



### 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 under application comprises of a number of different sections within a road reserve. Some of these are in a degraded condition with very little vegetation occurring and thus could not be considered to represent a high level of biodiversity. However, other sections are in excellent condition as they occur adjacent to areas that have not been cleared. This proposal occurs in a coastal location and is dominated by the Beard vegetation association 440; which is described as *Acacia ligulata* open scrub. Naturally, as a coastal vegetation type, this association is found up and down the coast from this point. In particular, the area to the south of Coronation Beach Road remains well vegetated and is continuous with the road reserve. Therefore as the area under application is relatively small compared to the areas of similar vegetation that would remain, it is unlikely that the proposal would reduce the biodiversity of the local area.

**Methodology** Hopkins et al. 2001  
Site visit, DEC Officer 2006.

#### (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 areas under application occurs within road reserve which is possibly not the preferred habitat for local fauna, particularly as the coastal area south of Coronation Beach Road remains well vegetated. Given that the amount of clearing proposed is relatively small, and that similar habitat is available nearby, it is unlikely that the proposal would result in the loss of significant habitat for fauna.

**Methodology** Site visit, DEC Officer 2006

#### (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 some records of Declared Rare and Priority Flora occurring some 8km and 4km, respectively from the area under application. However, these species occur on soil types that are described as hard acidic red soils and neutral yellow mottled soils containing ironstone gravels. These soils are different to the coastal area which is described as siliceous sands with some grey-brown sandy soils. Therefore it is unlikely that any DRF or Priority flora recorded locally would occur within the area under application.

**Methodology** GIS Databases:  
- Declared Rare and Priority Flora list - CALM 01/07/05.  
- Soils, Statewide - DA 11/99  
Department of Agriculture (2005) Map Unit Database  
Site visit, DEC Officer 2006.

#### (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 some Threatened Ecological Communities associated with the Morseby Ranges that are situated some 8km to the east from the area under application. These communities occur within different vegetation types and require a buffer of 500m. The proposal is therefore not likely to be at variance to this Principle.

**Methodology** GIS Databases: 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 may be at variance to this Principle

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation status**	Reserves/CALM-managed land %
IBRA Bioregion -					
Geraldton Sandplains***	2,474,401	663,290	26.8	Vulnerable	Not available
Shire - Chapman Valley***	311,623	32,312	10.4	Vulnerable	Not available
Beard veg type - 359	51,008	10,762	21.1	Vulnerable	0
Beard veg type - 440	6,670	3,977	59.6	Least concern	3.8

\* (Shepherd et al. 2001)

\*\* (Department of Natural Resources and Environment 2002)

\*\*\*Within the Intensive Landuse Zone

Based upon their pre-European vegetation extent remaining, the Shire of Chapman Valley, Geraldton Sandplains IBRA Bioregion and Beard vegetation association 359 all have a conservation status of vulnerable, while Beard vegetation association 440 is of least concern (Department of Natural Resources and Environment 2002). The area under application occurs within an extensively cleared landscape and would reduce the vegetation in each of these groups. However, the clearing would occur over a number of different sections along the road, which together make up the 0.7ha under application. As the clearing does not involve a single remnant, but rather a collection of small areas, it may thus not be considered to represent a significant remnant. A revegetation condition has been imposed to help reduce the impacts this clearing may have on the remaining vegetation.

**Methodology** Shepherd et al, 2001.  
Hopkins et al. 2001.  
Department of Natural Resources and Environment 2002  
GIS Databases:  
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00  
- Pre-European Vegetation - DA 01/01  
- Local Government Authorities - DLI 08/07/04.

**(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**

There are no watercourses or wetlands associated with the area under application. Therefore the proposal is not at variance to this Principle.

**Methodology** GIS Databases:  
Hydrography, linear - DoE 01/02/04  
Site visit, DEC Officer 2006.

**(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**

Given the coastal aspect of the site and that the chief soils are siliceous sands with some grey-brown sandy soils, the area could be expected to be susceptible to wind and water erosion after clearing. However, the purpose of the clearing is to realign a section of road that will then be bituminised. The sealing of this road that is currently gravel, will reduce the generation of dust that currently affects roadside vegetation. The proposal is not likely to be at variance to this Principle.

**Methodology** GIS Databases:  
Soils, Statewide - DA 11/99  
Department of Agriculture (2005) Map Unit Database  
Site visit, DEC Officer 2006.

**(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 a number of reserves that occur within a 10km radius of the area under application. These include the Oakajee Reserve, Howatharra Nature Reserve, Oakabella Nature Reserve, Nilligarri Nature Reserve and Bella Vista Nature Reserve. These reserves range in area from 6.6 to 100ha, and in distance from 7 to 10km. Although they may be linked to the area under application, given that the amount of clearing proposed is small and that there is surrounding vegetation remaining, the proposed clearing is unlikely to affect these conservation areas.

**Methodology** Site visit, DEC Officer 2006.  
GIS Databases:  
- CALM Regional Parks - CALM 12/04/02  
- CALM Managed Lands & Waters - CALM 01/07/05  
- Proposed National Parks FMP-CALM 19/03/03  
- Register of National Estate - EA 28/01/03

**(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 likely to be at variance to this Principle**

The area under application contains no Public Drinking Water Source Areas, nor are any located nearby. Given the sandy soils of this area and the fact that it lies within a coastal catchment, it is likely that the area is free draining in the direction of the ocean. As such, it is not likely that there would be any impact on either surface or groundwater quality, particularly as the area to be cleared is small.

**Methodology**      GIS Databases:  
- Public Drinking Water Source Areas (PDWSAs) - DOE 09/08/05  
- Hydrographic Catchments - Catchments - DOE 23/3/05  
- Soils, Statewide - DA 11/99  
Department of Agriculture (2005) Map Unit Database  
Site visit, DEC Officer 2006

**(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**

As previously explained the area under application occurs close to the coast and consists of sandy soils, which makes it likely that the area freely drains in the direction of the ocean. In addition the area receives an annual rainfall of 500mm. Given this free drainage and moderate rainfall, it is unlikely that clearing up to 0.7ha would cause or increase the risk of flooding.

**Methodology**      GIS Databases :  
- Rainfall, Mean Annual - BOM 30/09/01  
- Soils, Statewide - DA 11/99  
Department of Agriculture (2005) Map Unit Database  
Site visit, DEC Officer 2006

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

**Comments**

There is no other RIWI Act Licence, Works Approval or EP Act Licence required that will affect the area under application.

The EPA has assessed a number of Town Planning Schemes and other matters that encompass the area under application. All assessments have been informal with no advice that would impact this assessment.

**Methodology**

**4. Assessor's recommendations**

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Road construction or Removal maintenance	Mechanical	0.7	Grant	The assessable criteria have been addressed and it has been found that the proposal may be at variance to Principle (e). However it is a condition of the permit that the sections of road that become disused as a result of this realignment will be revegetated. In addition, as the purpose of the application is to improve the safety of road users, the assessing officer recommends that the permit be 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.

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.

## 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)

