



1. Application details

1.1. Permit application details

Permit application No.: 2585/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: Cheynes Beach Holdings Pty Ltd

1.3. Property details

Property: LOT 5 ON PLAN 8481 (DINGUP 6258)
 Local Government Area: Shire Of Manjimup
 Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.4		Mechanical Removal	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
Beard Vegetation Association: 3 - Medium Forest; jarrah & marri (Hopkins et al. 2001; Shepherd et al. 2001). Mattiske Vegetation Complex: BE1 and WH2 Bevan1 (BE1): Tall open forest of <i>Corymbia calophylla</i> - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> on uplands in perhumid and humid zones. Wheatley (WH2): Woodland of <i>Eucalyptus marginata</i> subsp. <i>marginata</i> - <i>Eucalyptus wandoo</i> on slopes with woodland of <i>Eucalyptus rudis</i> on valley floors in the humid zone.(Mattiske Consulting 1998)	The area is described as being in a degraded (Keighery 1994) condition, consisting of a small cluster of trees and shrubs with little to no understorey. According to a DEC site visit (30/07/08) the area in question consists of closed heath of <i>Banksia occidentalis</i> with some <i>melaleuca</i> species regrowth over non-native grasses. The area is currently grazed by stock and appears to have been previously cleared. Soil Type (Tc6): Tc6 is described as dissected lateritic plateau of hilly relief at moderate elevation, chief soils of the dissected hilly areas are hard acidic yellow mottled soils with some hard acidic red mottled soils and brown earths, all containing ironstone gravels. (Northcote et al. 1960-68)	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	A site visit was conducted on the 30/07/08, by the DEC Warren Region. The area is dominated by a regrowth stand of <i>Banksia occidentalis</i> with some <i>Melaleuca</i> species regrowth.

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 proposed clearing is to clear 0.4 hectares of native vegetation for the purpose of extending a dam. The area is described as being in a degraded (Keighery 1994) condition, consisting of a small cluster of trees and shrubs with little to no understorey. The area is dominated by a stand of *Banksia occidentalis* with some *melaleuca* species. The area is currently grazed by stock and appears to have been previously cleared(DEC site visit, 2008).

There is one Priority Ecological Community (PEC) 3.3km west of the area under application. The values of the

PEC are not consistent with the applied area (DEC site visit, 2008) and therefore the vegetation is not likely to effect or be of this PEC.

There is one record of a priority flora species present within a 10km radius of the area under application, which is *Leptinella drummondii* (Priority 2). The species grow in a different mattiske vegetation type, but grows in the same beard vegetation type and soil type as the area under application.

The proposed clearing is small (0.4ha), an isolated remnant (170m from the nearest remnant), in a degraded (Keighery, 1994) condition and surrounded by extensive native vegetation (there is 70% remaining in the local area, which is a 10km radius). Due to this, it is not considered to hold significant biodiversity values and is therefore not at variance to this principle.

Given the local susceptibility to dieback, a dieback and weed control condition is placed on the permit to mitigate the spread of weeds and dieback.

Methodology DEC Site Visit (2008)
Keighery (1994)
GIS Database:
- CALM Managed Lands and Waters - CALM 01/06/05
- DEFL, SAC Biodataset (17/07/08)
- Manjimup 50cm ORTHOMOSAIC - DLI04
- TEC Database, SAC Biodatasets - accessed 17/07/08

(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

Within the local area (10km radius from the proposed clearing) there are seven records of threatened fauna, three records of priority species and one record of other specially protected fauna.

The proposed clearing is small (0.4ha), an isolated remnant (170m from the nearest remnant), in a degraded (Keighery, 1994) condition and surrounded by extensive native vegetation (there is 70% remaining in the local area, which is a 10km radius). Due to this, it is unlikely that the proposed clearing will be significant habitat for fauna species and the clearing as proposed is therefore not likely to be at variance to this principle.

Methodology DEC Site Visit (2008)
GIS Database:
- CALM Managed Lands and Waters - CALM 01/06/05
- Manjimup 50cm ORTHOMOSIAC - DLI04
- Threatened Fauna, SAC Bio Dataset (17/07/08)

(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

Within the local area (10km radius) of the site under application there is one record of rare flora being *Caladenia christineae* (Christine's Spider Orchid). This was recorded 3.4km east of the area under application. A regional site inspection (2008) advised that the area under application contained landforms conducive to *C.christineae* and *C.harringtoniae*, however, given the disturbance and grazing on site the region has advised that it is unlikely these species would occur (DEC regional advice 2008).

Methodology DEC regional advice (2008)
DEC site visit (2008)
GIS Database:
- DEFL, SAC Bio Dataset (17/07/08)
- Manjimup 50cm ORTHOMOSAIC - DLI04

(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 at variance to this Principle

There are no known threatened ecological communities (TECs) occurring within a 10km area and it is unlikely that the proposed clearing will impact upon TECs.

Methodology GIS Database:
- TEC, SAC Bio Databset (17/07/08)

(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		
	Pre-European	Current Extent	Remaining
IBRA Bioregion			
Jarrah Forest	4,506,654.28	2,405,331.40	53.4
Shire			
Manjimup	696,702.28	589,728.24	84.6
Beard Vegetation			
3	2,661,403.29	1,846,588.90	69.4
Mattiske Vegetation			
Bevan 1 (BE1)	767,844	657,120	85.6
Wheatley (WH2)	84,351	65,510	77.7

The area under application is located in the Jarrah Forest Bioregion and is in the Shire of Manjimup. The extent of pre-European vegetation (3) within this Bioregion is 53.4% (Shepherd et al. 2001) and within the Shire of Manjimup is 84.6% (Shepherd et al. 2001). The extent of the Mattiske Vegetation Complex, Bevan 1 (BE1) and Wheatley (WH2) is 85.6% for Bevan and 77.7% for Wheatley. Vegetation has not been extensively cleared within this region, and is higher than the desirable 30% threshold level target identified by the EPA (2000).

As the area under application is considered to be in a degraded (Keighery, 1998) condition. Additionally the area under application is not significant remnant vegetation and is not at variance to this principle.

Methodology	EPA (2000)
	Mattiske Consulting (1998)
	Shepherd (2006)
	Shepherd et al. (2001)
	GIS Database:
	- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
	- Manjimup 50cm ORTHOMOSAIC - DLI04
	- Mattiske Vegetation (01/03/1998)
	- Pre European Vegetation, SAC Bio Dataset (17/07/08)

(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 is a non-perennial minor watercourse which runs from the area under application into the Wilgarup River. In addition to this, an existing dam abuts the proposed clearing. The non-perennial minor watercourse consists of degraded vegetation up stream and as the watercourse moves down stream there is little to no vegetation before it flows into the Wilgarup River.

The site is considered to be in association with the non-perennial minor watercourse. Therefore clearing will have impact on the tributary banks, habitat for aquatic fauna or water quality. The proposal is therefore is at variance to this principle.

A condition to revegetate and rehabilitate the dam extension will be placed upon the permit to mitigate the impacts of clearing.

Methodology	GIS database:
	- Hydrography linear - DOW 13/7/06
	- Hydrography linear (hierarchy) - DoW 13/7/06

(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 area under application lies within Zone B of the Warren River Water Reserve gazetted under the County Areas Water Supply Act 1947 (CAWS Act). The CAWS Act controls land clearing within the Warren River Water Reserve in order to protect public drinking water quality and was developed in response to increased dryland salinity and increasing concentrations of salts in drinking water within the catchment.

The CAWS Act requires that 10 per cent of vegetation must remain on the land in question unless exceptional circumstances arise. The Act requires any application to clear below this threshold be refused to reduce the impacts of salinity on the land and waterways.

Lot 5 on Plan 8481 (area in question) is a 22.2 ha holding. Although it is located in a moderately high salinity

risk area (Zone B) of the Warren River catchment, the small size (0.4ha) of the proposed clearing means there is unlikely to be a significant broad scale salinity impact, however there is already less than 10% native vegetation remaining on the holding. Consequently, if no other conservation values prevail, it is recommended that the clearing be allowed subject to the establishment of a 0.8ha revegetation offset (twice the clearing area in accordance with DoW clearing policy & guidelines) (DoW Advice, 2008).

The topography of the site is 185m - 195m AHD (Australian Height Datum); the land is situated within a valley, sloping southerly towards the Wilgarup River. The soil type of the area is described as dissected lateritic plateau of hilly relief at moderate elevation, chief soils of the dissected hilly areas are hard acidic yellow mottled soils with some hard acidic red mottled soils and brown earths, all containing ironstone gravels (Northcote et al. 1960-68).

There is evidence of the area in question being subject to inundation, as the area under application is within a very wet area with a natural water seep that feeds the adjacent dam (DEC Site Visit 2008).

The groundwater salinity is 1000 to 3000mg/L (Low salinity risk). The mean rainfall is 900mm per annum and the evapotranspiration rate is 800mm.

Due to the incremental impact of salinity and the potential for further waterlogging clearing within the area under application may be at variance to this principle. Therefore, a condition will be placed on the permit to revegetate 0.8ha with native vegetation.

Methodology DEC Site Visit (2008)
DoW Advice (2008)
Keighery (1994)
Northcote et al. (1968)
GIS Database:
- Evapotranspiration Isopleths - WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrogeology, statewide DOW 13/07/06
- Mean Annual Rainfall Isohytes (1975 - 2003) DEC 02/08/05
- Topographic Contours, Statewide - DOLA 12/09/02

(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**
The proposed clearing site is surrounded by the Tone State Forest (closest distance is 175m south) and is 3.6km south-east from a Registered National Estate known as the Dingup Area.

The proposed clearing is small (0.4ha), an isolated remnant (170m from the nearest remnant), in a degraded (Keighery, 1994) condition and surrounded by extensive native vegetation (there is 70% remaining in the local area, which is a 10km radius). Therefore the area under application is unlikely to have any impact on the registered national estate or the state forest.

Methodology DEWHA (2008)
GIS Database:
- CALM Managed Lands and Waters - CALM 01/06/05
- Register of National Estate - Environment Australia, Australian and world heritage division 12/03/02

(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 may be at variance to this Principle**
There is a non-perennial minor watercourse which runs from the area under application into the Wilgarup River. In addition to this, an existing dam abuts the proposed clearing. The non-perennial minor watercourse consists of degraded vegetation up stream and as the stream moves down stream there is little to no vegetation before it flows into the Wilgarup River.

The area under application lies within Zone B of the Warren River Water Reserve gazetted under the County Areas Water Supply Act 1947 (CAWS Act). The CAWS Act controls land clearing within the Warren River Water Reserve in order to protect public drinking water quality and was developed in response to increased dryland salinity and increasing concentrations of salts in drinking water within the catchment.

The CAWS Act requires that 10 per cent of vegetation must remain on the land in question unless exceptional circumstances arise. The Act requires any application to clear below this threshold be refused to reduce the impacts of salinity on the land and waterways.

There is evidence of the area in question being subject to inundation, as the area under application is within a

very wet area with a natural water seep that feeds the adjacent dam (DEC Site Visit 2008).

The groundwater salinity is 1000 to 3000mg/L (Low salinity risk). The mean rainfall is 900mm per annum and the evapotranspiration rate is 800mm.

Due to the incrementally impact of salinity and the potential further waterlogging the area under application may be at variance to this principle. A revegetation and rehabilitation condition will be placed on the permit to mitigate these impacts of clearing.

Methodology DEC Site Visit (2008)
DoW (2008)
Northcote et al. (1968)
GIS Database:
- Evapotranspiration isopleths - WRC 29/09/98
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrogeology, statewide DOW 13/07/06
- Mean Annual Rainfall Isohytes (1975 - 2003) DEC 02/08/05
- RIWI Act, Groundwater Areas - DoW 13/07/06

(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**
There is evidence of the area in question being subject to inundation, as the area under application is within a wet area with a natural water seep that feeds the adjacent dam (DEC Site Visit 2008).

Given the scale of the proposed clearing is 0.4ha and for a dam, flooding is not likely to be at variance to this principle.

Methodology DEC Site Visit (2008)
GIS Database:
- Manjimup 50cm ORTHOMOSAIC - DLI04

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

Comments
The area proposed to clear is zoned rural.

The Shire of Manjimup responded to a Direct Interest Letter. The Shire has no comment with respect to the clearing and dam.

Methodology GIS Database:
- Town Planning Scheme Zones - MFP 31/08/98

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing is at variance to principles (f), the clearing may be at variance to principle (i) and (g), the principles (a), (b), (c), (h) and (j) are not likely to be at variance and the remaining principles are not at variance.

5. References

- DEC (2008) Site Inspection Report for Clearing Permit Application CPS 2585/1, Lot 5 on Plan 8481 Pozzi Road, Manjimup. Site inspection undertaken 30/07/2008. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC59640).
- DEC regional advice (2008) Warren Region, Department of Environment and Conservation (DOC60675)
- Department of the Environment, Water, Heritage and the Arts (2008) Dingup Area (RNE), Department of the Environment, Water, Heritage and the Arts, Canberra. Available from: <http://www.environment.gov.au/sprat>. Accessed July 2008
- Department of Water (2008) CAWSA advice DoW (DOC59672)
- 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, 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.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.

- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- 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.
- T.Chapman, R. Johnstone and M. Massam, Department of Environment and Conservation, Fauna Note No. 06/2005. Red-tailed Black Cockatoo.
- Western Australian Herbarium (1998-). FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/>. Accessed on 17/07/08

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)