



1. Application details

1.1. Permit application details

Permit application No.: 763/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: LWP Property Group

1.3. Property details

Property: LOT 4 ON DIAGRAM 19303 (House No. 346 LYON AUBIN GROVE 6164)
LOT 3 ON DIAGRAM 19303 (House No. 360 LYON AUBIN GROVE 6164)
Local Government Area: City Of Cockburn
Colloquial name: Lyon Road - Lots 3 and 4 on Plan 19303

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
6.48		Mechanical Removal	Building or Structure

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
<p>The dominant vegetation communities were described by Ecoscape (2004) as:</p> <p>Jarrah-Banksia Woodland over <i>Xanthorrhoea preissii</i>, <i>Macrozamia riedlei</i>, <i>Gompholobium tomentosum</i>, <i>Hibbertia hypericoides</i>, <i>Burchardia umbellata</i> and <i>Patersonia occidentalis</i>; and</p> <p><i>Banksia attenuata</i> and <i>Banksia menziesii</i> over an understorey dominated by <i>Allocasuarina humilis</i>, <i>Eremaea pauiflora</i>, <i>Strilingia latifolia</i>, <i>Calytrix flavescens</i>, <i>Leucopogon conostephioides</i>, <i>Dasyopogon bromeliifolius</i> and <i>Hibbertia</i> spp.</p>	Clearing will include all vegetation within lots 3 and 4 as part of bulk earthworks associated with the proposed subdivision.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	Lyon Rd Subdivision - Environmental Assessment (Banjup) (Ecoscape 2004) and Site Visit 31 January 2006.

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**
Vegetation within Lot 3 and 4 has been significantly modified through historic land clearing practises. The native vegetation under application include limited overstorey species and sparse scattered understorey. Given the lack of understorey and the additional site inspection carried out by Ecoscape DoE TRIM Ref: 2006I/124 report identifying no migratory birds being present on-site. It is not considered likely that the area under application is likely to be representative of higher biological diversity than that present in the local area.

Methodology Ecoscape (2006) DoE TRIM Ref: 2006I/124

(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 fauna survey carried out by Ecoscape (2004) identified a large variety of mammals, avifauna and reptiles present within the local area.

The Quenda *Isodon obesulus fusciventer* is the only mammalian priority species that was identified as being present on-site and that the proponents have conducted a translocation program in association with CALM to remove these species to secure suitable habitat.

The area under application was also considered likely to be used as a breeding site for the EPBC Act (Migratory) listed Rainbow Bee-Eater. A targeted survey for the presence of this species within Lots 3 and 4 was carried out by Ecoscape on the 23 January 2006 identified that there was 'no indications of their presence in terms of direct sightings, nests or calls'.

Methodology CALM (2005)
Ecoscape (2004)
Ecoscape (2006) DoE TRIM Ref: 2006I/124

(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

CALM (2005) identifies vegetation on lots 3 and 4 as supporting vegetation of scattered trees and fragmented vegetation. Ecoscape (2004) and site visit confirmed that the absence of understorey species and completely degraded nature of the area under application. It is considered unlikely that the DRF and priority species identified in the local area are present within the area under application.

Methodology Ecoscape (2004)
Site Visit 31 January 2006
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

Within 10km of the area under application there are 16 recorded occurrences of Threatened Ecological Communities. However, as there are no known occurrences within the local area, which is defined as 5km, CALM advises that this proposal is not likely to be at variance.

Methodology GIS Databases:
Threatened Ecological Communities - CALM 12/04/05
Clearing Regulations - Environmentally Sensitive Areas - DOE 8/03/05
CALM (2005)

(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

Heddlie et al. (1980) defines the vegetation under application as 'Bassendean Complex - Central and South' and is also classified as vegetation association 1001 (Shepherd et al. 2001) of which both have a representation below 30%.

The proposal may be at variance with this principle, as the State Government is committed to the National Objective Targets for Biodiversity Conservation, which includes targets that prevent clearance of ecological communities with an extent below 30% of that present pre-1750 (Department of Natural Resources and Environment 2002; EPA 2003).

While these representation figures are below the recommended 30% target, the vegetation on site is in a completely degraded condition, that it is unlikely to be representative of these complexes.

Methodology Department of Natural Resources and Environment 2002
EPA 2003
Shepherd et al. 2001

GIS Databases:
Heddlie Vegetation Complexes - DEP 21/06/95
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

An ANCA Wetland of approximately 2628ha is situated approximately 0.2km to the south and approximately 1km to the east of the area under application. Thompsons Lake is also situated approximately 3km to the north-west of the area under application. Ecoscape (2004) and the GIS database did not identify any wetlands or vegetation associated with wetlands or watercourses within the area under application, therefore the proposal is unlikely to be at variance with this principle.

Methodology Ecoscape 2004
GIS Databases:
Clearing Regulations - Environmentally Sensitive Areas - DOE 30/5/05
Hydrography, linear (hierarchy) - DOE 13/4/05

(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

Ecoscape (2004) reported that the majority of the area under application consists of sandy soils, and a minority of the area is of a different soil type containing a layer of clay. The soil therefore has a slight to moderate susceptibility to erosion and poor infiltration rates in some areas. Problems with wind erosion and drainage during and following clearing can be minimised by following the conditions on the City of Cockburn Earthworks Planning Approval.

The area under application is also classified as a medium to low risk area for shallow acid sulphate soils at >3m depth, however removal of vegetation alone is unlikely to cause a problem. The proposal is therefore unlikely to be at variance with this principle.

Methodology Ecoscape 2004
GIS Databases:
Acid Sulfate Soil Risk Map, SCP - DOE 04/11/04
Soils, Statewide - DA 11/99

(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

Within the local area (within 5km of the area under application) there are three CALM managed areas, including Thompsons Lake Nature Reserve, Harry Waring Marsupial Reserve and Wandri Nature Reserve. There are also 8 Land for Wildlife sites, the nearest of which is approximately 2.1km from the area under application. A number of other conservation areas are also found within the local area, including 12 Bush Forever sites, the closest of which is located approximately 1.2km from the area under application.

CALM (2005) advises that the proposal 'does not appear to directly impact upon any recorded occurrences of CALM-managed lands, EPP wetlands, Bush Forever sites, nor any DoE 'ESA' areas.'

The 'Bassendean Complex - Central and South' currently has minimal (0.7%) vegetation (Hedde et al 1980) in secure tenure. JANIS (1997) recommends that 15% of the pre-1750 distribution of each vegetation ecosystem should be protected in a comprehensive, adequate and representative reserve system.

While these representation figures are below the recommended 15% target, the vegetation on site is in a completely degraded condition, that it is unlikely to be representative of these complexes.

Methodology CALM (2005)
JANIS 1997
Hedde et al 1980

(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 area under application is partially located within a proclaimed groundwater area (Jandakot GWA) and a Priority 3 Public Drinking Water Source Area (PDWSA). The eastern side of Lot 3 is also located within a Wellhead Protection Zone. However, retention of vegetation in priority 3 Wellhead Protection Zones is not a requirement of the Metropolitan Water Supply, Sewerage and Drainage Act By-laws.

Due to medium rainfall (900mm per year on average) in the region there is low groundwater recharge. Therefore, the clearing as proposed is not likely to change water tables or significantly alter salinity or pH.

Methodology GIS Databases:
 Groundwater Subareas - WRC 10/10/00
 Public Drinking Water Source Areas (PDWSA) - DOE 09/08/05
 Rainfall, Mean Annual - BOM 30/09/01
 PDWSA Protection Zones - DOE 7/1/04

(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**
 The area under application is located approximately 2.5km from Thompsons Lake. Due to the size of the proposed clearing, the general relief of the area and distance from any waterbody it is unlikely that the removal of vegetation from the site would have an impact on peak flood height or duration.

Methodology GIS Databases:
 Topographic Contours, Statewide - DOLA 12/09/02
 Hydrography, linear (hierarchy) - DOE 13/4/05

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

Comments
 The City of Cockburn issued the Earthworks Approval.
 Structure plan or subdivision approval for the lots under application had not yet been received.
 Groundwater licence was issued on 2 February 2006 for dust suppression and compaction requirements on-site.
 No other statutory approvals are required under legislation administered by the Department when considering this proposal.

Methodology City of Cockburn (2005)
 DPI (2006)

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Building or Structure	Mechanical Removal	6.48	Grant	The assessable criteria have been addressed and the proposal is unlikely to be at variance to any of the clearing principles. The assessing officer therefore recommends that the permit be granted.

5. References

ANCA (1996) A Directory of Important Wetlands in Australia. Second Edition. Australian Nature Conservation Agency, Canberra

CALM Land clearing proposal advice (2005). Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref: IN 25227.

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.

Ecoscape (Australia) Pty Ltd (2004). Lyon Road Subdivision - Environmental Assessment (Banjup). Report for LWP Property Group Pty Ltd, Unpubl.

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.

JANIS Forests Criteria (1997) Nationally agreed criteria for the establishment of a comprehensive, Adequate and Representative reserve System for Forests in Australia. A report by the Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-committee. Regional Forests Agreement process. Commonwealth of Australia, Canberra.

Keighery, BJ (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.

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)