



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 2840/1
File Number: DEC9711
Duration of Permit: From 18 January 2009 to 18 January 2011

PERMIT HOLDER

Shire of Kondinin

LAND ON WHICH CLEARING IS TO BE DONE

EAST HYDEN-BIN ROAD RESERVE (HYDEN 6359)

AUTHORISED ACTIVITY

Clearing of up to 1 hectare of native vegetation within the area hatched yellow on attached Plan 2840/1.

CONDITIONS

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 restrict the movement of machines and other vehicles to the limits of the areas to be cleared

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;

weed/s 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 *Agricultural and Related Resources Protection Act 1976*.

A handwritten signature in black ink, appearing to read "Kelly Faulkner", written over a horizontal line.

Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

18 December 2008

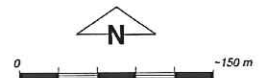
Plan 2840/1



LEGEND

Clearing Instruments

- ☐ Areas Approved to Clear
- ☐ Cadastre
- Hyden 50cm Orthomosaic - Landgate 2004



Scale 1:5540

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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

[Signature] Date 18/12/08
K Faulkner

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.: 2840/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Kondinin

1.3. Property details

Property: ROAD RESERVE (HYDEN 6359)
Local Government Area: Shire Of Kondinin
Colloquial name: East Hyden Bin Road

1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|--------------------|-----------|--------------------|----------------------------------|
| 1 | | 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 |
|---|---|--|--|
| The vegetation under application is comprised of Beard vegetation association 519: Shrublands; mallee scrub, Eucalyptus eremophila | The vegetation ranges from degraded to good (Keighery 1994) condition. The western section of application area has large areas of bare, previously cleared land with only small amounts of vegetation present. The eastern section of the application area is more densely vegetated yet both areas show signs of weed invasion, rabbit grazing and road related trampling (Trim Ref: DOC 67142). | Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994) | The description and condition of the vegetation under application was determined via the use of aerial mapping systems and a flora survey conducted by Enviroworks Consulting (Trim Ref: DOC 67142). |
| The vegetation is also described as consisting of sparse Eucalyptus myriadena - E.loxophelba dominated low woodland with variable understorey consisting of occasional woody shrubs above mostly exotic herbaceous grasses and herbs (Trim Ref: DOC67142) | | | |

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

| | |
|----------|---|
| Comments | <p>Proposal is not likely to be at variance to this Principle</p> <p>The 1 hectare of native vegetation under application for the purpose of road upgrading along East Hyden-Bin road reserve, varies in its condition from degraded to good (Keighery 1994). The area has multiple disturbances such as weed invasion, grazing by rabbits and roadside trampling (EnviroWorks Consulting 2008).</p> <p>The vegetation is not significant as a remnant, although it does contribute to a roadside linkage corridor in a highly cleared area.</p> <p>No fauna or rare flora was recorded within the application area (EnviroWorks Consulting 2008). Due to the condition and size of the proposed cleared area, it is considered unlikely that the vegetation under application is representative of an area of outstanding biodiversity in the bioregion or local area.</p> <p>To reduce the further spreading of weeds throughout the local area, it is recommended that a weed control condition be imposed.</p> |
|----------|---|

Methodology EnviroWorks Consulting (2008)
Keighery (1994)
- CALM Managed Lands and Waters - CALM 01/06/05
- SAC Biodatasets - accessed 11 Feb 08

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

Comments **Proposal may be at variance to this Principle**
The local area (10km radius) is highly cleared with only small pockets of isolated vegetation scattered throughout. Two fauna species were recorded, *Leipoa ocellata* (Malleefowl) and the *Pomatostmus superciliosus* (White-browed Babbler).

A survey conducted by EnviroWorks Consulting (2008) also revealed that the vegetation under application has no significant faunal habitat present, with no nesting or roosting sites or burrows being found during the survey of the area. There was also no road kill, tracks or scats to suggest faunal visits to the application area. However no fauna survey was undertaken.

While the application area is relatively small it does contribute to a roadside corridor in an already highly cleared landscape. However no fauna species are likely to occur within the direct vicinity of the area proposed to be cleared and only a small number of trees will actually be removed (DEC 2008).

Methodology EnviroWorks Consulting (2008)
DEC (2008)
GIS DataSets:
- CALM Managed Lands and Waters - CALM 01/06/05
- Hyden 50cm Orthomosaic - 9/10/07
- SAC Biodatasets - accessed 2 Dec 2008

(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**
A flora survey revealed 21 native plant species within the local area. Most of these species were comprised of woody trees and shrubs. A number of priority listed species were recorded in the local area (10km radius), none of which were identified within the application area (EnviroWorks Consulting 2008). Two rare flora species were recorded within the local area, occurring more than 8km from the application area. No rare or priority flora was recorded within the direct vicinity of the applied area (DEC 2008).

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

Methodology DEC (2008)
EnviroWorks Consulting (2008)
GIS DataSets:
- Hyden 50cm Orthomosaic - 9/10/07
- SAC Biodatasets - accessed 2 December 2008

(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 Threatened Ecological Communities (TECs) within the local area (10km radius) or within the application area itself. It is therefore considered unlikely that the proposed clearing is at variance to this principle.

Methodology GIS DataSets:
- SAC Biodatasets - accessed 2 December 2008

(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**
While the area proposed to be cleared is small (1 hectare), the vegetation does contribute to a local roadside linkage, helping to connect small remnants in a highly cleared area (EnviroWorks Consulting 2008).

The vegetation under application is comprised of beard association 519. This association is well represented, with 51% of pre-European vegetation currently remaining. (Shepherd et al. 2007). The Shire of Kondinin and the Mallee bioregion also contain vegetation representation over the recommended 30% threshold for retained vegetation (Commonwealth 2001). However, within the local area (10km radius) only 15-20% of vegetation remains, largely due to the area being previously cleared for agricultural practises.

The application area is within the agricultural area covered by the EPA's position statement No2, where the continued clearing of native vegetation is not supported other than in relatively small amounts (EPA 2000). The area under application is only 1 hectare, with the intended purpose of straightening the road in order to reduce safety concerns.

Given the remaining vegetation within the Kondinin Shire, the Mallee bioregion and the beard association 519, the proposed clearing of 1 hectare of native vegetation is considered unlikely to have significant impacts in an already highly cleared landscape.

Methodology Commonwealth (2001)
 EnviroWorks Consulting (2008)
 EPA (2000)
 Shepherd et al. (2007)
 GIS DataSets:
 - Hyden 50cm Orthomosaic - 9/10/07
 - Interim Biogeographic Regionalisation of Australia - EA 18/10/00
 - Pre European Vegetation - DA 01/01
 - SAC Biodatasets - accessed 2 Dec 2008

(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 application area can be divided into two sections, comprised of a larger western section and a smaller eastern section. Both areas have cleared paddocks on either side.

Aerial mapping systems show that there is a minor non-perennial watercourse which intersects the west end of the eastern section of the application area. However a survey of the area conducted by EnviroWorks Consulting (2008) revealed that the application area was not associated with any watercourses or wetlands, as no riparian vegetation was recorded.

Methodology EnviroWorks Consulting (2008)
 GIS DataSets:
 - CALM Managed Lands and Waters - CALM 01/06/05
 - Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
 - Hydrography linear - DOW 13/7/06
 - Hydrography linear (hierarchy) - DoW 13/7/06

(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 has a low-medium salinity risk. Due to the size of the area proposed to be cleared, the degraded nature of some existing parts of the application area and given the low rainfall of the region, it is unlikely that the risk of salinity in the local area will increase. Additionally, wind & water erosion is unlikely to occur as a consequence of the proposed clearing (EnviroWorks Consulting 2008).

Methodology EnviroWorks Consulting (2008)
 GIS DataSets:
 - Rainfall, mean annual 30/09/01
 - Salinity Risk LM 25m - DOLA 00

(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 closest conservation area is the Lake Gronter Nature Reserve. The reserve is located 6.4km west of the application area. The vegetation under application, while contributing to a small roadside vegetation link, is not part of a significant linkage corridor to this reserve. It is considered unlikely that the proposed clearing of 1 hectare of native vegetation along a road reserve which shows signs of disturbance and has no records of fauna activity (EnviroWorks Consulting 2008) will reduce the environmental values offered by the nearby conservation area.

Methodology EnviroWorks Consulting (2008)
 GIS DataSets:
 - CALM Managed Lands and Waters - CALM 01/06/05
 - Hyden 50cm Orthomosaic - 9/10/07

(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 area under application has a low-medium salinity risk. The groundwater salinity exceeds 35,000 mg/L. According to GIS data, there is a minor non-perennial watercourse that dissects the west end of the eastern section of vegetation under application. A non-perennial lake is also within close proximity of the application area, situated 500 metres south west. The proposed clearing of 1 hectare of native vegetation in a highly cleared environment, with low rainfall in the region, is unlikely to contribute to a further decrease in the quality of surface or groundwater present in the local area.

Methodology GIS DataSets:

- Evapotranspiration Isopleths - WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Mean Annual Rainfall Isohytes (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

It is considered unlikely that the proposed clearing of 1 hectare of native vegetation in a region which experiences an average annual rainfall of 400mm will exacerbate flooding in the local area (10km radius).

Additionally, the culverts (once established) will divert the flow of water which may reduce the risk of potential flooding events (Enviroworks 2008).

Methodology EnviroWorks Consulting (2008)

GIS DataSets:

- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05

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

Comments

No submissions have been received in relation to this principle.

The proposed clearing for the purpose of road straightening was recommended following a Road Safety Audit.

Methodology

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.

The assessment has found that

- principle (b) may be at variance
- all other principles are not likely to be at variance.

5. References

- DEC (2008) Wheatbelt Regional Advice. Department of Environment and Conservation Trim Ref DOC71013.
- Commonwealth of Australia (2001) National Targets and Objectives for Biodiversity Conservation 2001-2005, AGPS, Canberra.
- EnviroWorks Consulting (2008) Flora of East Hyden-Bin road, Shire of Kondinin
- EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority, Western Australia.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Shepherd, D.P. (2007). Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

6. Glossary

| Term | Meaning |
|-------|--|
| BCS | Biodiversity Coordination Section of DEC |
| CALM | Department of Conservation and Land Management (now BCS) |
| DAFWA | Department of Agriculture and Food |
| DEC | Department of Environment and Conservation |
| DEP | Department of Environmental Protection (now DEC) |
| DoE | Department of Environment |
| DoIR | Department of Industry and Resources |
| DRF | Declared Rare Flora |
| EPP | Environmental Protection Policy |
| GIS | Geographical Information System |
| ha | Hectare (10,000 square metres) |
| TEC | Threatened Ecological Community |
| WRC | Water and Rivers Commission (now DEC) |