



1. Application details

1.1. Permit application details

Permit application No.: 2808/1
 Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Broga Security Pty Ltd

1.3. Property details

Property: LOT 63 ON PLAN 2075 (GLEN IRIS 6230)
 LOT 51 ON PLAN 2249 (GLEN IRIS 6230)
 LOT 123 ON DIAGRAM 1271 (Lot No. 332 OLIVE GLEN IRIS 6230)
 LOT 120 ON PLAN 233021 (Lot No. 120 OLIVE GLEN IRIS 6230)
 ROAD RESERVE (GLEN IRIS 6230)

Local Government Area: City Of Bunbury
 Colloquial name:

1.4. Application

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

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 Unit: * 1000 - Mosaic: Medium forest; jarrah-marri / Low woodland; banksia / Low forest; teatree (Melaleuca spp.)	The proposal is to clear approximately 0.6ha of native vegetation within a 11.51ha area for the purpose of land development.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The condition of the vegetation was determined from aerial photography, Bunbury 50cm orthomosaic - landgate 2006.

1182 - Medium woodland; Eucalyptus rudis & Melaleuca raphiophylla

SOUTHERN RIVER COMPLEX **: Open woodland of E. calophylla - E. marginata - Banksia species with fringing woodland of E. rudis - M. raphiophylla along creek beds.

* Shepherd et al., 2001; Shepherd, 2007

** Heddle 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**
 The proposal is to clear less than 1 ha of native vegetation within a 11.51 ha a predominately cleared area for the purpose of land development.

The vegetation under application is in a degraded (Keighery, 1994) condition as most of the applied area is scattered Flooded Gum, Marri and Peppermint trees over a dense layer of weeds such as Kikuyu grass, watsonia and blackberry (Strategen, 2008).

The local area retains approximately 40% native vegetation however the scattered trees under application may provide partial passage for fauna.

A fauna survey identified that there were a number of Western Ringtail Possums (*Pseudocheirus occidentalis*) within the applied area, therefore the scattered trees under application may be transitional habitat for this species (Stratagen, 2008).

A flora survey of the applied area did not identify any rare or priority flora within the applied area which is likely to be a result of a long history of disturbance to the area under application (Stratagen, 2008).

Given that the vegetation under application is scattered trees in a degraded (Keighery, 1994) condition the clearing as proposed is not likely to be at variance to this principle.

Methodology References:
Keighery (1994)
Stratagen (2008)

GIS Database:
NLWRA, Current Extent of Native Vegetation 20 Jan 2001
SAC Biodatasets - accessed 11 December 2008

(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 vegetation under application includes mature Marri, Flooded Gum and Peppermint trees, some of which are known to provide habitat for Western Ringtail Possums (Stratagen, 2008).

Given that the vegetation under application provides limited linkage to areas of remnant vegetation the applied area may facilitate some fauna movement.

Therefore the vegetation under application may provide some habitat for Western Ringtail Possums however fauna management conditions will be placed on the permit to mitigate the potential for clearing to impact on Western Ringtail Possums.

Methodology References:
Stratagen (2008)

GIS Database:
SAC Bio datasets - accessed 10/12/2008

(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

There are two rare floras within the local area (10km radius), namely *Eleocharis keigheryi* and *Diuris drummondii*.

D. drummondii is known to occur in similar habitats to that of the applied area however a flora survey of the applied area did not identify any occurrences of this species within the vegetation under application (Stratagen, 2008).

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

Methodology References:
Stratagen (2008)

GIS Database:
SAC Bio datasets - accessed 10/12/2008

(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 17 known records of Threatened Ecological Communities (TECs) within the local area (10km radius).

The closest recorded TEC is SCP09 (MANEA01) approximately 2.1km south west.

The applied area is not within the buffer zone for any nearby TEC (TEC Database), therefore the clearing as proposed is not likely to part of or necessary for the maintenance of a known TEC.

Methodology References:
TEC Database (Accessed 11 December 2008)

GIS Database:
SAC Bio datasets - accessed 11 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			
	Pre-European reserves/DEC- area (ha)	Current extent (ha)	Remaining % managed land	% in
IBRA Bioregion **				
- Swan Coastal Plain	1,501,208	583,140	38.84	32.55
City of Bunbury*	6,180	1,620	26.22	0.76
Beard vegetation associations**				
- 1000	99,835	28,540	28.59	15.74
- 1182	23,437	6,548	27.94	52.82
Heddle Vegetation Complex***				
- Southern River Complex	57,979	11,501	19.8	1.5
* (Shepherd et al., 2001; Hopkins et al., 2001)				
** (Shepherd, 2007)				
*** Heddle et al. (1980)				

The local area (10km radius) retains approximately 40% native vegetation with much of that in a similar or better condition than the scattered trees under application (degraded; Keighery, 1994).

Given that the local area has not been extensively cleared the proposal is not likely to be at variance to this principle.

Methodology References:
Keighery (1994)
Heddle et al. (1980)
Hopkins et al. (2001)
Shepherd et al. (2001)
Shepherd (2007)

GIS Database:
Heddle Vegetation Complexes - DEP 22/06/95
Interim Biogeographic Regionalisation of Australia - EA 18/10/00
Local Government Authorities - DLI 8/07/04
Pre European Vegetation - DA 01/01
SAC Biodatasets - accessed 11 December 08
NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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 in close proximity to a perennial lake (25m W), a major watercourse (Preston River, 70m NE), conservation palusplain (40m NE) and occurs within mapped multiple use palusplain.

Therefore the clearing as proposed is at variance to this principle as it includes vegetation growing within a

known wetland and associated with wetlands and watercourses.

Methodology References:

GIS Database:
Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain ? DEC 11/04/07
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 is not likely to be at variance to this Principle**

Given that the proposal is small, less than 1ha of native vegetation within an 11.51ha predominately cleared area, the clearing as proposed is not likely to cause appreciable land degradation.

Methodology GIS Database:

Hydrographic catchments, catchments - DoW 01/06/07 Salinity Risk LM 25m - DOLA 00
Soils, Statewide DA 11/99
Topographic contours statewide - DOLA and ARMY 12/09/02
Hydrogeology, Statewide 05 Feb 2002

(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 may be at variance to this Principle**

There are 6 CALM managed lands, 5 system 6 areas and multiple Register of National Estate (RNE) areas within the local area, the closest being the Old Picton Inn (RNE) approximately 195m N.

There is also a conservation category wetland approximately 40m north east of the applied area, the applied area is within the recommended buffer for this wetland (DEC, 2008).

As the applied area has a high number of invasive weeds such as Watsonia, Blackberry, Soursob, Arum Lilly and Blue lupin the clearing as proposed may cause weeds and /or dieback disease to spread into areas of conservation significance.

Weed and Dieback conditions will be placed on the permit to mitigate the potential for clearing to impact on the environmental values of nearby conservation areas.

Methodology References:

DEC (2008)

GIS Database:
Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain ? DEC 11/04/07
Hydrography, linear - DOW 13/7/06
Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02
System 6 areas ? DEC 11/7/06

(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**

As the applied area is small (less than 1 ha within an 11.51ha predominately cleared area) the clearing as proposed is not likely to cause deterioration in surface or groundwater quality.

Methodology GIS Database:

Groundwater Salinity Statewide DoW 13/07/06
Hydrographic catchments, catchments - DoW 01/06/07
Hydrography, linear - DOW 13/7/06 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**

As the applied area is small (1 ha within an 11.51ha predominately cleared area) the clearing as proposed is not likely to cause or exacerbate the incidence or intensity of flooding.

Methodology GIS Database:

Hydrography, linear - DoW 13/7/06
Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05

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

Comments

The applied area is within Rights in Water Irrigation areas Bunbury (groundwater) and Preston River (River).

The applied area is subject to subdivision approval granted on the 14 February 2008 for which draft conditions addressing Regional Open Space, riparian zone buffers, flora and fauna surveys, drainage management, Acid Sulfate Soil management, Landscape management, geotechnical and water supply issues are included (WAPC 132333) (Strategen, 2008).

Methodology

References:
Strategen (2008)

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 (b) and (h) and is not likely to be at variance with principles (a), (c), (d), (e), (g), (i) and (j).

5. References

- DEC (2008) Memo re Standard Wetlands Advice for Native Vegetation Conservation Branch. Dated 17/07/2008. Species and Communities Branch, Department of Environment and Conservation, Western Australia.
- Heddle, 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. (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.
- Strategen (2008) Application for a clearing permit supporting documentation, prepared by Strategen Environmental for TME October 2008, DOC 65740

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)

