



1. Application details

1.1. Permit application details

Permit application No.: 775/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: William Allen and Jean Higginson

1.3. Property details

Property: LOT 782 ON PLAN 202759
LOT 597 ON PLAN 202759
Local Government Area: City Of Rockingham
Colloquial name: Jarvis Road - Lot 597

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.33		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>Beard vegetation association:</p> <p>998: Medium woodland; tuart</p>	<p>The vegetation under application can be separated into four different areas, based on the location and the purpose for which the clearing is proposed.</p>	<p>Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)</p>	<p>Vegetation clearing description based on information obtained through Bush Forever Volume 2 (Government of Western Australia, 2000) and observations from the site inspection conducted on 1/8/2005.</p>
<p>Heddle vegetation complexes:</p> <p>Herdsmen Complex: Sedgelands and fringing woodland of <i>E. rudis</i> - <i>Melaleuca</i> species.</p> <p>Karrakatta Complex - Central and South: Predominantly open forest of <i>E. gomphocephala</i> - <i>E. marginata</i> - <i>C. calophylla</i> and woodland of <i>E. marginata</i> - <i>Banksia</i> species.</p> <p>(Hedde et al. 1980)</p>	<p>Area A: Vegetation within the area consists of one large <i>Eucalyptus gomphocephala</i> located within Lot 597, directly adjacent a nursery work area and water feature. Growth of this tree has led to the limbs and trunk leaning over the nursery area, with numerous limbs appearing dangerous.</p> <p>Area B: Three mature <i>E. gomphocephala</i> located within Lot 782, with removal for the purpose of a proposed building envelope.</p> <p>Area C: Clearing to maintain a cleared area surrounding an existing shed for the purpose of fire hazard reduction. Vegetation within this area includes a few relatively small <i>E. gomphocephala</i> and a limited understorey of <i>Gahnia trifida</i> to the east of the shed.</p> <p>Area D: Removal of fallen material (branches, leaves, and logs) from Lots 597 and 782, for the purpose of fire hazard reduction. Vegetation within this area is comprised of an upperstorey of <i>Melaleuca raphiophylla</i> with an understorey of <i>Gahnia trifida</i>. Impacts associated with a large fire event are obvious within this area, as understorey vegetation is quite sparse.</p> <p>All areas of vegetation under application are within a degraded condition, having been historically cleared or degraded through the recent fire event.</p>		

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 vegetation under application for the purpose of this permit consists primarily of E. gomphocephala, within areas which have been degraded through historical landuse practises. It is not considered likely that the vegetation under application is representative of a higher level of biological diversity, than that present within the immediately surrounding area.

Methodology Site inspection (1/8/2005)

(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**

CALM (2005) advise that the area that is proposed to be cleared is directly adjacent to a conservation category wetland and includes a portion of Bush Forever Site 275, which appears to support an intact dampland/sumpland wetland community and associated habitat. However the clearing is unlikely to appreciably impact on significant fauna habitat at this site provided the clearing is limited to the clearing of 'approx 3-4 trees, no bush' as declared by the applicants in their submission.

While the vegetation under application could be utilised for nesting habitat are available within the vegetation under application, no existing nests were observed during the site inspection, and is it not considered likely that these trees represent significant habitat which is not available within the immediate surrounding area.

Methodology CALM (2005)
Site inspection (1/8/2005)

(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 Declared Rare or Priority Flora presented within the area under application, or within the local area surrounding this application (defined as a 5km radius of the applied properties).

CALM (2005) advise that he vegetation that is proposed to be cleared, appears to be limited to a small number of trees and based on the available information it is not anticipated that any flora of conservation significance would be adversely impacted as a consequence of this proposal being approved.

Methodology CALM (2005)
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 may be at variance to this Principle**

The local area (5 km) surrounding the application site contains 75 known Threatened Ecological Communities (TEC), of which all are associated with the Quindalup Vegetation Complex to the west of the applied area. There are no known TEC within the boundaries of the property under application, or within the same vegetation complexes.

CALM (2005) advise that a number of TEC's have been recorded in the local area and are known to occur on similar land elements and vegetation communities that may (unconfirmed) exist on the property under assessment. CALM advise that without further information regarding the vegetation condition and structure it is not possible to determine the likelihood of TEC's being present.

Methodology Site inspection (1/8/2005)
GIS Database: Threatened Ecological Communities - CALM 12/04/05

(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 may be at variance to this Principle**

The vegetation proposed to be cleared is defined as Beard vegetation association 998 (Hopkins et al. 2001) and Heddle vegetation complexes Karrakatta Complex - Central and South and 'Herdsman Complex' (Heddle et al. 1980), of which Karrakatta Complex has a representation below 30%.

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 2000). Beyond this value, species extinction is

believed to occur at an exponential rate and any further clearing may have irreversible consequences for the conservation of biodiversity and is, therefore, not supported.

While these vegetation complexes have a representation under the recommended 30%, the EPA recognises that vegetation within constrained areas can be varied to a minimum level of 10% representation (EPA, 2003).

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	% in reserves/CALM-managed land
IBRA Bioregion	1,529,235	657,450	43%	Depleted	
City of Rockingham	24,326	8,534	35.1%	Depleted	
Beard vegetation association					
- 998	51,094	18,320	35.9%	Depleted	32.9%
Hedde vegetation complex					
- Herdsman Complex	8,309	2,875	34.6%	Depleted	11.5%
- Karrakatta Complex - Central and South					
	49,912	14,729	29.5%	Vulnerable	2.5%

* (Shepherd et al. 2001)

** (Department of Natural Resources and Environment 2002)

Methodology Hopkins et al. (2001)
Hedde et al. (1980)
Department of Natural Resources and Environment (2002)
EPA (2000)
EPA (2003)
Shepherd et al (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

Lots 782 & 597 Jarvis Road contain a relatively large portion of the Stakehill Swamp, which is classified as both a Conservation Category Wetland (CCW) and an EPP (Lake). These classifications provide for the protection of wetland functions by managing impacts which may include the direct alteration of the wetland. Potential impacts are managed through the provision of buffers from development to these environmentally sensitive areas.

The Water and Rivers Commission (2001) contains recommended buffer distances for developments from wetland areas, with the minimum distance being 50 metres. The proposed clearing does not comply with these recommendations, which at a maximum are approximately 25 metres from the defined CCW boundary, and in the case of Areas C and D, are within the defined boundary.

Methodology Site inspection (1/8/2005)
GIS Databases:
- Geomorphic Wetland (Mgt Categories) - Swan Coastal Plain - DOE 15/09/04
- EPP, Lakes - DEP 1/12/92

(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 vegetation under application is located directly adjacent to or within the Stakehill Swamp, which has been impacted through past landuse activities and recent fire events.

The area outside of the wetland area is classified as a Class 3 risk of Acid Sulphate Soils (ASS) - No known risk of shallow or deeper ASS or PASS. Areas within Stakehill Swamp wetland boundary are classified as having a Class 3 risk of ASS which is a moderate to high risk of shallow (<3m) ASS or PASS occurring.

Based on the amount of vegetation proposed for removal, and the already degraded nature of the area under application, it is considered unlikely that approval of this proposal will cause appreciable on-site or off-site land degradation.

Methodology Site inspection (1/8/2005)
GIS Database: Acid Sulphate Soil Risk Map, Swan Coastal Plain - DOE 01/02/04.

(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

CALM (2005) advise that the proposed clearing is relatively small in scale and based on the information provided by the proponent, confined to a small portion of the property. On this basis the proposed clearing is unlikely to significantly impact on any CALM lands managed for conservation in the local area. However the area that is proposed to be cleared is directly adjacent to a conservation category wetland and takes in a portion of Bush Forever Site 275, which appears to support an intact dampland/sumpland wetland community and associated habitat.

CALM advises that in the event of the clearing proposal being accepted that the DoE ensures that the clearing is restricted to the areas specified and that no clearing occurs on the more extensive dampland areas found on the property, which are likely to possess high biodiversity values.

Methodology CALM (2005)

(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

Lots 597 and 782 Jarvis Road contain substantial areas of the Stakehill Swamp, a defined Conservation Category Wetland, EPP (Lake), and a perennial swamp. Based on the limited amount of vegetation under application, it is considered unlikely that the removal of vegetation will impact on the wetland area through sedimentation, erosion, turbidity or eutrophication, nor is it considered likely to alter the water regimes.

Methodology Site inspection (1/8/2005)
GIS Database: Hydrography, linear - DOE 01/02/04

(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, flooding impacts are unlikely to occur.

Methodology Site inspection (1/8/2005)

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

Comments

Environmental Protection Authority:

The Environmental Protection Authority advises that this application impacts an area of native wetland vegetation that is currently proposed for reservation as Parks and Recreation within the Metropolitan Region Scheme (MRS), by the Western Australian Planning Commission (WAPC).

Due to the high conservation value of Stakehill Swamp, this proposed reservation is being formally assessed by the EPA. It is noted that this permit application contains four elements, one of which impacts the high conservation value wetland proposed for protection by the WAPC (Area D). It may therefore be considered premature to make any decision on this element of the permit prior to the completion of the formal assessment process.

In view of this, should the Department of Environment consider approving the application in its current form for all four elements, then it must be referred to the EPA pursuant to section 38(1) of the Environmental Protection Act 1986 (DOE Trim ref: 2005/1183).

Department of Planning and Infrastructure:

The Department of Planning and Infrastructure advises that the land subject to application is within or near an environmentally sensitive wetland area (Stakehill Swamp), currently to subject of proposed MRS Amendment Stakehill Swamp, Baldivis 1050/33 to reserve Rural land for Parks and Recreation (P&R)

The Environmental Protection Authority required formal assessment of the proposed amendment, and is still under consideration, as per statutory requirements. If the application for a permit to clear native vegetation is granted, it may compromise the above MRS amendment process and the future reservation boundary (DOE Trim ref: 2005/1200)

City of Rockingham:

The City of Rockingham advises that the eastern and northern parcels of clearing are located within the

Conservation Category Wetland (CCW) at Stakehill Swamp, which is also classified as an Environmental Protection (Swan Coastal Plain Wetlands) Policy (EPP) wetland under the Environmental Protection Act 1986.

In respect to the western and southern parcels of vegetation, the City advises that Part 4.11.2(a) of its TPS Mo. 2 states that all development, including the clearing of land, shall be setback a minimum of 30 metres from the primary street and 10 metres from all other boundaries, other than for the purpose of providing a fire break or vehicular accessway.

Part 4.11.2(b) states that no native vegetation or remnant vegetation shall be removed or cleared unless approved by the Council, and other than for the purpose of a firebreak, fire protection within a building zone, dwelling, outbuilding, fence and vehicular access or where such vegetation is dead, diseased or dangerous. (DOE Trim ref: KWI4123).

Submission by a private organisation:

The submission by a private organisation stated that this permit raises several serious issues.

- The area is currently being reserved for Parks and Recreation and the final boundary is not known.
- The land is a Bush Forever Site
- The wetland has a lakes EPP classification
- The area is not suitable for building or habitation of any sort
- DPI and the Minister for Planning have indicated they are prepared to purchase back at market price properties. (DOE Trim ref: KWI4259)

Methodology

4. Assessor's recommendations

Purpose	Method Applied	Applied area (ha)/ trees	Decision	Comment / recommendation
Building or Structure	Mechanical Removal	0.33	Grant	<p>The assessable criteria have been addressed, and the proposal has been found to be at variance to Principle (f), and may be at variance to Principles (d), (e), and (h).</p> <p>The vegetation under application is associated with a recognised regionally significant wetland which is classified as both an EPP Lake and a Conservation Category Wetland. Consideration of the Principles has found that the vegetation under application may also include Threatened Ecological Communities, may be important in the maintenance of environmental values of nearby conservation areas and any clearing will further reduce the vegetation complex which is under represented.</p> <p>As Area D of this proposal is located within the wetland area, it is recommended that it be refused as part of this application.</p> <p>The building envelope proposed for clearing (Area B) has been referred to the EPA by the Department of Environment, under Section 38 of the Environmental Protection Act 1986.</p> <p>Section 51F of the Environmental Protection Act 1986 states:</p> <p>'(1) If an application for a clearing permit made under section 51E(1) is related to a proposal which has been referred to the Authority under section 38, the CEO shall not perform any duty imposed on the CEO by section 51E(5).'</p> <p>In this regard, the CEO may not make a decision until such time that a decision on the level of assessment has been placed on this referral by the EPA.</p> <p>The assessing officer therefore recommends that only vegetation which presents a risk to human safety and existing infrastructure (Areas A and C) be approved for clearing.</p>

5. References

- CALM Land clearing proposal advice. Advice to A/Director General, Department of Environment (DoE). Department of Conservation and Land Management, Western Australia. DoE TRIM ref IN23244.
- 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 (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority.
- 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.
 Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth WA.
 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, 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)