



1. Application details

1.1. Permit application details

Permit application No.: 192/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Worley Pty Ltd

1.3. Property details

Property: LOT 14052 ON PLAN 220953
LOT 14054 ON PLAN 220953
Local Government Area: City Of Joondalup
Colloquial name: Craigie LeisureCentre, Whitfords Ave, Craigie

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.02		Mechanical Removal	Bore construction

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 6: Medium woodland; tuart and jarrah (Hopkins et al. 2001, Shepherd et al. 2001)	Local vegetation consists of scattered trees mainly comprised of medium size Eucalyptus gomphocephala (tuart). Other species present included Xanthorrhoea preissii	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Observed during site visit (01/02/05): the vegetation in the area under application is clearly altered from original state with significant areas of weed species and sand patches. The medium sized trees are scattered and there were signs of regeneration.
Heddle vegetation complex: Karrakatta central/south - predominantly open forest of Eucalyptus gomphocephala, E. marginata, E. calophylla and woodland of E. marginata and Banksia species (Government of Western Australia 2000, Heddle et al. 1980).	Understorey comprised of native vegetation with heavy weed invasion near road verge. Vegetation is generally sparse with a number of sandy patches and some signs of regeneration. 'Craigie Bushland' on the other side of the adjacent access road is fenced off and in pristine condition. 'Craigie Bushland' is not part of area under application (DoE site visit 01/02/05).		

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 at variance to this Principle**

The area under application is part of Bush Forever site (303). However, the vegetation has been altered from its original condition with the presence of weed species and large sandy patches. It therefore does not consist of a high level of biodiversity and is not likely to be at variance to this Principle.

Methodology Site visit 01/02/05

(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 at variance to this Principle**

Medium trees may provide some habitat for fauna species, however, the level of disturbance within the vegetation under application is likely to limit the habitat value of this site. Given the small areas under application, it is unlikely that the clearing as proposed will significantly compromise local fauna habitat.

Methodology Site visit 01/02/2005

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, significant flora.

Comments Proposal is not at variance to this Principle

GIS database did not highlight any significant flora in the area under application. Given the degraded nature of the area under application it is unlikely that the clearing as proposed is at variance to this Principle.

Methodology GIS databases:

-Threatened Plant Communities - DEP 06/95
-Declared Rare and Priority Flora List - CALM 13/08/03

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a significant ecological community.

Comments Proposal is not at variance to this Principle

There are no records of Threatened Ecological Communities (TEC) in the vicinity of the proposed clearing.

Methodology GIS databases:

-Threatened Ecological Communities - CALM 15/7/03
-Threatened Plant Communities - DEP 06/95

(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 at variance to this Principle

The vegetation under application is part of Beard vegetation association 6 with 23.3% remaining and Heddle Karrakatta Complex Central and South (18% remaining) (Hopkins et al., 2001; Shepherd et al., 2001). The State Government is committed to the National Objectives Targets for Biodiversity Conservation which includes a target that prevents clearance of ecological communities with an extent below 30% of that present pre-European (Department of Natural Resources and Environment, 2002; EPA, 2000). Vegetation complexes in this application are below the recommended minimum of 30% representation, however the areas under application are very small (0.01ha each) and the vegetation is in a degraded state.

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation Status**	% in reserves/CALM-managed land
IBRA Bioregion					
Swan Coastal Plain	1,529,253	657,450	43	Depleted	
Shire - Joondalup (city)	No information				
Beard vegetation association 6	79,001	18,398	23.3	Vulnerable	14.5
Heddle Karrakatta Complex Central and South	34,532	6,275	18	Vulnerable	31

* Shepherd et al. (2001)

** Department of Natural Resources and Environment (2002)

Methodology

Shepherd et al. (2001)
Hopkins et al. (2001)
Department of Natural Resources and Environment (2002)
EPA (2000)
Government of Western Australia (2000)
GIS databases:
- Pre-European Vegetation - DA 01/01
- Heddle Vegetation Complexes - DEP 21/06/95
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00

(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 at variance to this Principle

No watercourses or wetlands present. Lake Joondalup is the nearest wetland and is over 5km away. The small areas of vegetation to be cleared are not likely to have an affect on this wetland.

Methodology GIS databases:

ANCA, Wetlands - CALM 08/01

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments Proposal may be at variance to this Principle

The proposed clearing is likely to result in a wind erosion hazard (DAWA, 2004). Risk from other forms of land degradation was considered to be low (DAWA, 2004). There is also no known risk of shallow or deeper Acid Sulphate Soils or Potential Acid Sulphate Soils. However given the small sizes of the area proposed to be cleared (0.01ha each) it is unlikely that the clearing under application is likely to cause appreciable land degradation.

Methodology DAWA (2004) (Trim: EI208)
GIS Databases:
- Acid Sulphate Soil risk map, SCP - 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 is at variance to this Principle

The area under application is a Bush Forever site (Site number 303). Advice from Bush Forever officers of the Department of Planning and Infrastructure indicates that due to the small size of the areas under application and the degraded state of the vegetation they have no objections to the proposed clearing.

Methodology Information from Bush Forever 2005 (EI330)

(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 areas under application are in a Priority 3 (PDWSA) area. However due to the small size of the areas to be cleared (0.01ha each) the clearing as proposed is not likely to have an impact on the quality of underground water.

Methodology GIS Databases:
- Public Drinking Water Source Areas (PDWSAs) - DOE 04/11/04

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.

Comments Proposal is not at variance to this Principle

Flooding impacts are unlikely to occur as a result of the proposed clearing due to its very small size and location. The Craigie Leisure Centre site is over 5km from Lake Joondalup or any other significant water source and has an elevation between 15-20m. It is considered that the removal of vegetation from the site would have no impact on peak flood height or duration.

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

Planning instrument or other matter.

Comments

The proponents have applied for a licence to construct 2 bores. These are to be production and injection bores for the heating of a swimming pool. The licence is likely to be granted and is not likely to have any significant impact on the groundwater resource. A number of conditions relating to the construction of the bore are being recommended.

Methodology Pers coms Cameron Sudintas, Licensing Officer 31/01/05

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Bore construction	Mechanical Removal	0.02	Grant	The assessable criteria have been addressed and the clearing proposed is at variance with Principles e and h and may be at variance with Principle g. However, given the degraded nature of the vegetation and the small areas under application, the assessing officer recommends that the permit should be granted.

5. References

- DAWA (2004) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref EI208.
- 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.
- Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth 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.