



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 3751/1
Permit Holder:	CBH Engineering Pty Ltd
Duration of Permit:	29 August 2010 – 29 August 2015

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 road construction and associated infrastructure and works.

2. Land on which clearing is to be done

Lot 88 on Plan 36724 (Lot No. 88 Marshall, Hyden)

Lot 179 on Plan 219526 (Hyden)

Road reserve (PIN 11745103) (Hyden)

3. Area of Clearing

The Permit Holder must not clear more than 0.60 hectares of native vegetation within the area hatched yellow on attached Plan 3751/1.

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 – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

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. Offsets

If part or all of the clearing to be done is or may be at variance with one or more of the clearing principles, then the Permit Holder must implement an *offset* in accordance with conditions 6(a) and (b) of this Permit with respect to that clearing.

- (a) Determination of *offsets*:
- (i) in determining the *offset* to be implemented with respect to a particular area of native vegetation proposed to be cleared under this Permit, the Permit Holder must have regard to the *offset* principles contained in condition 6(b) of this Permit;
 - (ii) once the Permit Holder has developed an offset proposal, the Permit Holder must provide that offset proposal to the CEO for the CEO's approval by 29 October 2010 and prior to implementing the offset;
 - (iii) the Permit Holder shall implement the offset proposal approved under condition 6(a)(ii); and
 - (iv) each offset proposal shall include a direct offset, timing for implementation of the offset proposal and may additionally include contributing offsets.
- (b) For the purpose of this condition, the *offset* principles are as follows:
- (i) *direct offsets* should directly counterbalance the loss of the native vegetation;
 - (ii) *contributing offsets* should complement and enhance the *direct offset*;
 - (iii) *offsets* are implemented only once all avenues to avoid, minimise, rectify or reduce environmental impacts have been exhausted;
 - (iv) the environmental values, habitat, species, *ecological community*, physical area, ecosystem, landscape, and hydrology of the *offset* should be the same as, or better than, that of the area of native vegetation being *offset*;
 - (v) a ratio greater than 1:1 should be applied to the size of the area of native vegetation that is offset to compensate for the risk that the *offset* may fail;
 - (vi) *offsets* must entail a robust and consistent assessment process;
 - (vii) in determining an appropriate *offset*, consideration should be given to ecosystem function, rarity and type of *ecological community*, vegetation *condition*, habitat quality and area of native vegetation cleared;
 - (viii) the *offset* should either result in no net loss of native vegetation, or lead to a net gain in native vegetation and improve the *condition* of the natural environment;
 - (ix) *offsets* must satisfy all statutory requirements;
 - (x) *offsets* must be clearly defined, documented and audited;
 - (xi) *offsets* must ensure a long-term (10-30 year) benefit; and
 - (xii) an *environmental specialist* must be involved in the design, assessment and monitoring of *offsets*.

PART III - RECORD KEEPING AND REPORTING

7. Records must be kept

- (a) The Permit Holder must maintain the following records for activities done pursuant to this Permit in relation to the clearing of native vegetation authorised under this Permit:
- (i) the species composition, structure and density of the cleared area;
 - (ii) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
 - (iii) the date that the area was cleared; and
 - (iv) the size of the area cleared (in hectares).
- (b) In relation to the offset of areas pursuant to condition 6:
- (i) the location of any area of *offsets* recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
 - (ii) a description of the *offset* activities undertaken; and
 - (iii) the size of the *offset* area (in hectares).

8. Reporting

- (a) The Permit Holder must provide to the CEO, on or before 30 June of each year, a written report of records required under condition 7 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 29 May 2015, the Permit Holder must provide to the CEO a written report of records required under condition 7 of this Permit where these records have not already been provided under condition 8(a) of this Permit.

Definitions

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

condition means the rating given to native vegetation using the *Keighery scale* and refers to the degree of change in the structure, density and species present in the particular vegetation in comparison to undisturbed vegetation of the same type;

contributing offset/s has the same meaning as is given to that term in the Environmental Protection Authority's *Position Statement No.9: Environmental Offsets*, January 2006;

direct offset/s has the same meaning as is given to that term in the Environmental Protection Authority's *Position Statement No.9: Environmental Offsets*, January 2006;

ecological community/ies means a naturally occurring biological assemblage that occurs in a particular type of habitat (English and Blythe, 1997; 1999);

environmental specialist means a person who is engaged by the Permit Holder for the purpose of providing environmental advice, who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;

Keighery scale means the vegetation condition scale described in *Bushland Plant Survey: A Guide to Plant Community Survey for the Community (1994)* as developed by B.J. Keighery and published by the Wildflower Society of WA (Inc). Nedlands, Western Australia;

offset/s means an offset required to be implemented under condition 6 of this Permit;

offset proposal means an *offset* determined by the Permit Holder in accordance with condition 6 of this Permit.

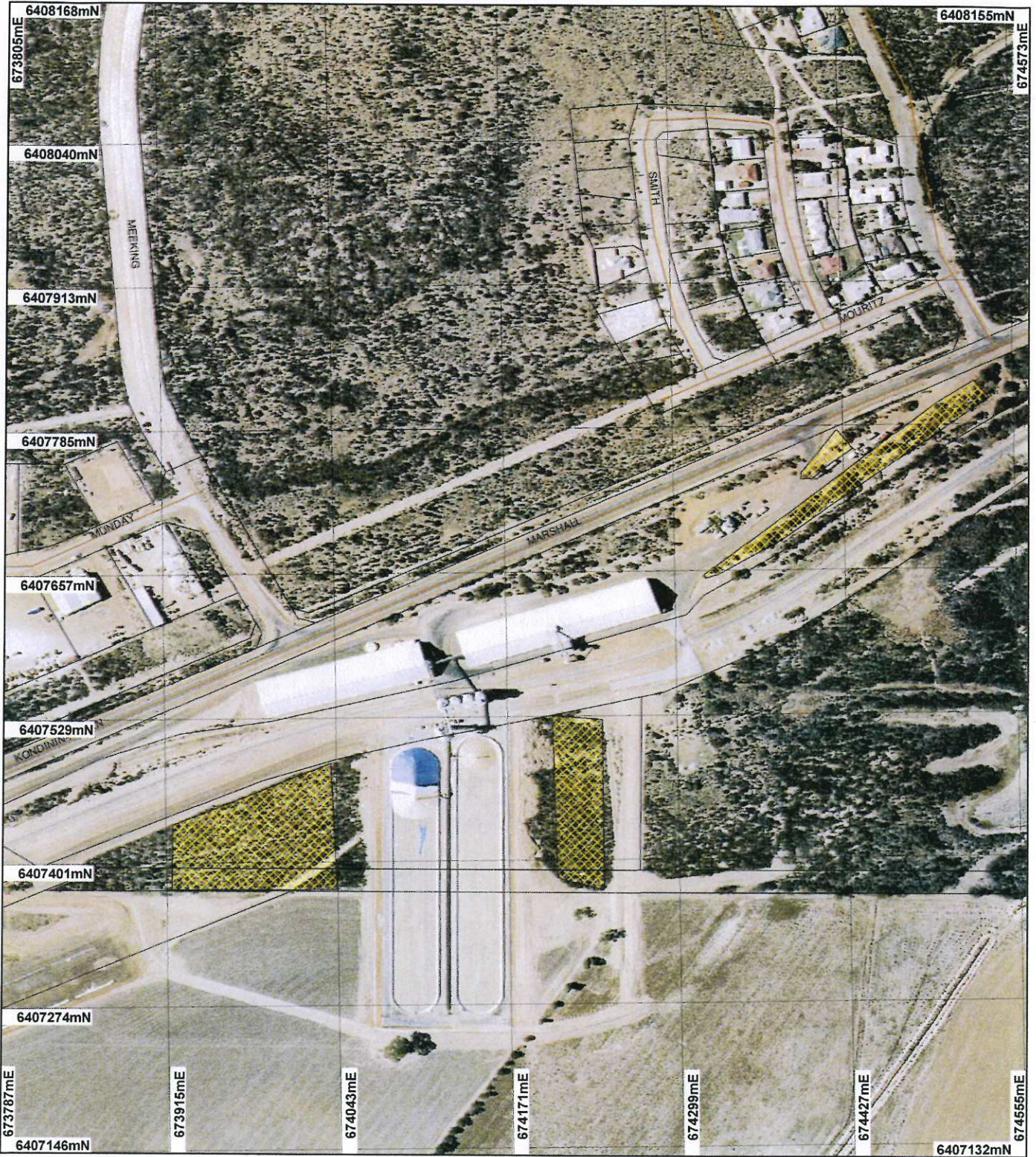


Matthew Warnock
ACTING MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

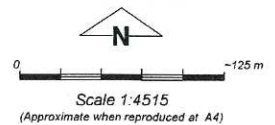
29 July 2010

Plan 3751/1



LEGEND

- | | | |
|-----------------------------|---|-----|
| Clearing Instruments | Hyden 50cm Orthomosaic - Landgate 2004 | LRS |
| Areas Applied to Clear | Road Centrelines | MR |
| Areas Subject to Conditions | FW | N |
| Areas Approved to Clear | HY | TR |
| Cadastrate | LRO (cont) | |



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 29/7/10 Date

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.



1. Application details

1.1. Permit application details

Permit application No.: 3751/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: CBH Engineering Pty Ltd

1.3. Property details

Property: LOT 88 ON PLAN 36724 (Lot No. 88 MARSHALL HYDEN 6359)
LOT 179 ON PLAN 219526 (HYDEN 6359)
ROAD RESERVE (HYDEN 6359)

Local Government Area:

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.6		Mechanical Removal	Road construction or maintenance

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 Associations: Western area - 519: Shrublands; mallee scrub; Eucalyptus eremophila; Eastern 3 areas - 945: Hyden; Mosaic medium woodland; of salmon gum; shrublands, mallee scrub; redwood and black marlock (Hopkins et al 2001).	The applied area is 0.6 hectares for the purpose of road construction and associated works. The vegetation appears to be in 'very good' (Keighery 1994) condition, although no flora and vegetation survey information was provide and no site visit was undertaken by DEC.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The vegetation description and condition was determined from aerial imagery (Hyden 2004 50cm Orthomosaic - Landgate 2004) and photographs supplied with the application (CBH Engineering Pty Ltd 2010).

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 proposal is for the clearing of 0.6 hectares of native vegetation for road construction and associated works.

The vegetation under application appears to range in condition from 'good' (Keighery 1994) to 'degraded' (Keighery 1994) within the two north-eastern portions and 'very good' (Keighery 1994) to 'excellent' (Keighery 1994) within the two south-western portions of the applied area based on the site photos provided (CBH Engineering Pty Ltd 2010) and from aerial photography (Hyden 50cm Orthomosaic - Landgate 2004).

The vegetation is mapped as Beard vegetation associations 519 (shrublands, mallee scrub of Eucalyptus eremophila) and 945 (mosaic medium woodland of salmon gum, shrublands, mallee scrub of redwood and black marlock) (Hopkins et al 2001), which would offer habitat trees and a range of niches to fauna in the area. The applied area appears to have been fenced from stock over a long period of time which has enabled the vegetation to remain intact (particularly the south-western areas) compared with much of the native vegetation remaining on private property in the local area.

The local area is highly cleared, with approximately 10-15% native vegetation remaining in a 20 km radius. Priority flora records for the local area (20 km radius) show that 30 priority flora with over 80 occurrences are known. The applied area has not had a flora or fauna survey and its full floristic and biodiversity values are not known.

The four small portions of land which make up the applied area are part of a larger, fairly continuous tract of vegetation (863 hectares) but are slightly alienated by roads, tracks and a railway line. The vegetation under application is likely to be contributing to the biological values of this larger corridor of vegetation within a highly cleared landscape and assisting to maintain ecological processes within the landscape.

Therefore, whilst the application area is small in total area, the vegetation under application is likely to be important for the biological diversity of the local area and bioregion. The clearing as proposed, in particular the south-west portions of the applied area, is likely to further fragment the landscape and is therefore may be at variance to this principle.

Methodology References:
CBH Engineering Pty Ltd (2010)
Keighery (1994)
Hopkins et al (2001)

GIS databases:
- Hyden 50cm Orthomosaic - Landgate 2004
- DEC tenure - DEC 2010
- Pre European Vegetation - DA 2001
- Environmentally Sensitive Areas - DEC30 May 2005
- DEC SAC Biodatasets - DEC 2010

(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 applied area is 0.6 hectares of native vegetation for the purpose of road construction and associated works. The vegetation under application appears to range in condition from 'good' (Keighery 1994) to 'degraded' (Keighery 1994) within the two north-eastern portions and 'very good' (Keighery 1994) to 'excellent' (Keighery 1994) within the two south-western portions of the applied area based on the site photos provided (CBH Engineering Pty Ltd 2010) and from aerial photography (Hyden 50cm Orthomosaic - Landgate 2004).

The vegetation is comprised of Beard vegetation associations 519 (shrublands, mallee scrub of *Eucalyptus eremophila*) and 945 (mosaic medium woodland of salmon gum, shrublands, mallee scrub of redwood and black marlock) (Hopkins et al 2001), which may offer habitat trees and a range of niches to fauna in the area. The applied area appears to remain in a better condition compared with much of the native vegetation remaining on private property in the local area as it has been fenced from stock.

Three declared threatened fauna species including Carnaby's black-cockatoo (*Calyptorhynchus latirostris*), Malleefowl (*Leipoa ocellata*) and Numbat (*Walmiputi myrmecobius fasciatus*) and four priority listed fauna species including Crested Shrike-tit (south-western species *Falcunculus frontatus leucogaster*), White-browed Babbler (Western Wheatbelt) *Pomatostomus superciliosus ashbyi*, Crested Bellbird (southern) (*Oreoica gutturalis gutturalis*), and the Western Mouse (*Pseudomys occidentalis*) occur within the local area (20 km radius).

The local area is highly cleared with approximately 10-15% native vegetation remaining, generally on DEC estate, and as such available habitat is limited. Given that the two portions of vegetation in the south western area under application retains its integrity, the vegetation is likely to be significant for fauna in this highly cleared landscape. The two portions of north eastern applied area do not represent the same habitat value given that these areas are alienated and do not remain in the same vegetation condition.

Therefore, whilst the applied area is small in size, it remains intact and is part of a larger, relatively intact area and may provide locally significant habitat for indigenous fauna and as such may be at variance to this principle.

Methodology References:
CBH Engineering Pty Ltd (2010)
Keighery (1994)
Hopkins et al (2001)

GIS databases:
- Hyden 50cm Orthomosaic - Landgate 2004
- DEC tenure -DEC 2010
- Pre European Vegetation - DA 2001
- DEC SAC Biodatasets - DEC 2010
- Soils, Statewide - DA 1999

(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

Three species of rare flora comprising 6 individual records are found in the local area (20 km radius). These include *Roycea pycnophylloides*, *Grevillea scapigera* and *Verticordia staminosa* var. *erecta*. Based on collection notes and vegetation types, there was potential only for *Grevillea scapigera* to occur within the area under application (WA Herbarium 1998 -). However, this species is not likely to occur in the applied area (DEC 2010).

The applied area has been fenced from stock for a long period of time and remains in an intact condition with at least two different vegetation communities occurring within the applied. No flora survey report information was provided with the application.

As the vegetation under application does not appear to have the potential to contain rare flora species, the proposed clearing is not likely to be at variance to this principle.

Methodology References:

DEC (2010)
WA Herbarium (1998 -)

GIS databases:

- Hyden 50cm Orthomosaic - Landgate 2004
- Pre European Vegetation - DA 2001
- DEC SAC Biodatasets - DEC 2010
- Soils, Statewide - DA 1999

(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 mapped occurrences of threatened ecological communities (TEC) within the local area (20 km radius) of the proposed clearing. On that basis, it is unlikely that the applied areas are necessary for the maintenance of any TECs and therefore the proposed clearing is not likely to be at variance to this principle.

Methodology GIS databases:

- Hyden 50cm Orthomosaic - Landgate 2004
- DEC SAC Biodatasets - DEC 2010

(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 area under application is located in the Western Mallee Bioregion, within which 33.3% of the pre-European vegetation remains (Shepherd 2007). The proposal also falls within the Shire of Kondinin, of which there is 50.5% of pre-European vegetation remaining (Shepherd 2007).

The Beard vegetation association within the western area (519: Shrublands; mallee scrub; *Eucalyptus eremophila*) and the 3 eastern areas (945; Hyden; Mosaic medium woodland; of salmon gum; shrublands, mallee scrub; redwood and black marlock) retain 60% and 12.7% respectively of the remaining pre-European vegetation. Within the Western Mallee Bioregion 57.6% and 13% of these vegetation units is retain respectively (Hopkins et al. 2001 & Shepherd 2007). Additionally, the local area (20 km radius) is highly cleared, with approximately 10 - 15% native vegetation remaining.

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).

Given the proposed clearing is within an extensively cleared landscape, may be significant as fauna habitat and is likely to accelerate species loss at ecosystem level it is considered the proposed clearing is at variance to this clearing principle.

	Pre-European (ha)	Current extent (ha)	Remaining (%)	% In reserves DEC Managed Land
IBRA Bioregions*				
Western Mallee [^]	3,981,721	1,325,703	33.3	25.4
Shire*				
Kondinin	741,927	374,478	50.5	6.0

Beard Vegetation Association*				
519	2,333,414	1,399,943	60.0	17.2
945	176,612	22,369	12.7	15.5
Beard Vegetation Association with Bioregion*				
519	2,100,314	1,210,402	57.6	18.5
945	141,354	18,358	13.0	10.8

* (Shepherd 2007)

^ Area within Intensive Land Use Zone

Methodology

References:

Commonwealth of Australia (2001)
Hopkins et al (2001)
Shepherd (2007)

GIS databases:

- Hyden 50cm Orthomosaic - Landgate 2004
- Pre European Vegetation - DA 2001
- Pre-European Vegetation - DA 2001
- Interim Biogeographic Regionalisation of Australia - EA 2000
- Local Government Authorities - DLI 2004

(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

Within the local area (20 km radius) of the area under application there are no EPP Lakes, RAMSAR Wetlands or ANCA wetlands. Only the Lake Gounter chain of ephemeral salt lakes, which are approximately 3.5 km north of applied area but the small amount of proposed clearing (0.6 hectares), is not likely to have a significant effect on this lake system.

The Camm River exists within the local area and one of its major tributaries, is 0.3 km east of the applied areas. The entire 300 metres between the applied areas and the tributary remains vegetated with native vegetation. Given the small amount of clearing proposed and the distance between these rivers and the applied areas, the proposed clearing is not likely to have a significant effect on any of these watercourses.

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

Methodology

GIS databases:

- Hydrography, linear - DOE 2004
- ANCA Wetlands - CALM 1995
- EPP Area - DEP 1995
- EPP Lakes - DEP 1992
- RAMSAR, Wetlands - CALM 2003

(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 proposed to be cleared is 0.6 hectares and comprises 4 small areas within small areas of remnant vegetation. Given the small scale of the clearing and the development of the CBH site, the proposed clearing is not likely to cause appreciable land degradation issues. Therefore the proposed clearing is not likely to be at variance to this principle.

Methodology

GIS databases:

- Acid Sulfate Soil Risk Map, Swan Coastal Plain - DEC 2006
- Average Annual Rainfall Isohyets - WRC 1998
- Annual Evaporation Contours (Isopleths) - WRC 11998
- Hydrogeology, statewide - DOW 2006
- Hydrography, linear - DOW 2006
- Salinity Risk LM 25m - DOLA 2000
- Soils, Statewide - DA 1999
- Topographic contours statewide - DOLA and ARMY 2002

(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

The applied area does not lie adjacent to any formal conservation areas. However, it is within close proximity to

Lake Gounter Nature Reserve, 400 metres to the west. Given the area of vegetated buffer between the proposed clearing and the nature reserve and the small amount of clearing proposed (0.6 ha), is not likely to have a significant effect on this or any other formal conservation area within the local area (20 km radius).

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

Methodology GIS databases:
- Hyden 50cm Orthomosaic - Landgate 2004
- DEC tenure - DEC 2010

(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 proposed clearing is within the Swan-Avon-Lockhart Catchment, which is mapped as a medium salinity risk area. Given the small amount of clearing (0.6 ha) within areas that retain native vegetation, the likelihood of increased salinity may not be significant. However, the removal of deep rooted perennial native vegetation may increase the risk of salinity, both on and off site and therefore the proposed clearing may be at variance to this principle.

Methodology GIS databases:
- Average Annual Rainfall Isohyets - WRC 1998
- Annual Evaporation Contours (Isopleths) - WRC 1998
- Hydrogeology, Statewide - DOW 2006
- Hydrography, linear - DOW 13/7/06
- Salinity Risk LM 25m - DOLA 2000
- Soils, Statewide - DA 1999
- Topographic Contours, Statewide - DOLA and ARMY 2002

(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 increase the risk of water logging or flooding due to the permeability of the soils present locally. Therefore, the proposed clearing is not likely to be at variance to this principle.

Methodology GIS databases:
- Average Annual Rainfall Isohyets - WRC 1998
- Annual Evaporation Contours (Isopleths) - WRC 1998
- Hydrogeology, Statewide - DOW 2006
- Hydrography, linear - DOW 13/7/06
- Soils, Statewide - DA 1999
- Topographic Contours, Statewide - DOLA and ARMY 2002

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

Comments

The Shire of Kondinin has no objections to the proposed clearing or the use of the unmade road reserve Hyden (Shire of Kondinin 2010).

The applied area is within EPA position statement No. 2 agricultural area (EPA 2000) although the purpose of the clearing is not for agricultural activities.

CBH Engineering Pty Ltd has provided supporting information which states that the Shire of Kondinin has raised traffic safety concerns in regards vehicular traffic associated with the Hyden grain receival facility.

Additionally, a new weigh bridge is required due to new legislation being introduced for road trains and the new facilities will also require a dam/catchment area to contain run-off on site.

Methodology References:
EPA (2000)
Shire of Kondinin (2010)

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

5. References

- CBH Engineering Pty Ltd (2010). Clearing permit application and supporting documentation. (DEC Ref: A304501).
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2010) Regional advice for Clearing Permit Application CPS 3751/1, Lot 179 on Plan 219526 and adjacent un-named road reserve, and within Lot 88 on Plan 36724 Marshall Road, Hyden. Department of Environment and Conservation, Western Australia (DEC Ref. A313362).
- 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.
- 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.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- 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.
- 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.
- Shire of Kondinin (2010). Letter of 'no objection' to CBH Engineering Pty Ltd for the development of the CBH applied area, Hyden.
- WA Herbarium (1998 -) FloraBase — The Western Australian Flora. Department of Environment and Conservation <http://florabase.dec.wa.gov.au/browse/profile/2091>. Accessed 23 June 2010.

6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management (now DEC)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment (now DEC)
DoW	Department of Water
DMP	Department of Mines and Petroleum (ex DoIR)
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)