

(Mattiske Consulting
1998).

Hedde Vegetation
Complex: Dwellingup
Central and South
Complex; Hester Complex
(Hedde et al. 1980).

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**

Based on the DEC Site Visit (DEC 2007) and the area under application lacking vegetation structure (consisting of mature trees with no middle or lower storeys), the area proposed to be cleared is considered to have a medium to low level of biological diversity within the local area and is unlikely to significantly affect conservation, flora values or exacerbate land degradation and water quality issues in the area.

In particular areas under application, the removal of vegetation may affect some connectivity for animal movement in the local area; to mitigate this and the potential loss of surrounding biodiversity, the proposed clearing will be carried out in accordance with fauna management conditions and dieback and weed control conditions.

Therefore, the proposal is unlikely to be at variance to this Principle.

Methodology DEC Site Visit (2007);
 GIS Databases:
 - Bunbury 50cm ORTHOMOSAIC - DLI04

(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**

Regional Biodiversity advice indicates that corporate records identify Ringtail Possum habitat within areas under application.

Large habitat trees, some with hollows were observed during the site visit (DEC Site Visit 2007). A majority of the species noted included a medium marri-jarah woodland with *Melaleuca* spp. representing known possum habitat.

Given the above, the proposed clearing may be at variance to this Principle. To mitigate any loss of habitat, fauna management conditions will be imposed on the permit to ensure surveys are undertaken by a fauna specialist to identify trees that may be suitable as habitat for specially protected fauna under the Wildlife Conservation Act and where applicable translocation of fauna is undertaken.

Methodology DEC Site Visit (2006);
 Regional Biodiversity Advice (2007).

(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 are no known records of Declared Rare Flora (DRF) in the vicinity of the notified area (10km radius), however one Priority 3 flora species, *Acacia semitrullata* has been recorded approximately 3.7km north of the proposed clearing (not within the same vegetation type).

Due to the distance between the area under application and recorded priority flora species and the proposed clearing occurring within a historically impacted area, the proposal is unlikely to contain declared rare flora.

Methodology GIS databases:
 - Declared Rare and Priority Flora List - CALM 13/08/03
 - Busselton 50cm Orthomosaic - DLI 03
 - Mattiske Vegetation - CALM 24/3/98

(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 occurrences of Threatened Ecological Communities (TECs) in the local area (10km radius)

of the proposed clearing (the closest is 28km away and is not within the same vegetation or soil type as the notified area).

Therefore, the area under application is unlikely to contain TECs; and is unlikely to be at variance to this Principle.

Methodology GIS databases:
- Threatened Ecological Communities - CALM 15/7/03
- Threatened Plant Communities - DEP 06/95

(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 at variance to this Principle**

The vegetation proposed to be cleared is a component of Beard Vegetation Association 3 (Hopkins et al. 2001) of which there is 72.1% (Shepherd et al. 2001) of the pre-European extent remaining and therefore of 'Least Concern' status for Biodiversity conservation (Department of Natural Resources and Environment 2002). The vegetation under application is also within the Dardanup Shire of which there is 52.2% of pre-European extent remaining.

The vegetation under application is representative of Mattiske Vegetation Complexes Hester (HR), Lowden (Lo), Grimwade (GR) and Yarragil (Yg1) (Havel 2002) of which there is 82.3%, 50.7%, 69.1% and 87.9% of the pre-European extent remaining and therefore all of a 'Least Concern' status for biodiversity conservation (Department of Natural Resources and Environment 2002).

Therefore, it is unlikely this proposal is at variance to this Principle.

Methodology Department of Natural Resources and Environment (2002);
EPA (2000);
Havel (2002);
Hopkins et al. (2001);
Shepherd et al. (2001);
GIS databases:
- Mattiske Vegetation - CALM 24/3/98
- Interim Biogeographic Regionalisation of Australia - EM 18/10/00
- Local Government Authorities - DLI 8/07/04
- Pre European Vegetation - DA 01/01

(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 under application is within a road reserve of a road that already exists. All watercourses have previously been diverted through culverts or under bridges.

The Ferguson River and tributaries are the main watercourses in close proximity to the area under application. There are no wetlands mapped within 5km of the notified area.

Due to the vegetation under application being contained within a road reserve where an existing road exists and the distance to wetlands, the proposal is not likely to be at variance to this Principle.

Methodology GIS databases:
- ANCA, Wetlands - CALM 08/01
- EPP Areas - DEP 06/95
- EPP Lakes - DEP 28/07/03
- Geomorphic Wetlands (Mgt Categories) Swan Coastal Plain - DoE 15/9/04
- Hydrography Linear - DoE 1/2/04
- RAMSAR, Wetlands - CALM 21/10/02
- Bunbury 50cm ORTHOMOSAIC - DLI04

(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**

Any land degradation issues associated with clearing vegetation for upgrading the road reserve would be minimal as the existing road already has road side infrastructure in place to prevent land degradation associated with the road, i.e. table drains and culverts.

In addition, the area under application contains a groundwater salinity of 500-1000mg/L with no known acid

sulphate soils risk or salinity risk.

Therefore, the proposal is unlikely to be at variance to this Principle.

Methodology GIS databases:
- Acid Sulfate Soil Risk Map, SCP - DoE 01/02/04
- Salinity Risk LM 25m - DOLA 00.
- Groundwater Salinity, Statewide - 22/02/00

(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**
As the Wellington State Forest surrounds the area under application, the proposed clearing may increase edge effects, such as weed invasion within this area. To mitigate this risk the defined area of clearing only permits clearing within 3m either side of the existing roads.

Therefore, it is unlikely the proposal is at variance to this Principle.

Methodology GIS databases:
- CALM Managed Lands and Waters - CALM 1/06/04
- Register of National Estate - EA 28/01/03
- System 6 Conservation Reserves - DEP 06/95
- System 1-5 and 7-12 Areas - DEP 06/95

(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 proposed clearing is not within a gazetted public drinking water supply area and is not likely to degrade water quality.

Methodology GIS databases:
- Public Drinking Water Source Areas (PDWSAs) - DOE 29/11/04

(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**
Due to the scale of the proposed clearing, and the fact the clearing is being done within an already established road reserve, flooding impacts are unlikely to occur.

Methodology GIS databases:
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments
The area under application is a road reserve.

There is one Native Title Claim over the area under application. The Department of Environment and Conservation's advertising of the application in the West Australian newspaper constitutes legal notification of the native title representative body for the purpose of the future act procedures under the Native Title Act 1993. No response was received from the representative body.

Methodology State of Construction Map, Shire of Dardanup
GIS Database:
- Town Planning Scheme Zones - MFP 8/98

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Road construction or maintenance	Mechanical Removal	3.1	Assessable criteria have been addressed and no objections were raised. The assessment identified that the proposal may be at variance to Principle (b) for potential fauna habitat. The assessing officer therefore recommends that the permit be granted for 3.1 hectares of road widening with management conditions addressing dieback, fauna, weeds, recording and reporting and maintenance.

5. References

- DEC Site Visit (2007). Department of Environment and Conservation, Western Australia. TRIM Ref: DOC15018
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske Consulting (1998) Mapping of vegetation complexes in the South West forest region of Western Australia, CALM.
- 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)

