



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 5820/1
Permit Holder:	Capel Farms Pty Ltd
Duration of Permit:	22 March 2014 – 22 March 2016

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of pivot horticulture.

2. Land on which clearing is to be done

Lot 13 on Plan 4432 (CAPEL 6271)
Lot 102 on Diagram 80592 (CAPEL 6271)

3. Area of Clearing

The Permit Holder must not clear more than 72 native trees within the area hatched yellow on attached Plan 5820/1.

4. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

PART II – MANAGEMENT CONDITIONS

5. Avoid, minimise etc clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

6. Fauna management

- Prior to undertaking any clearing authorised under this permit, the Permit Holder shall engage a *fauna specialist* to conduct a *fauna survey* of the area hatched yellow on attached Plan 5820/1 to identify fauna specified in Schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice*.
- Within one week prior to undertaking clearing authorised under this permit, the Permit Holder shall engage a *fauna specialist* to remove and relocate fauna identified under condition 6(a).

DEFINITIONS

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

fauna specialist: means a person who holds a tertiary qualification specializing in environmental science or equivalent, and has a minimum of 2 years work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed, or who is approved by the CEO as a suitable fauna specialist for the bioregion, and who holds a valid fauna licence issued under the *Wildlife Conservation Act 1950*.

fauna survey: means a field-based investigation, including a review of established literature, of the biodiversity of fauna and/or fauna habitat of the Permit Area. Where conservation significant fauna are identified in the Permit Area, the survey should also include sufficient surrounding areas to place the Permit Area into local context.

Wildlife Conservation (Specially Protected Fauna) Notice means those fauna taxa gazetted as rare fauna pursuant to section 14(4)(a) of the *Wildlife Conservation Act 1950* (as amended).

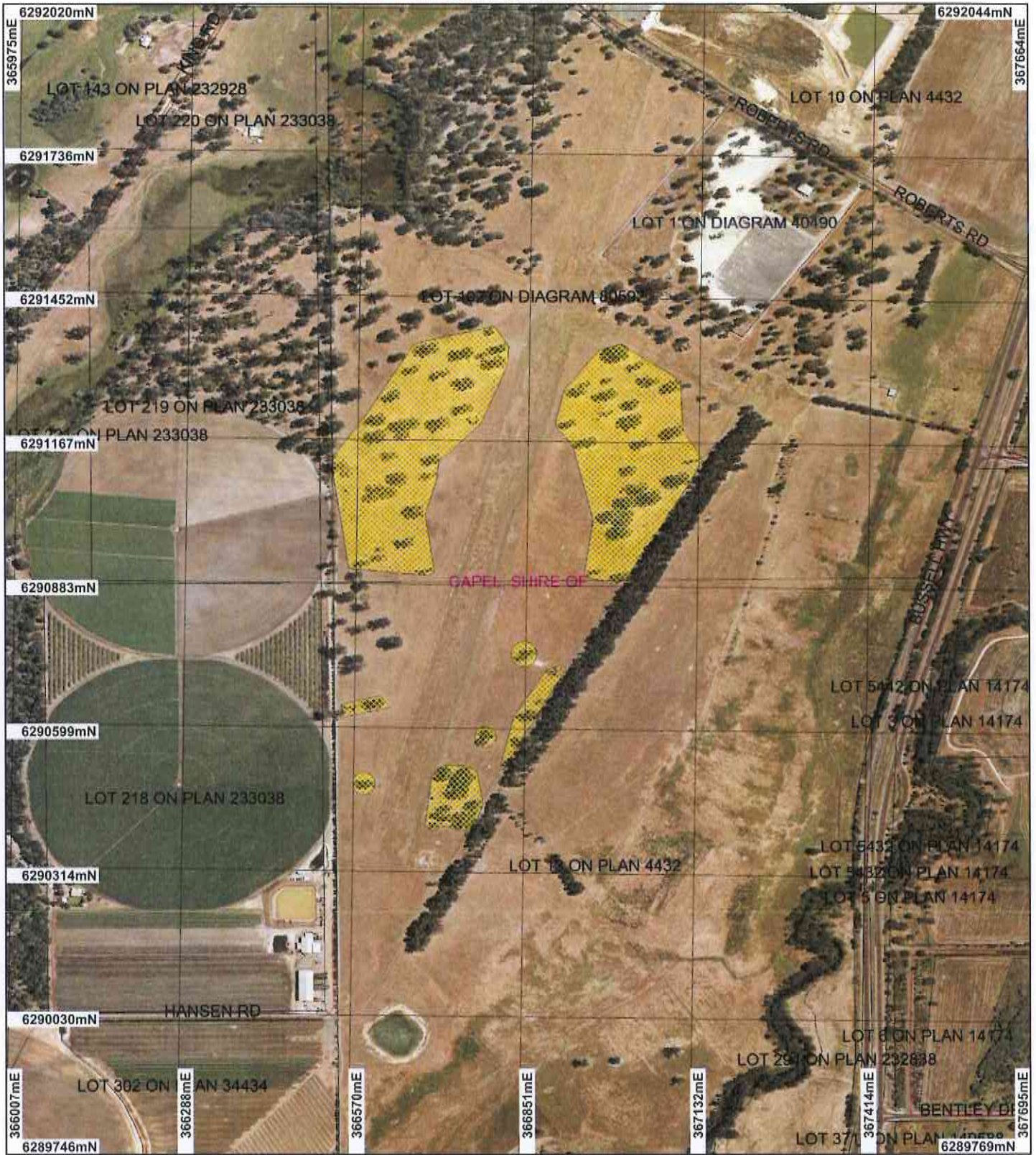


M Warnock
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

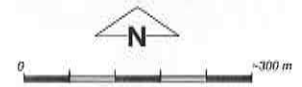
20 February 2014

Plan 5820/1



LEGEND

- | | |
|-------------------------|---|
| Clearing Instruments | Local Government Authorities |
| Areas Approved to Clear | Donnybrook 50cm Orthomosaic - Landgate 2004 |
| Road Centrelines | |
| Cadastre | |
| Cadastre for labelling | |



Scale 1:10000
(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.

M Warnock Date 20/2/14
M Warnock

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.



Government of Western Australia
Department of Environment Regulation

WA Crown Copyright 2002

Government of Western Australia
Department of Environment Regulation

1. Application details

1.1. Permit application details

Permit application No.: 5820/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Capel Farms Pty Ltd

1.3. Property details

Property: LOT 102 ON DIAGRAM 80592 (CAPEL 6271)
LOT 13 ON PLAN 4432 (CAPEL 6271)
Local Government Area: Shire of Capel

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 20 February 2014

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 Vegetation Association 6 is described as medium woodland; tuart and jarrah (Shepherd et al 2001).	The clearing consists of 72 native trees within Lot 13 on Plan 4432 and Lot 102 on Diagram 80592, Capel, Shire of Capel, for the purpose of pivot horticulture.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The amended application is to clear up to 72 native trees for the purpose of pivot horticulture.
Mapped Heddle Karrakatta Complex Central and South is described as open forest and woodland (Heddle et al 1980).			The application consists of tuart (<i>Eucalyptus gomphocephala</i>), marri (<i>Corymbia calophylla</i>) and jarrah (<i>Eucalyptus marginata</i>) trees scattered throughout a paddock over a 45 hectare area with no mid or understorey and in completely degraded (Keighery 1994) condition (DER 2013).
Mapped Heddle Guildford Complex is described as open forest to tall open forest and woodland (Heddle et al 2001).			Some of the trees within the application area are habitat trees, with some of these containing hollows or the potential to develop hollows (DER 2013). The application has been reduced from 100 native trees in order to retain as much fauna habitat as possible.
			The condition and description of the vegetation was determined by a Department of Environment Regulation site inspection on 22 November 2013 (DER 2013) and using aerial imagery (Donnybrook 50cm Orthomosaic - Landgate 2004).

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 application is to clear up to 72 native trees for the purpose of pivot horticulture.

The trees under application are scattered throughout a paddock over a 45 hectare area and are in a completely degraded (Keighery 1994) condition. The paddock has previously been cleared for sand extraction. The trees under application were retained when the sand extraction took place, however there is a complete absence of midstorey and understorey.

Considering the application area consists of a few overstorey species with no native understorey, and is in completely degraded (Keighery 1994) condition, the application area is not likely to contain high biodiversity, especially in comparison with other vegetation remnants in the local area (10 kilometre radius).

Therefore, the application is not likely to be at variance to this principle.

Methodology

References

- Keighery (1994)
- GIS Databases
- SAC Biodatasets (accessed November 2013)

(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

Twenty five fauna species of conservation significance have been mapped within the local area (10 kilometre radius) (DEC 2007-).

Carnaby's cockatoo (*Calyptorhynchus latirostris*), which is endemic to south-western Australia and classified as Endangered under the Environment Protection and Biodiversity Conservation Act 1999 and as 'rare or likely to become extinct' under the Western Australian Wildlife Conservation Act 1950, has been recorded within the local area.

Baudin's cockatoo (*Calyptorhynchus baudinii*) and forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*) are listed as Vulnerable under the Environment Protection and Biodiversity Conservation Act 1999 and 'rare or likely to become extinct' under the Wildlife Conservation Act 1950 and have also been recorded in the local area (DEC 2007-).

Due to the small size of the application area and the completely degraded (Keighery 1994) condition, the proposed clearing is not expected to result in significant impacts to black cockatoos at a species level, however may impact upon individuals utilising the trees under application.

The application area is in close proximity to a number of ecological linkages as defined by the South West Regional Ecological Linkage (SWREL) Report (Molloy et al 2009). The proposed clearing area has been reduced from 100 trees to 72 trees to minimise impacts to the linkage.

The application area is not likely to support ground dwelling fauna due to the absence of understorey. The application area also provides limited habitat for arboreal fauna due to the distances between the individual trees and the lack of mid and understorey to provide protection while moving between them. Avian fauna that may be utilising the trees under application for foraging are highly mobile and able to utilise other native vegetation in the local area in equal or better condition.

The application has been reduced from 100 trees to 72 trees and the applicant intends to retain as much native vegetation on the property as possible to mitigate any potential impacts to native fauna. An inspection of tree hollows prior to clearing will minimise the risk of harming individuals.

Methodology

References

- DER (2013)
- DEC (2007-)
- Molloy et al (2009)
- SEWPaC (2012)
- GIS Databases
- Carnaby's cockatoo breeding areas confirmed
- Carnaby's cockatoo feeding SCP unconfirmed

(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

The closest record of rare flora is mapped approximately 2.3 kilometres from the application area in a different soil and vegetation type to the proposed clearing. Numerous records of rare flora have been made within the local area (10 kilometre radius).

The application area consists of scattered paddock trees occurring over grass with no native understorey. Rare flora that have been recorded within the local area are all understorey species. Considering this, the application area is unlikely to contain any rare flora.

Therefore, the application is not likely to be at variance to this principle.

Methodology GIS Databases:
 - SAC Biodatasets (accessed November 2013)

(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**
 Four threatened ecological communities are mapped within the local area (10 kilometre radius). These include:
 - Shrublands on dry clay flats (Endangered) - 3.5 kilometres east of the application area in different mapped soil and vegetation type
 - Eucalyptus calophylla-Xanthorrhoea preissii woodlands and shrublands, Swan Coastal Plain (Critically Endangered) - five kilometres north east of the application area within the same mapped soil and vegetation type
 - Herb rich shrublands in clay pans (Vulnerable) - five kilometres north east of the application area in the same mapped soil and vegetation type
 - Eucalyptus calophylla woodlands on heavy soils of the southern Swan Coastal Plain (Vulnerable) - 6.5 kilometres south of the application area on different mapped soil and vegetation type.

The vegetation under application lacks understorey and floristic diversity, is in completely degraded (Keighery 1994) condition and is unlikely to be representative of any of these threatened ecological communities.

The proposed clearing is unlikely to impact upon any threatened ecological communities within the local area and is therefore not likely to be at variance to this principle.

Methodology References
 - Keighery (1994)
 GIS Databases
 - SAC Biodatasets (accessed November 2013)

(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 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 Shire of Capel retains approximately 34 per cent of its original vegetation extent and the local area (10 kilometre radius) retains approximately 20 per cent of the original extent (Government of Western Australia 2013).

The application area is mapped as Beard Vegetation Association 6 (Shepherd et al 2001) which retains approximately 25 per cent of the original extent within the Swan Coastal Plain IBRA Bioregion (Government of Western Australia 2013). The majority of the application area is also mapped as Heddle Karrakatta Complex Central and South (Heddle et al 1980) which retains approximately 29 per cent of the original extent and a small portion is mapped as Guildford Complex (Heddle et al 1980) which retains approximately five per cent of the original extent within the Swan Coastal Plain IBRA Bioregion (Government of Western Australia 2013).

The 72 individual trees under application are scattered throughout a 45 hectare agricultural paddock over non-native grasses, with an absence of any native mid or understorey, and is therefore not truly representative of the mapped vegetation associations. Although the dominant tree species such as tuart (Eucalyptus gomphocephala), marri (Corymbia calophylla) and jarrah (Eucalyptus marginata) are present, there are no other native species to provide the structure, composition and ecological processes that would be typical of the mapped vegetation associations in their pre-disturbance form. The proposed clearing area has been reduced from 100 trees to 72 trees to minimise impacts to the linkage.

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

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Swan Coastal Plain	1,501,221	587,708	39	35
Shire*				
Shire of Capel	55,945	19,122	34	44
Beard Vegetation Association in Bioregion*				
6	56,343	14,019	25	36

Hedde Vegetation Complex **					
Karrakatta Complex Central and South	49,912	14,729	29		3
Guildford Complex	92,497	4,662	5	0.2	

- Methodology** References
- Commonwealth of Australia (2001)
 - Government of Western Australia (2013)
 - Hedde et al (1980)
 - Shepherd et al (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 at variance to this Principle**
- The closest watercourse to the application area is Gynudup Brook, a major perennial watercourse occurring 300 metres to the south east and flowing into the Capel River. Capel River is approximately two kilometres to the south west of the application area. Numerous other watercourses and areas subject to inundation occur within the local area (10 kilometre radius). Multiple Use wetlands occur 300 metres to the north west and south east, and a Conservation Category wetland occurs 2 kilometres to the west of the application area.
- No watercourses intersect the application area and the proposed clearing does not involve any riparian vegetation. Therefore, the application is not at variance to this principle.

- Methodology** GIS Databases
- Geomorphic wetlands (Classification), Swan Coastal Plain
 - Geomorphic wetlands (Management Categories), Swan Coastal Plain
 - Hydrography linear DoW

(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 area under application is mapped to contain sandy soils (Northcote et al 1960 - 1968). The area is approximately 1.5 kilometres from the coastal waterline and is 5 - 10 metres above sea level on relatively flat ground. The average annual rainfall of 800 millimetres is moderate.
- The removal of up to 72 scattered trees over a 45 hectare area that is currently otherwise devoid of native vegetation is unlikely to cause appreciable land degradation (DAFWA 2013). Some wind and water erosion may occur following the clearing however the impact is likely to be temporary and minimal. These minimal impacts can be mitigated by planting horticultural crops immediately after the removal of native vegetation, and implementing erosion management measures.
- Considering the above, the application is not likely to be at variance to this principle.

- Methodology** References
- DAFWA (2013)
 - Northcote et al (1960-1968)
- GIS Databases
- Groundwater Salinity, statewide
 - Rainfall, Mean Annual
 - Soils, statewide
 - 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 are a number of conservation areas mapped within the local area (10 kilometre radius). The Tuart Forest National Park (Class A) is located two kilometres to the north and 2.5 kilometres to the south west of the application area. The Ludlow State Forest (Class A) and Coolilup State Forest (Class A) occur nine and eight kilometres to the south west respectively. Capel Nature Reserve (Class A) is located 5.5 kilometres to the south west of the application area and an unnamed nature reserve (Class A) is located 2.8 kilometres to the south of the application area.
- The application area is in close proximity to a number of ecological linkages as defined by the South West Regional Ecological Linkage (SWREL) Report (Molloy et al 2009). The proposed clearing area has been reduced from 100 trees to 72 trees to minimise impacts to the linkage.

Considering the proposed clearing is for 72 individual trees with no mid or understorey and minimal ecological linkage capacity, the application is not likely to significantly impact upon conservation areas.

Therefore the application is not likely to be at variance to this principle.

Methodology References
- Molloy et al (2009)
GIS Databases
- DEC Tenure

(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 application consists of deep-rooted perennial trees which may provide a buffer for nutrient flow in ground water, between the existing horticultural practise to the west and the Gynudup Brook to the south east. However, the removal of the 72 scattered paddock trees is unlikely to increase the risk of eutrophication, considering the soil type and intended land use (DAFWA 2013).

The likelihood of the proposed clearing causing deterioration in the quality of surface or ground water is minimal, therefore, the application is not likely to be at variance to this principle.

Methodology References
- DAFWA (2013)
GIS Databases
- RIWI Act, Ground Water Areas
- RIWI Act, Surface Water Areas, Irrigation Districts

(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 unlikely to cause or exacerbate flooding due to the application area being slightly elevated in relation to the surrounding land, and the number of trees to be removed are unlikely to significantly alter the level of the water table.

Therefore, the application is not likely to be at variance to this principle.

Methodology GIS Databases
- Topographic Contours, Statewide

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

Comments

The application is to clear up to 72 scattered paddock trees for the purpose of pivot horticulture.

An application was originally submitted for the proposed clearing of five hectares of native vegetation. The application was amended to 100 native trees, excluding a four hectare portion that was deliberately planted. The application has been further reduced by the applicant to 72 native trees in order to mitigate potential environmental impacts.

The application area occurs within the Busselton-Capel Ground Water Area and the Capel River System Surface Water Area, as proclaimed under the Rights in Water and Irrigation Act 1914. The Department of Water advised that the applicant holds an existing groundwater licence and the proposed horticultural activities are not expected to exceed the current licence entitlement (Department of Water 2013).

Planning approval has been obtained from the Shire of Capel (2014).

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

The application area is zoned 'rural' under the Town Planning Scheme Zones.

Methodology References
- Department of Water (2013)
- Shire of Capel (2014)
GIS Databases
- Aboriginal Sites of Significance
- RIWI Act, Ground Water Areas
- RIWI Act, Surface Water Areas, Irrigation Districts

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DAFWA (2013) Land Degradation Assessment Report and Supporting Information, for Clearing Permit Application CPS 5820/1, provided by the Department of Agriculture and Food Western Australia - Commissioner of Soil and Land Conservation, on 29 October 2013 (DER Ref: A698280).
- Department of Water (2013) Advice regarding Clearing Permit Application CPS 5820/1, provided on 24 October 2013 (DER Ref: A688094).
- DER (2013) Site Inspection Report for Clearing Permit Application CPS 5820/1, Department of Environment Regulation, 22 November 2013 (DER Ref: A698195).
- DEC (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed 19/11/2013.
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.
- Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, 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.
- Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whisson, G. (2009) South West Regional Ecological Linkages Technical Report, Western Australian Local Government Association and Department of Environment and Conservation, Perth.
- 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.
- SEWPaC (2012) EPBC Act Referral Guidelines for Three Threatened Black Cockatoo Species, April 2012. Department of Sustainability, Environment, Water, Populations and Communities. Commonwealth of 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.
- 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 Capel (2014) Planning Approval in relation to Clearing Permit Application CPS 5820/1, 6 February 2014 (DER Ref: A724820).