

1. Application details

1.1. Permit application details

Permit application No.: 670/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Angelo and Soccorsa I. Canzirri

1.3. Property details

Property: LOT 40 ON DIAGRAM 70789

Local Government Area: City Of Wanneroo

Colloquial name: Karaborup Road - Lot 40 on Diagram 70789; Vol 1747 Fol 619

1.4. Application

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

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

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 in the area under application is in poor condition and is likely to have been cleared previously with regrowth evident (DAWA 2005). Aerial photography indicates that the vegetation appears sparse and is not contiguous with the vegetation bordering the property. A site visit (7/9/05) confirmed that the majority of the existing vegetation was in poor condition with weed species interspersed throughout the area. Large trees along the fence line were observed and will remain as they are outside the area proposed to be cleared (Site Visit 7/9/05). Given the degraded condition of the vegetation there is a low likelihood of the area under application comprising a high level of biological diversity.

Methodology Site visit (07/09/2005)
DAWA (2005) Trim Ref: EI2496
GIS databases:
-Swan Coastal Plain North 1m Orthomosaic - DLI 01/04

(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**
A search of the Department of Environment and Heritage database for the area listed three species or species habitat likely to occur: two vulnerable species, Baudin's Black-Cockatoo and (Calyptorhynchus baudinii), Chuditch, Western Quoll (Dasyurus geoffroii) and one endangered species Carnaby's Black-Cockatoo, (Calyptorhynchus latirostris). No evidence of fauna species was observed in the area during the site visit. Given the sparse nature of the vegetation and the low level of regrowth, in addition to the high level of weed invasion (Site Visit 7/9/05), it is unlikely that the area comprises part of or is necessary for the maintenance of significant habitat for indigenous fauna.

Methodology Site visit (07/09/2005)
DAWA (2005) Trim Ref: EI2496
GIS databases:
-Department of Environment and Heritage EPBC Act database

(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

Seven populations of Declared Rare Flora (DRF) *Eucalyptus argutifolia* have been recorded within 7.1km of the area under application, with the nearest DRF being 4.1km from area under application. These populations occur on a different vegetation type as that proposed to be cleared. The existing level of disturbance (DAWA 2005) severely restricts the possibility of DRF to occur within the proposed area. Given the above, it is unlikely that proposed clearing will be at variance to this Principle.

Methodology Site visit (07/09/2005)
DAWA (2005) Trim Ref: EI2496
GIS databases:
-Declared Rare and Priority Flora List - CALM 13/08/03.
- Pre-European Vegetation - DA 01/01

(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

Threatened Ecological Communities (TEC) are known to occur within the local area (<10km) of the proposed clearing. The nearest TEC is approximately 1.4km away and occurs on the same vegetation type as the area under application. However, that TEC is located within a Bush Forever site (130), which appears (through satellite imagery) to be in significantly better condition than the area under application. Given the sparsity of regrowth in the area under application and the existing level of disturbance, it is unlikely that the area proposed to be cleared comprises the whole or part of, or is necessary for the maintenance of a TEC.

Methodology Site visit (07/09/2005)
DAWA (2005) Trim Ref: EI2496
GIS databases:
- Threatened Ecological Communities - CALM 15/7/03
- Threatened Plant Communities - DEP 06/95. (Swan Coastal Plain)
- Pre-European Vegetation - DA 01/01
- Bushforever - MFP 07/01

(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

The Heddle vegetation complex identified in the area under application (Cottlesloe Complex Central and South) has 18,474ha remaining (41.1%) (Heddle et al 1980). The Beard Vegetation complex (998) has 18,320ha remaining (35.9%) (Shepherd et al 2001, Hopkins 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-1750 (Department of Natural Resources and Environment, 2002; EPA, 2000).

Given the above, the clearing as proposed is not likely to be at variance to this Principle.

Methodology Site visit (07/09/2005)
AGPS 2001
Hopkins et al. (2001)
Department of Natural Resources and Environment 2002; EPA 2000
GIS databases:
- Pre-European Vegetation - DA 01/01
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Heddle Vegetation Complexes - DEP 21/06/95.

(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

There are no watercourses or wetlands associated with the area under application. Carabooda Lake is an Environmental Protection Policy (EPP) Lake and is also a Resource Enhancement Wetland (REW) area, which is located 220 metres south of the area under application. However, no vegetation associated or growing in an environment associated with a watercourse or wetland is located in the area under application.

Methodology GIS databases:

- Geomorphic wetlands (Mgmt Categories) - Swan Coastal Plain - DOE 15/09/04.
- EPP, Lakes - DEP 28/07/03.
- EPP, Wetlands (draft) - DEP 21/07/04.
- ANCA wetlands - CALM 08/01.
- Clearing Regulations - Environmentally Sensitive Areas - DOE 8/03/05

(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

DAWA (2005) identified that the majority of the property contains deep sands, which are prone to wind erosion, and advises that there is a potential for land degradation in the form of wind erosion. However DAWA (2005) concludes that this is unlikely to be a problem providing adequate management strategies are undertaken. In order to manage the potential for wind erosion, the proponent has agreed to establish a 'windbreak' along the western boundary of the property, against the local prevailing winds. The Acid sulfate soil risk map shows no known risk of shallow or deeper Acid Sulphate Soils (ASS) or Potential Acid Sulphate Soils (PASS) (class 3) in the area under application.

Methodology DAWA (2005) Trim Ref: EI2496
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 not likely to be at variance to this Principle

Bush Forever site 130, the Gngangara - Moore River State Forest, and Neerabup National Park are all located up to 1.6km from the area under application. Connectivity is maintained through scattered remnants of native vegetation between the three conservations areas. However, the degraded condition of the vegetation found within the proposed area is unlikely to provide any beneficial connectivity to the surrounding conservation areas. The proposed clearing therefore is unlikely to have any impact on the environmental values of these conservation areas.

Methodology Site visit (07/09/2005)
GIS databases:
- CALM Managed Lands and Waters - CALM 1/06/04
- Bushforever - MFP 07/01

(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 has an average annual rainfall of 800mm and regional groundwater salinity at this site ranges between 0-500mg/L. The area under application is situated between two proclaimed groundwater areas, Gngangara Underground Water Pollution Control Area (a Priority 1 Public Drinking Water Source Area (PDWSA)) and Perth Coastal Underground Water Pollution Control Area (Priority 3 PDWSA). Given the small size of proposed area and that it is 1.3 kilometres from the nearest PDWSA, the clearing as proposed is not likely to cause deterioration in the quality of surface or underground water.

Methodology GIS databases:-
- Groundwater Salinity, Statewide - 22/02/00.
- Hydrography, linear - DOE 01/02/04.
- Hydrographic Catchments, Sub-catchments - DOE 01/07/03
- Rainfall, Mean Annual - BOM 30/09/01
- Public Drinking Water Source Areas (PDWSAs) - DOE 29/11/04

(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 property contains mainly sandy type soils that have a high transmissivity, and is relatively flat with a general relief in topography toward the south. Given the above, and that the area proposed to be cleared is relatively small size and in a degraded condition, the clearing as proposed is unlikely to cause or exacerbate the incidence of flooding.

Methodology Site visit (07/09/2005)
GIS databases:
- Topographic Contours, Statewide - DOLA 12/09/02.
- Soils, Statewide - DA 11/99

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

Comments

A GWL had been issued for Lot 40 which is the amalgamation of Lots 10, 41 and 6 - all owned by the Canzirris. This GWL will cover the new area of irrigation, as applied for in this permit, and will allow for crop rotation with the neighbouring Lots.

Development approval has been granted by the City of Wanneroo under District Planning Scheme No. 2 enabling the practice of intensive agriculture to occur on the proposed area.

There is no other RIWI Act Licence, Works Approval or EP Act licence that will affect the area that has been applied to clear.

Methodology City of Wanneroo submission Trim Ref: ED 824

4. Assessor's recommendations

Purpose	Method Applied	area (ha)/ trees	Decision	Comment / recommendation
Horticulture	Mechanical Removal	3	Grant	Following negotiation during a site visit, the proposed to be cleared was reduced to 2.5 ha. The amended application has been assessed and the clearing as proposed is not likely to be at variance to the Clearing Principles. The assessing officer recommends a permit for 2.5 hectares be granted with the following condition: The permit holder shall revegetate the area cross-hatched red on plan 670/1. The revegetation shall be established and maintained to an average planting density of 1000 plants per hectare. The species shall consist of overstorey, midstorey and understorey species that are native to the area. Seed shall be sourced from within a 10km radius of the property.

5. References

- AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, Canberra.
- DAWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. DoE TRIM ref EI2496.
- 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.
- 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.
- 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, 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.

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)