



1. Application details

1.1. Permit application details

Permit application No.: 1609/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Ortego Bay Pty Ltd

1.3. Property details

Property: LOT 22 ON PLAN 21121 (House No. 3804 CAVES WILYABRUP 6280)
Local Government Area: Shire Of Busselton
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.1		Burning	Dam construction or maintenance

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
The area is a mixture of Mattiske vegetation types Cowaramup (C2) consisting of open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla-Banksia grandis on lateritic uplands and Cowaramup (Cw2) consisting of Woodland of Eucalyptus marginata subsp. marginata-Corymbia calophylla on slopes and low woodland of Melaleuca preissiana-24 Banksia littoralis on depressions (Mattiske 1998)	The vegetation is in good condition, a few meters south of a minor perennial watercourse.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	Vegetation condition determined using orthomosaic mapping (Busselton 50cm 2004)

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 proposed for clearing is considered riparian vegetation and is in good condition. However given the small size of the area it is considered unlikely that the proposed clearing is at variance with this principle.

Methodology GIS Database:
- SAC Bio datasets 290507

(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

There are 4 threatened and 1 priority fauna known to occur in the local area (10km radius). Given the small size of the area under application and the close proximity to 2 National Parks it is not considered to represent a significant habitat for fauna.

Methodology GIS Database:
- CALM Managed Lands and Waters - CALM 1/06/04

(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 5 populations of Declared Rare Flora (DRF) and 15 populations of priority flora within the local area (10km radius). Of these 5 DRF and 9 priority populations occur within the same Mattiske vegetation complexes (C2 and Cw2), but only 3 of these populations are associated with watercourses. Due to the small area under application it is considered unlikely to be a significant habitat for rare flora.

Methodology Mattiske (1998)
GIS Database:
- Declared Rare and Priority Flora - CALM 01/07/05
- SAC Bio datasets 290507
- Mattiske Vegetation - CALM 24/03/98

(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**
There are no known records of Threatened Ecological Communities (TEC) within a 10km radius of the proposed clearing. It is therefore unlikely that the proposed clearing is part of or necessary for the maintenance of a TEC.

Methodology GIS Database:
- Threatened Ecological Communities - CALM 12/04/05
- Threatened Plant Communities - DEP 06/95 (Swan Coastal Plain)
- SAC Bio datasets 290507

(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 proposed clearing is located in the Shire of Busselton and within the Warren Bioregion. The extent remaining within these areas is 78.1% and 44.5% respectively.

The vegetation is a component of the Beard Vegetation Association 3 of which 70.0% of Pre-European vegetation is remaining. In addition it is a component of Mattiske Vegetation Complex C2 (Cowaramup) and Cw2 (Cowaramup) of which 34.6% and 23.9% are remaining respectively.

Due to the small area under application, the extent of vegetation remaining in the local and bioregional areas and the extent of vegetation complexes remaining the area under application is not considered to be a significant remnant of native vegetation in an area that has been extensively cleared.

Methodology Sheperd et al. (2001)
Commonwealth of Australia (2001a)
Mattiske (1998)
GIS Database:
- Pre-European Vegetation - DA 01/01
- Mattiske Vegetation - CALM 24/03/98
- 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 at variance to this Principle**
There are no mapped wetlands within a 10km radius of the proposed clearing. However the area is in association with an unnamed minor perennial watercourse which is a tributary of the Woodlands Brook 560m to the east. Therefore the proposed clearing is at variance with this principle.

To mitigate loss of riparian vegetation associated with the clearing proposal a condition to revegetate should be imposed in the event that a clearing permit is granted.

Methodology GIS Database:
- Hydrography, linear - DOE 01/02/04
- EPP, Areas - DEP 06/95
- EPP, Lakes - DEP 28/07/03

- EPP, Wetlands - DEP 21/07/04
- Anca Wetlands - CALM 08/01
- Geomorphic Wetlands - Swan Coastal Plain

(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 area has no mapped salinity risk and a ground water salinity of 1000-3000 mg/L. Given the size of the area under application, soil type consisting of low permeability, with an eastward sloping topography and medium relief it is unlikely to cause appreciable land degradation.

Methodology GIS Database:

- Acid Sulfate Soil Risk Map, Swan Coastal Plain - DEC
- Groundwater Salinity, Statewide - DOW
- Hydrogeology, Statewide - DOW
- 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

There are 2 National Parks (Leeuwin-Naturaliste and Yelverton) and 1 Nature Reserve (Unnamed) within a 10km radius of the proposed area. Also 2.5km to the west is a Registered National Estate (Leeuwin-Naturaliste Ridge).

Given the distance to nearby conservation areas and the small area to be cleared it is unlikely the proposed clearing will impact on environmental values of nearby conservation areas.

Methodology GIS Database:

- CALM Managed Lands and Waters - CALM 1/06/04

(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 proposed area is in the RIWI Groundwater area of Busselton/Capel and the Wilyabrup Brook Catchment area. Topography shows the area under application has a medium relief. The area also has low groundwater salinity (1000 - 3000 mg/L) and an evaporation rate of 1000 mm combined with a rainfall rate of 1000 mm. Soil geology mapping shows the area has low permeability.

Given the size of the area to be cleared, the medium relief and groundwater salinity the proposed clearing is unlikely to impact on groundwater or surface water quality.

Methodology GIS Database:

- Public Drinking Water Source Areas (PDWSAs) - DOW
- Hydrographic Catchments - Subcatchments - DOW
- RIWI Act, Surface Water Areas - DOW
- RIWI Act, Rivers - DOW
- RIWI Act, Irrigation Districts - DOW
- RIWI Act, Groundwater Areas - DOW
- RIWI Act, Areas - DOW
- Topography Contours, Statewide - DOLA 12/09/02
- Evaporation Isopleths - BOM 09/98
- Mean Annual Rainfall Isohyets (1975-2003)

(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 has a medium relief, the same rainfall and evaporation rates and soils with low permeability. Given the size of the area under application is unlikely to cause or exacerbate the incidence of flooding.

Methodology GIS Database:

- Topography Contours, Statewide - DOLA 12/09/02
- Evaporation Isopleths - BOM 09/98
- Mean Annual Rainfall Isohyets (1975-2003) - DOW

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

Comments

There are two Native Title claim (SW Boojarah and Harris Family) over the area under application, as the property is privately owned the granting of the clearing permit is a secondary approval and does not constitute a future act under the Native Title Act 1993.

1 Aboriginal Sites of Significance is listed within the area under application (Moses Cave). It is the responsibility of the proponent to ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

A submission from the Shire of Busselton was received stating no objection to the clearing proposal and an expectation of revegetation conditions.

The proposed area is within the RIWI Groundwater area of Busselton/Capel, however as the proposed clearing is associated with the capture of surface water a RIWI permit to construct and license to take is not required.

Methodology

Shire of Busselton Submission

GIS Database:

- Native Title Claims - DLI 7/11/05
- Aboriginal Sites of Significance
- RIWI Act, Groundwater Areas - DOW

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Dam construction o maintenance	Burning	0.1	Completed assessment has found principle (f) is at variance and all other principles are not likely to be at variance. A condition to revegetate should be imposed in the event that a clearing permit is granted.

5. References

- 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.
- Keighery, B.J. (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.

6. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
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 DEC)