



1. Application details

1.1. Permit application details

Permit application No.: 783/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: City of Albany

1.3. Property details

Property: LOT 6984 ON PLAN 195519 (REDMOND WEST 6327)
Local Government Area: City Of Albany
Colloquial name: Redmond Hay Road - Reserve 27679

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.81		Mechanical Removal	Extractive Industry

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 3 - Medium forest; jarrah-marri (Hopkins et al., 2001; Shepherd et al., 2001). Mattiske consulting (1996) described the vegetation as Mitchell (M) Open forest of Eucalyptus marginata subsp. marginata / Corymbia calophylla / Allocasuarina fraseriana on broad undulating uplands in perhumid and humid zones. Connell & ATA Environmental (2001) describe the vegetation as E. marginata/C. calophylla Medium Forest E; Medium Eucalyptus marginata/Corymbia calophylla forest on low hills (30 to 90m). Species include Banksia attenuata, B. ilicifolia, Hakea amplexicaulis, Agonis obovatus, Synaphea sp. Stirlingia tenuifolia, Hovea species.	The vegetation under proposal comprise Eucalyptus marginata (jarrah), E. calophylla (marri) and Allocasuarina fraseriana (sheoak) low woodland with a mixed shrubland understorey including of Banksia grandis, Boronia crenulata and Hakea amplexicaulis (DoE Site Visit, TRIM ref AD206; Spatial Information Surveys, 2004).	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).	The DoE Site Visit (TRIM ref AD206) showed that the vegetation was in an excellent condition with few signs of invasion by weed species. The area proposed to be cleared is 0.81ha in a mostly vegetated 15.5ha Reserve with a purpose of gravel. Part of the Reserve has already been cleared for gravel extraction, rehabilitation has commenced on some of these areas with moderate success.

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 area covered under this application appears to contain a high level of biological diversity when compared to the freehold agricultural land in the local area (DoE Site Visit). However, when compared to the Blue Gum Creek Nature Reserve 250m to the north of the area under application and the State Forest 50m to the south it

is likely to contain a moderate level of biodiversity. The area to be cleared is small (0.81ha) and is bordered by cleared and rehabilitated areas to the east and north. The area will be rehabilitated with local native species immediately following the completion of gravel extraction at the site as a condition to the permit, if granted. Given these factors, it is considered unlikely that this application is at variance with this Principle.

Methodology DoE Site Visit (TRIM ref AD206)
GIS Database:
-Albany 1.4m Orthomosaic - DLI March 03

(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 area under application appears to comprise a large range of significant flora for fauna habitat. Sightings of *Calyptorhynchus latirostris* (Carnaby's Black cockatoo, listed as Threatened under the Western Australian Wildlife Conservation Act) have been made near the Reserve (Spatial Information Surveys, 2004), however as the adjoining State Forest has the same Beard Vegetation Community as the area under application, it is unlikely that the clearing of a small area will significantly impact the habitat availability for the cockatoo's within the vicinity. The Redmond Hay Reserve, on which the gravel extraction takes place, connects the Blue Gum Creek Nature Reserve and the Denmark Catchment State Forest so may play an important role as a corridor for fauna. However, the small area proposed to be cleared (0.81ha) is unlikely to significantly impact on indigenous fauna in the area as there are large areas of forest in reserve to the north and south that can provide habitat and a corridor of approximately 100m exists in the east of the Gravel Reserve linking the neighbouring reserves. The revegetation proposed as a condition of the clearing permit is likely to reinstate this corridor and provide habitat in the long term.

Methodology Spatial Information Surveys (2004), DoE Site Visit (TRIM ref AD206)
GIS Database:
-CALM Managed Lands and Waters - CALM 1/07/05
-Albany 1.4m Orthomosaic - DLI March 03

(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**
A flora survey conducted for the whole reserve in September 2004 indicated that there were a number of Priority 4 species *Stylidium plantagineum* populations present. Three of these sightings were in the area proposed to be cleared (Spatial Information Surveys, 2004). A further two Declared Rare Flora species and five Priority species are located within 8km of the site. The closest of these are the Declared Rare Flora (DRF) *Banksia goodii* 2km north and *Synaphea preissii* a Priority 3 species found 700m northwest of the proposed site. The City of Albany has received approval from the Department of Conservation and Land Management (CALM) to remove the population of *Stylidium plantagineum* located in the area covered under this application, on the condition that the revegetation plan for the site includes the re-establishment of this Priority species (CALM, 2005). Given that the proponent will be required to revegetate the area using local native species including *Stylidium plantagineum* as a condition of the clearing permit, they have approval to remove the Priority flora and no other Rare or Priority species were found during the survey it is considered unlikely that this application is at variance to this Principle.

Methodology Spatial Information Surveys (2004), CALM (2005, TRIM ref AI894)
GIS Databases:
-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**
The closest recorded Threatened Ecological Community (TEC) to the site is 31km to the east (ML207 & ML208.1). The area under application is not likely to be a TEC as the vegetation association present as described by Beard, Connell and Mattiske (Hopkins et al., 2001; Shepherd et al., 2001; Mattiske Consulting, 1998; Connell & ATA Environmental, 2001) and confirmed by a Flora Survey and DoE Site Visit is well represented in the Albany region (Spatial Information Surveys, 2004). Therefore, it is considered that the proposal is not likely to be at variance with this Clearing Principle.

Methodology Spatial Information Surveys (2004), DoE Site Visit (TRIM ref AD206), Hopkins et al. (2001), Shepherd et al. (2001), Mattiske Consulting (1998), Connell & ATA Environmental (2001)
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 is not at variance to this Principle

The State Government is committed to the National Objective Targets for Biodiversity Conservation 2001-2005 (AGPS, 2001) which includes a target that prevents clearance of ecological communities with an extent below 30% of that present pre- 1750 (Department of Natural Resources and Environment, 2002; EPA, 2000). The area under application is part of the Jarrah Forest Bioregion that has 58.7% of its Pre-European extent remaining, which is classed as least concern for conservation while the local government area, the City of Albany, has only 38.9% remaining which is classed as depleted (Hopkins et al., 2001; Shepherd et al., 2001; Department of Natural Resources and Environment, 2002). For the vegetation classifications of this site the Beard Vegetation Association 3 has 72.1% remaining (Hopkins et al., 2001; Shepherd et al., 2001) which is considered to be of least concern for conservation status (Department of Natural Resources and Environment, 2002). For the Matiske vegetation class Mitchell (MI) 77.8% remains (Matiske Consulting, 1998), while for the Connell & ATA Environmental (2001) description of the area 65.1% remains, both of these figures classify the area to be of least concern for conservation (Department of Natural Resources and Environment, 2002). However, the benchmark of 15% representation in conservation reserves (JANIS, 1997) has not been met for the Beard Association 3 with only 10.1% under reservation (Hopkins et al., 2001; Shepherd et al., 2001). However, according to Connell the vegetation at the site has 45.9% in conservation reserves within the Albany Hinterland (Connell & ATA Environmental, 2001).

Methodology Hopkins et al. (2001) Shepherd et al. (2001), Department of Natural Resources and Environment (2002), Matiske Consulting (1998), JANIS (1997), AGPS (2001), Connell & ATA Environmental (2001), EPA (2000)

(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 at variance to this Principle

The proposal is not at variance with this Principle as the vegetation is not closely associated with any watercourses or wetlands and there is a vegetated buffer of over 100m between the proposed clearing and the edge of the Reserve, except for the southern edge which joins the State Forest. The Hay River flows 2km west of the site with the nearest watercourse a minor perennial 450m northeast.

Methodology DoE Site Visit (TRIM ref AD206)
GIS Database:
-Hydrography, linear - DoE 01/02/04
-Albany 1.4m Orthomosaic - DLI March 03

(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

Department of Agriculture WA (DAWA) advice was not sought due to the small size of the area under application (0.81ha). Clearing is not likely to cause land degradation at this site in the longer term as rehabilitation will commence following gravel extraction.

Methodology DoE Site Visit (TRIM ref AD206)

(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

Redmond Hay Gravel Reserve 06984 is bounded by Blue Gum Nature Reserve to the north and the Denmark Catchment State Forest (64) to the south. To the west of the Hay River is the Mt Lindesay National Park. The small amount of vegetation expected to be cleared (0.81ha) and rehabilitated is buffered by a minimum of 50m to the Reserves bordering and given the other 7.4ha of forest on the 15.6ha Reserve, it is unlikely that its removal will have a significant effect on the environmental values of the neighbouring and surrounding CALM managed lands.

Methodology GIS Databases:
-CALM Managed Lands and Water - CALM 01/07/05
-Albany 1.4m Orthomosaic - DLI March 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 at variance to this Principle

Proposed clearing is not expected to impact on surface water or groundwater tables and is not in a gazetted or proclaimed water catchment area. The proposal is not at variance with this Clearing Principle.

Methodology GIS Databases:
 -Public Drinking Water Source Areas (PDWSA) - DOE 09/08/05
 -Hydrographic Catchments-Subcatchments- 23/03/2005

(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 at variance to this Principle**
 The gradient of the Reserve ranges between 55 and 50m (ADH) in an area that is not prone to flooding and given the small area to be cleared (0.81ha) relative to the surrounding vegetated forest, the proposed clearing will not impact peak flood height and duration.

Methodology DoE Site Visit (TRIM ref AD206)
 GIS Database:
 -Topographic Contours, Statewide - DOLA 12/09/02

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

Comments
 No objections have been raised for this proposed clearing activity. There is no other RIWI Act Licence, Works Approval or EP Act Licence that will affect the area that has been applied to clear. The area under application is within Crown Reserve 27679, reserved for the purpose of "Gravel". It is the CEO of the Department's view that the grant of a clearing permit in this case constitutes a secondary approval that removes the Environmental Protection Act's prohibition on the applicant exercising its statutory powers. Accordingly, the CEO is not required to comply with future act procedures under the Native Title Act 1993.

Methodology GIS Databases:
 -Cadastre - DLI 1/05/05
 -Native Title Claims - DLI 07/11/05

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Extractive Industry	Mechanical Removal	0.81	Grant	It is recommended that the application to clear 0.81ha of native vegetation for the purpose of gravel extraction be granted as the proposal is not at variance with Clearing Principles e, f, i and j and not likely to be at variance with Clearing Principles a, b, c, d, g and h. It is recommended that rehabilitation of the site after the gravel has been extracted be made a condition of this permit, with the inclusion of Priority 4 species <i>Stylidium plantagineum</i> , to mitigate any environmental harm caused by the clearing.

5. References

- AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.
- Connell and ATA Environmental (2001) Vegetation survey of the Albany Hinterland. Unpublished. City of Albany and Natural Heritage Trust.
- 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.
- 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.
- 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.
- 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.
- Spatial Information Surveys (2004) Redmond Hay Reserve 06984 Preliminary Flora Survey. Western Australia. DoE TRIM ref AI895.

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)