



1. Application details

1.1. Permit application details

Permit application No.: 2508/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Chapman Valley

1.3. Property details

Property: UNALLOCATED CROWN LAND (YUNA 6532)
VICTORIA LOCATION 10102 (DARTMOOR 6532)
Local Government Area: Shire Of Chapman Valley
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2		Mechanical Removal	Extractive Industry
2		Mechanical Removal	Extractive Industry

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 Unit - 380: Shrublands; scrub-heath on sandplain	Vegetation within the proposed clearing area appears to vary from degraded - good condition (Keighery, 1994). It is predominantly scrub heath that has been affected by fire. Weed invasion appears to be minimal. Vegetation is consistent with that found in semi-arid areas, however patchier and more disturbed in areas.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Vegetation condition has been determined from site photo's provided by the proponent.

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 area proposed to be cleared is predominantly scrub heath on lateritic soils. A fire has recently gone through the area. Site photo's show that some areas have been disturbed by past gravel extraction and other human disturbances resulting in degraded - good condition vegetation (Keighery, 1994). The proposed clearing area is part of a larger remnant of continuous vegetation.

Given the past disturbance on site, and the surrounding vegetation which has been undisturbed, it is unlikely that clearing will be at variance to this principle.

Methodology Keighery, 1994
Site Photo's, 2008
GIS Databases:
- Mungo 1.4m Orthomosaic - Landgate02

(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**
There are no records of threatened fauna within the local area. The area proposed to be cleared is scrub-heath

in a degraded - good condition (Keighery, 1994) and is part of a larger area of uncleared remnant of vegetation. This area is likely to provide habitat for reptile species, including skinks, small mammals and birds.

As the size of the proposed clearing area's are small (1ha per gravel pit) and they are within a larger remnant it is unlikely that the area proposed to be cleared provides significant habitat for native fauna.

Methodology Keighery, 1994
ANRA, 2007
GIS Databases:
-SAC Biodatasets, accessed 9 June 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

Within a 20km radius there has been Declared Rare Flora (Rare flora) and Priority Flora identified. The rare flora species, *Ptilotus Fasciculatus*, was recorded 16km to the south west of the proposed clearing. This species is commonly found in areas that are naturally saline and is unlikely to be present within the proposed clearing area.

The priority flora species identified nearby (within 20km radius) include:

- * *Acacia leptospermoides* subsp. *obovata*
- * *Scholtzia* sp. *Binnu*
- * *Scholtzia* sp. *Whelarra*
- * *Thryptomene duplicata*

These species are found within the same vegetation type and similar soils as the proposed clearing. The proposed clearing area is in degraded - good condition (Keighery, 1994) and there has been fire through some of the areas recently. As the clearing is limited to two 1ha areas it is unlikely that this vegetation is required for the maintenance of these species.

Methodology Keighery, 1994
CALM, 2002
Site Photos, 2008
GIS Databases:
- SAC Biodatasets, accessed 9 June 2008
- Topographic Contours, Statewide
- Mungo 1.4m Orthomosaic - Landgate02

(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 within the local area (20km radius). The area proposed to be cleared is scrub heath in degraded - good condition (Keighery, 1994) and shares no characteristics with areas that are likely to contain threatened ecological communities. It is unlikely that the proposed clearing is at variance to this principle.

Methodology Keighery, 1994
ANRA, 2007
GIS Databases:
- SAC Biodatasets, accessed 9 June 2008
- Mungo 1.4m Orthomosaic - Landgate02

(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 proposed to be cleared, retains approximately 58.2% of pre-European vegetation, and, of that 30% is contained within reserves.

As the proposal is to clear two 1ha areas of scrub heath which are in degraded - good condition (Keighery, 1994) and are part of a large continuous remnant of bushland, it is unlikely that the clearing as proposed is at variance to this principle.

Methodology Keighery, 1994
Shepherd, 2006
GIS Databases:
- SAC Biodatasets, accessed 9 June 2008
- Mungo 1.4m Orthomosaic - Landgate02

(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 area proposed to be cleared is not mapped as being part of a watercourse or wetland. Site photo's taken by the proponent do not show wetland features, and vegetation and soil is not consistent with wet areas. It is unlikely that the proposed clearing is at variance to this principle.

Methodology Site photo's, 2008
GIS Databases:
- Mungo 1.4m Orthomosaic - Landgate02
- 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 soils proposed to be cleared are lateritic gravels; these soils are unlikely to result in excess wind erosion due to the coarse and large grains of soil. Site photo's provided by the proponent show areas with no vegetation and they do not appear to be affected by water erosion or water logging. Soils would provide reasonable drainage and rainfall in this area is low (400mm p/a).

Salinity levels in this area are reasonably high however the clearing on a small scale (2 x 1ha area) of low scrub heath vegetation is unlikely to impact upon salinity.

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

Methodology Site photo's, 2008
ANRA, 2007
GIS Databases:
- Groundwater Salinity, Statewide
- Mungo 1.4m Orthomosaic - Landgate02

(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 Wandana Nature Reserve lies approximately 6-9km to the east of the two proposed clearing areas. The reserve in which the proposed clearing lies, is separated from the conservation area by a 2-3km stretch of cleared land which disrupts the continuity of vegetation.

The area proposed to be cleared is too far away to be providing buffering facilities to the conservation area and due to the lack of continuity in vegetation does not provide an ecological linkage. Additionally, the proposed clearing areas are small (1ha) and in degraded-good condition (Keighery, 1994). It is unlikely that the proposed clearing is at variance to this principle.

Methodology Keighery, 1994
GIS Databases:
- CALM Managed Lands and Waters
- Mungo 1.4m Orthomosaic - Landgate02

(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 areas proposed to be cleared do not lie near to any watercourses or wetlands and is therefore unlikely to affect surface water quality.

Salinity levels within the proposed clearing area is high (3000-7000 mg TDS), however, as the proposed clearing is of a small scale (1ha) and involves removal of small scrub heath vegetation it is unlikely that salinity levels will be impacted.

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

Methodology Site photo's, 2008
GIS Databases:
- Groundwater Salinity, Statewide
- Mungo 1.4m Orthomosaic - Landgate02

- Rainfall, Mean Annual
- Hydrography, linear

(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 proposed clearing is of a small scale (2 x 1ha) in an area with low rainfall (400mm p/a) it is unlikely that clearing will be at variance to this principle.

Methodology GIS Databases:
- Rainfall, Mean Annual

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

Comments

The area proposed to be cleared lies within Unallocated Crown Land. The proponent has obtained a licence to occupy crown land (licence no. 296) from the Department for Planning and Infrastructure WA.

The area proposed to be cleared lies within the EPA Position Statement N0.2. Clearing is not for agricultural purposes.

Methodology

4. Assessor's comments

Comment

The clearing has been assessed according to the ten principles. None of these principles have been found to be at variance.

5. References

- Australian Natural Resources Atlas, 2007, <http://www.anra.gov.au/topics/rangelands/overview/wa/ibra-gs.html>, last updated 16.11.07
- CALM, 2002, Bioregional Summary of the 2002 Biodiversity Audit for Western Australia, eds McKenzie, N.L, May, J.E, McKenna, S.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- SAC Biodatasets, accessed 9 June 2008
- 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.
- Site Photo's, 2008, TRIM Ref DOCs54987, 54988, 54989, 54990, 54991, 54992, 54993

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)