacerbated.

The property is zoned 'Rural' under the Shire of Dandaragan Local Planning Scheme No 7.

The Shire of Dandaragan has no objection to the proposed clearing (Shire of Dandaragan, 2011).

The area under application falls within the Jurien groundwater area proclaimed under the Rights in Water and Irrigation Act 1914. If water is used for purposes other than domestic or stock watering, an application for a license to take water will be required (DoW, 2011).

There are no known Aboriginal Sites of Significance within the application area.

Methodology References:
-DoW, 2011
-Shire of Dandaragan, 2011
GIS Databases:
- Aboriginal Sites of Significance
- RIWI Act, Areas
- Town Planning Scheme Zones

4. References

- Birds Australia (2011) Birds in backyards - Peregrine Falcon. <http://birdsinyard.net/species/Falco-peregrinus> (Accessed 13/06/2011).
- CALM (2005) Fauna Note No. 01/2005 - Reducing fruit damage by Baudin's Cockatoo. Department of Conservation and Land Management, Western Australia.
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- CSLC (2011) Commissioner of Soil and Land Conservation. Land Degradation Assessment Report for Application for a Clearing Permit - CPS 4276/1. Received 29/04/2011. Department of Agriculture and Food, Western Australia. DEC Ref: A391530
- DEC (2009) ICMS 16177 Compliance Inspection Report for Lot 2347, 3795 and 2346 Strathmore Rd, Dandaragan. Department of Environment and Conservation, Western Australia. DEC Ref: A396730
- DEC (2011) Site Inspection Report for Clearing Permit Application CPS 4276/1, Waddi Road, Dandaragan. Site inspection undertaken 31/05/2011. Department of Environment and Conservation, Western Australia. DEC Ref: A406460

- DoW (2011) Clearing permit application CPS 4276/1 - Direct Interest Response. Department of Water, Western Australia. Received 28/04/2011. DEC Ref: A391322
- Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.
- 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. Technical Report 249. Department of Agriculture Western Australia, South Perth.
- Shire of Dandaragan (2011) Clearing permit application CPS 4276/1 - Direct Interest Response. Received 30/05/2011. DEC Ref: A399659
- Valentine, L.E. and Stock, W. (2008) Food Resources of Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) in the Gnaragara Sustainability Strategy Study Area. Edith Cowan University and Department of Environment and Conservation. December 2008.
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed 10/05/2011).

5. 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)