



1. Application details

1.1. Permit application details

Permit application No.: 1493/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Gingin

1.3. Property details

Property: LOT 7269 ON PLAN 34513 (LANCELIN 6044)

Local Government Area: Shire Of Gingin

Colloquial name:

1.4. Application

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

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 Association 1026 - Mosaic: Shrublands; <i>Acacia rostellifera</i> , <i>A. Cyclops</i> (S) & <i>Melaleuca cardiophylla</i> (N) thicket	The purpose of the clearing permit is for the extension of a recreational reserve and carpark in the Shire of Gingin. Total area of the proposed clearing is 0.1ha of native vegetation adjoining the recreational reserve.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation condition was deemed 'degraded' from site photos supplied by the proponent on 5/10/06 (TRIM Ref DOC 7586).
Heddlie et al (1980) defines the vegetation under application as Quindalup Complex: Coastal Dune Complex - low closed forest and closed scrub.	Site photographs suggest the area to be cleared has undergone previous disturbance and is considered to be of Degraded condition (Keighery, 1994) consisting of areas of bare sand, extensive weed invasion, and a scattering of low coastal shrubs.		

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**

Site photographs suggest that the proposed clearing of 0.1ha is of degraded condition with areas of bare sand, extensive weed invasion, and a scattering of low coastal shrubs that appear to have undergone high levels of disturbance.

The area under application lies adjacent to an existing recreational reserve, and is likely to become further degraded (without management) due to edge effects, weed invasion and surrounding activities. The high level of disturbance at this site, low native species density and diversity, and extensive weed invasion suggest that the original biodiversity has been significantly compromised.

Given the low levels of species and ecosystem diversity, it is unlikely that the vegetation under application is representative of an area of outstanding biodiversity in the Bioregion or local area.

Methodology Site Photos (2006)

(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 Shire is proposing to clear a total of 0.1 hectares for the purpose of extending an existing recreation reserve and adjoining carpark. Site photos (TRIM Ref DOC 7586) suggest that the area to be cleared is Degraded (Keighery, 1994).

The high level of disturbance at this site, extensive weed invasion and limited diversity of native species suggests that the original biodiversity and habitat value has been significantly compromised. The vegetation is therefore unlikely to provide a significant habitat for indigenous fauna.

Methodology Site Photos (2006)
Keighery (1994)

(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 three mapped records of Declared Rare Flora (DRF) within a five kilometre radius of the area under application. Two populations of Priority 3 Flora, *Conostylis pauciflora* subsp. *euryrhipis*, have been recorded one kilometre south and 4.2kms ESE from the area proposed to be cleared. The third DRF is another Priority 3 Flora, *Hibbertia spicata* subsp. *leptotheca*, located 3.4kms NNW of the area under application. These populations occur on the same Heddle vegetation complex as that of the proposed clearing, of which there is 49.5% remaining (EPA 2003).

Due to the size and degraded nature of the area under application, it is unlikely to be necessary for the continued existence of rare flora.

Methodology EPA (2003)
GIS Database:
- Declared Rare and Priority Flora List - CALM 01/07/05

(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

Mapping indicates there are no threatened ecological communities within a ten kilometre radius of the area under application, therefore the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Database:
- Threatened Ecological communities - CALM 12/04/05
- Threatened Plant Communities - DEP 06/95
- Environmentally Sensitive Areas - DOE 30/5/05

(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

Pre-European (ha)*	Current Extent (ha)*	Remaining (%)*	Conservation Status**	% in Reserves/CALM managed land
IBRA Bioregion: Swan coastal Plain	1,498,297	626,512	41.8	Depleted
Shire: Gingin	315,560	177,688	56.3	Least concern
Beard Unit 1026	124,905	85,076	68.1	Least concern
Heddle Vegetation: Quindalup complex	36,000	17,820	49.5	Depleted 10.7

The area under application is located in the Shire of Gingin and within the Swan Coastal Plain Bioregion. The extent of pre-European vegetation within these areas is 56.3% and 41.8% respectively (Shepherd et al., 2001).

The vegetation proposed to be cleared is a component of Beard Vegetation Association 1026 (Hopkins et al., 2001) of which there is 68.1% of the pre-European vegetation extent remaining (Shepherd et al., 2001).

Heddle et al (1980) defines the vegetation under application as Quindalup Complex : Coastal Dune Complex - low closed forest and closed scrub. This association has a representation of 49.5% of the pre-European extent (EPA 2003), and is therefore considered as having a 'Depleted' conservation status (Department of Natural Resources and Environment, 2002). The Quindalup Complex has 10.7% in secure tenure.

The Shire of Gingin also lies within the agricultural zone of EPA Position Paper No. 2. The EPA does not support the further reduction in native vegetation through clearing for agriculture and support active management by

landholders to maintain environmental values of remaining vegetation. A condition will be placed on the permit that adjoining remnant vegetation is to be fenced to mitigate any further impacts from the proposed clearing.

Given the size of the proposed clearing, the extent of remaining native vegetation, and the condition of the vegetation, the area under application is unlikely to be significant as a remnant of native vegetation in an area that has been extensively cleared.

Methodology Shepherd et al (2001)
Heddle et al (1980)
Hopkins et al., 2001
Department of Natural Resources and Environment (2002)
EPA (2003)
GIS Database:
- Heddle Vegetation Complexes - DEP 21/06/95
- Pre-European Vegetation - DA 10/01
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- EPA Position Paper No. 2 Agriculture Region - DEP 12/00

(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

There are no watercourses or wetlands associated with the proposed clearing site. Therefore this proposal is not likely to be at variance with this principle.

Methodology GIS Database:
- Geomorphic Wetlands, Swan coastal Plain - DEC
- EPP Lakes - DEP 1/12/92
- EPP Wetlands (draft) - DEP 21/07/04
- Ramsar Wetlands - CALM 14/02/03
- ANCA Wetlands - CALM 08/01
- Clearing Regulations - Environmentally Sensitive Areas DoE 8/03/05

(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 proposed clearing of native vegetation is unlikely to cause appreciable land degradation due to the low relief and shallow gradients of the topography within the region, and the size of the area to be cleared. Additionally, a condition will be placed on the permit that adjoining remnant vegetation is to be fenced to mitigate any further impacts from the proposed clearing.

Methodology GIS Database:
- Topographic Contours, Statewide - DOLA 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 at variance to this Principle

The area proposed to be cleared does not lie within areas set aside for conservation. The closest conservation area is a 'C' Class Reserve (Wanagarren and Nilgen Reserves) located 5.7kms north-east of the proposed clearing site. This conservation area is of a different vegetation type to the vegetation of the area under application. Therefore, the proposed clearing will not impact on the environmental values of the nearby conservation area.

Methodology GIS Database:
- CALM Managed Lands and Waters - CALM 1/07/05
- WRC Estate - DOE 9/04
- Bush Forever - MFP 07/01
- Register of National Estate - EA 28/01/03

(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 site lies within the Swan Coastal Catchment. A monitoring bore located 50m from the area under application indicates that groundwater depth was 13.5m below the top of casing (TOC) on 12/04/2006. Groundwater salinity (measured as Total Dissolved Solids) ranges from 500 - 1000mg/L. Relative to these figures, the proposed clearing is unlikely to compromise groundwater values.

The region is of low relief with shallow gradients, and has an annual rainfall of 700mm. Due to the small area proposed to be cleared in relation to the topography, it is unlikely that the clearing of native vegetation will cause deterioration in the quality of surface water or groundwater within the local area.

Methodology GIS Database:
 - Hydrographic Catchments - Catchments - DOE 23/03/05
 - WIN Groundwater Sites, Monitoring - DEWCP (Current)
 - Groundwater Salinity, Statewide - 22/02/00
 - Rainfall, Mean Annual - BOM 30/09/01
 - 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**
 Due to the scale and nature of the proposed clearing, it is unlikely to cause or exacerbate flooding within the local area.

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

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

Comments
 No submissions from the public have been received.

 There is a 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.

One Aboriginal Site of Significance, Ledge Point, is listed within the area under application. The applicant will be notified of its obligations under the Aboriginal Heritage Act 1972.

There is no RIWI Act Licence or Works approval required for the proposed works

Methodology GIS Database:
 - Aboriginal Sites of Significance - DIA 28/02/03
 - Native Title Claims - DLI 07/11/05
 - RIWI Act, Areas - WRC 05/04/02

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Recreation	Mechanical Removal	0.1	Grant	It is recommended that the Shire of Gingin be granted a permit to clear 0.1 hectares of native vegetation for the purpose of extending an existing recreation reserve and adjoining carpark. Assessment of the application found the proposal is not at variance to Principle (h), and not likely to be at variance to Principles (a), (b), (c), (d), (e), (f), (g), (i) or (j).

5. References

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.

EPA (2003) Guidance for the Assessment of Environmental Factors -level of assessment of proposals affecting natural areas within the System 6 region and Swan Coastal Plain portion of the System 1 Region. Report by the EPA under the Environmental Protection Act 1986. No 10 WA.

Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, 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., 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 Photos, 2006. Shire of Gingin. TRIM Ref DOC7586

6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
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 DoE)

