

1. Application details

1.1. Permit application details

Permit application No.: 2706/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: T.J.R & V.E/D & S.J Mouritz/Collins

1.3. Property details

Property: LOT 4 ON PLAN 25779 (Lot No. 4 HYDEN-LAKE KING HYDEN 6359)
LOT 4 ON PLAN 25779 (Lot No. 4 HYDEN-LAKE KING HYDEN 6359)
LOT 4 ON PLAN 25779 (Lot No. 4 HYDEN-LAKE KING HYDEN 6359)
LOT 4 ON PLAN 25779 (Lot No. 4 HYDEN-LAKE KING HYDEN 6359)

Local Government Area: Shire Of Kondinin

Colloquial name:

1.4. Application

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

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: 41 - Shrublands; teatree scrub 511 - Medium woodland; salmon gum & morrel	The proposal is to clear 26ha of dead or dying native vegetation within a highly saline drainage channel.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The condition of the vegetation was determined from an onsite inspection of the vegetation (DEC, 2008a)

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 proposal is to clear 26 hectares (within a 150ha area) of native vegetation in a completely degraded (Keighery, 1994) condition for the purpose of remediation and restoration works (DEC, 2008a).

The applied area contains little biological diversity as a result of salinisation of the landscape with much of the native vegetation either dead or dying.

Given that the area under application is in a completely degraded (Keighery, 1994) condition and taking into account that there are nearby areas of native vegetation in better condition than the applied area the clearing as proposed is not likely to be at variance to this principle.

Methodology

References:
DEC (2008a)
Keighery (1994)

GIS Database:
SAC Biodatasets - accessed 20 Oct 08
Pre European Vegetation - DA 01/01
NLWRA, Current Extent of Native Vegetation 20 Jan 2001

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

Comments Proposal is not likely to be at variance to this Principle

The area under application is in a completely degraded (Keighery, 1994) condition and there are nearby areas of intact vegetation in better condition than that of the applied area.

There are no known restricted endemic species which vegetation under application is the sole supporting habitat for.

Therefore the vegetation under application is not likely to be significant habitat (in a local context) for fauna indigenous to Western Australia as there is more suitable habitat in nearby vegetation remnants.

Methodology References:
Keighery (1994)

GIS Database:
SAC Biodatasets - accessed 20 Oct 08
Pre European Vegetation - DA 01/01

(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 is one known record of rare flora within the local area (10km radius), namely *Roycea pycnophylloides*.

This species is known to occur within saline flats however the area under application is completely degraded (Keighery, 1994) and highly saline and is therefore not likely to be habitat for this species (DEC, 2008b).

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

Methodology References:
DEC (2008b)
Keighery (1994)

GIS Database:
SAC Biodatasets - accessed 20 Oct 08
Pre European Vegetation - DA 01/01
NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Comments Proposal is not likely to be at variance to this Principle

There are no known records of Threatened Ecological Communities (TECs) within a 10km radius of the applied area.

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

Methodology GIS Database:
SAC Biodatasets - accessed 20 Oct 08

(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

	Pre-European	Current area (ha)	Remaining % extent (ha)	% in reserves/DEC- managed land
IBRA Bioregion **				
- Mallee	7,395,901	4,040,551	54.63	31.22
Shire of Kondinin*	741,927	374,477	50.47	6.04
Beard vegetation associations**				
- 41	194,250	179,370	92.34	10.66

* (Shepherd et al., 2001; Hopkins et al., 2001)

** (Shepherd, 2007)

The vegetation under application is in a completely degraded (Keighery, 1994) condition and falls within the agricultural area governed by the EPA Position Statement No.2. The EPA believes that it is unreasonable to expect to be able to continue to clear native vegetation within the agricultural area unless there is exceptional reason to do so (EPA, 2000). The proposed clearing is for remediation works and to revegetate a degraded area and therefore, the proposed clearing is reasonable as it is aimed at being beneficial for the vegetation in the long term.

Additionally, as the vegetation is considered to be completely degraded (Keighery 1994), it is not likely to be representative of the above mentioned vegetation associations.

As the local area is extensively cleared, vegetation retention, where possible, should be a priority. A condition to avoid, minimise and reduce the impact of the clearing will be placed on the permit to ensure vegetation is retained where possible. Additionally, revegetation conditions will be placed on the permit to mitigate the loss of vegetation within this extensively cleared landscape.

Methodology

References:

EPA (2000)

Keighery (1994)

Hopkins et al. (2001)

Shepherd et al. (2001)

Shepherd (2007)

GIS Database:

Interim Biogeographic Regionalisation of Australia - EA 18/10/00

Local Government Authorities - DLI 8/07/04

Pre European Vegetation - DA 01/01

NLWRA, Current Extent of Native Vegetation 20 Jan 2001

CALM Managed Lands and Waters - CALM 01/06/05

(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 at variance to this Principle

The area under application is wholly within an area subject to inundation as well as there being 6 non perennial lakes mapped within the applied area.

The proposal is aimed at reducing salinisation and increasing native vegetation regeneration within the drainage line (DEC, 2008a)

The clearing as proposed will involve the removal of vegetation in association with a watercourse and is therefore at variance to this principle. Revegetation conditions will be placed on the permit to mitigate the likely impact of clearing on the watercourses under application.

Given the purpose of the clearing (revegetation and remediation works) and the current condition of vegetation under application (completely degraded; Keighery, 1994) the proposal is likely to result in environmental benefit to nearby water bodies.

Methodology

References:

DEC (2008a)

GIS Database:

Hydrography linear - 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 may be at variance to this Principle

The area under application is affected by surface salinity and as a result the vegetation under application is in a completely degraded (Keighery, 1994) condition.

The proposal is aimed at reducing salinisation and increasing native vegetation regeneration within the drainage line (DEC, 2008).

Further removal of vegetation within this landscape is likely to increase the occurrence of salinity within the local area.

Revegetation conditions will be placed on the permit to mitigate the possible incremental impact of clearing within the applied area.

Methodology **References:**
DEC (2008a)
Keighery (1994)

GIS Database:
Average Annual Rainfall Isohyets - WRC 29/09/98
Annual Evaporation Contours (Isopleths) - WRC 29/09/98
Groundwater Salinity Statewide DoW 13/07/06
Hydrography, linear - DOW 13/7/06
Salinity Risk LM 25m - DOLA 00
Topographic contours statewide - DOLA and ARMY 12/09/02

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments **Proposal is not likely to be at variance to this Principle**
The closest conservation area (Lake Gounter Nature Reserve, gazetted) is located approximately 450m west of the applied area.

Given the distance between the applied area and Lake Gounter Nature Reserve the clearing as proposed is not likely to impact on the environmental values of this conservation area.

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

Methodology **GIS Database:**
CALM Managed Lands and Waters - CALM 01/06/05
Register of National Estate - Environment Australia Australian and world heritage division 12 Mar 02

(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**
Given that the proposal is to clear 26 ha of native vegetation within an area already affected by salinisation (DEC, 2008a) the clearing as proposed may incrementally add to a deterioration of surface and groundwater within the area.

The impacts of clearing are only likely to be short term as the purpose for clearing is for remediation and restoration works (DEC, 2008a) and will likely ultimately result in environmental benefits to the quality of local surface and ground water.

Given the above the clearing as proposed may be at variance to this principle, therefore revegetation conditions will be placed on the permit to mitigate the potential for deterioration in water quality as a result of clearing.

Methodology **References:**
DEC (2008a)

GIS Database:
Groundwater Salinity Statewide DoW 13/07/06
Hydrography, linear - DOW 13/7/06
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**
Given that the vegetation under application is in a completely degraded (Keighery, 1994) condition with much of the vegetation being either dead or dying (DEC, 2008a) the vegetation under application is not likely to be contributing significantly to excess water removal from the system.

Therefore clearing of the vegetation under application is not likely to be at variance to this principle as clearing

is not likely to change the current dynamic of water flow through this system.

Methodology GIS Database:
NLWRA, Current Extent of Native Vegetation 20 Jan 2001
Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The Shire of Kondinin has raised no objections to the clearing as proposed.

The clearing as proposed will involve the modification of a waterway however as the applied area is not within a Rights in Water Irrigation Area the proposal does not require a water licence.

No deep drainage works are proposed.

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, and the proposed clearing is at variance with principle (f), may be at variance with principles (e), (g) and (i) and is not likely to be at variance with principles (a), (b), (c), (d), (h) and (j).

5. References

- DEC (2008a) Regional Advice to assessing officer from Department of Environment and Conservation Wheatbelt Region, unpublished document, DOC65192.
- DEC (2008b) Flora Advice to assessing officer from Department of Environment and Conservation Wheatbelt Region, unpublished document, DOC65838
- 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.
- 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.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

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)

