



## 1. Application details

### 1.1. Permit application details

|                         |             |
|-------------------------|-------------|
| Permit application No.: | 3808/1      |
| Permit type:            | Area Permit |

### 1.2. Proponent details

|                   |                     |
|-------------------|---------------------|
| Proponent's name: | Alan Albert Stanley |
|-------------------|---------------------|

### 1.3. Property details

|                        |   |
|------------------------|---|
| Property:              | LOT M877 ON DIAGRAM 3103 (House No. 2412 GINGIN BROOK NEERGABBY 6503) |
| Local Government Area: |   |
| Colloquial name:       |   |

### 1.4. Application

|                    |           |                    |                     |
|--------------------|-----------|--------------------|---------------------|
| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
| 40                 |           | Grazing            | Grazing & Pasture   |

## 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 1012 described as Mosaic: Medium open woodland; tuart / Low woodland; Banksia (Shepherd, 2009).  | The proposal is to clear 40 hectares of native vegetation for the purpose of grazing and stock feed. The vegetation under application is considered to be in very good to excellent (Keighery, 1994) condition.   | Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)                                  | For the purpose of this assessment, the vegetation is considered to be in pre-disturbance condition.   |
| Hedde Vegetation Complex Karakatta North described as Predominantly low open forest and low woodland of Banksia species Eucalyptus todtiana (Pricklybark), less consistently open forest of Eucalyptus gomphocephala (Tuart) - Eucalyptus todtiana (Pricklybark) - Banksia species (Hedde, 1980). | The native vegetation on site includes Banksia menziesii, Banksia attenuata, Banksia ilicifolia, Eucalyptus todtiana, Eucalyptus rudis, Melaleuca preissiana, Jacksonia furcellata, Nuytsia floribunda, Xanthorrhoea preissii, Macrozamia riedlei and Adenanthos cygnorum (DEC, 201 | Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994) | Vegetation comparative to the pre-disturbance condition was observed in retained bushland adjacent to the area under application (DEC, 2010) and based on this and analysis of aerial imagery the vegetation under application is considered to be in very good to excellent (Keighery, 1994) condition. |

## 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 at variance to this Principle

Whilst the area under application has recently been subject to impacts through clearing (that is the subject of an investigation), DEC is of the view that if appropriately managed the environmental values of the area under application will recover. Therefore this assessment will also consider the likely environmental values of the vegetation under application in its pre-clearing condition. Pre-clearing condition has been determined on the condition of the remaining native vegetation adjacent to the area under application, observed during the DEC site inspection undertaken in July 2010, aerial imagery analysis and regenerative capacity of the areas cleared. It was noted during the DEC site inspection in July 2010 that the majority of the area was recently cleared, with limited regrowth of the understorey and only a few scattered clumps of larger trees remaining. Based on this the condition of the pre-cleared vegetation under application is considered to be in very good to excellent (Keighery, 1994) condition.

The vegetation under application encompasses 40 hectares of native vegetation that included Banksia menziesii, Banksia attenuata, Banksia ilicifolia, Eucalyptus todtiana, Eucalyptus rudis, Melaleuca preissiana, Jacksonia furcellata, Nuytsia floribunda, Xanthorrhoea preissii, Macrozamia riedlei and Adenanthos cygnorum (DEC, 2010).

The vegetation within the applied area comprised of suitable foraging and nesting habitat for a number of bird species (including Carnaby's black cockatoo) and the understorey comprised of suitable habitat for a number of small mammal (including Quenda), insect and reptile species. There are 15 records of 10 priority flora species recorded within the local area, of which three species occur within the same vegetation and soils type as the area under application.

The description of the vegetation on site is consistent with the description of the Priority Ecological Community (PEC) *Banksia illicifolia* woodlands, southern Swan Coastal Plain (Community type 22) being described as low lying sites generally consisting of *Banksia illicifolia*, *B attenuata* woodlands, but *Melaleuca preissiana* woodland and scrubs are also recorded. Occurs on Bassendean and Spearwood Systems in the central Swan Coastal Plain north of Rockingham. Typically has a very open understorey and sites are likely to be seasonally waterlogged. The vegetation under application has the potential to be considered FCT22 *Banksia illicifolia* woodlands, southern Swan Coastal Plain (DEC, 2010a).

The vegetation partly comprised of a Conservation Category Wetlands (CCW). There are five CCWs and five Resource Enhanced Wetlands (REW) within 1km of the application area. CCW's support a high level of ecological attributes and functions and REW's still retain substantial ecological attributes and functions.

Given the above the area under application, if appropriately managed, will contain vegetation of high biological diversity and therefore is considered to be at variance to this principle.

#### Methodology

##### References:

DEC (2010)

DEC (2010a)

Keighery (1994)

GIS Databases:

- Pre European Vegetation - DA 01/01

- SAC Bio datasets - accessed 30/03/2010

- Soils, Statewide DA 11/99

#### **(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 at variance to this Principle**

The vegetation under application encompasses 40 hectares of native vegetation that, if appropriately managed, has the capacity to regenerate to very good to excellent (Keighery, 1994) condition. The vegetation under application encompasses 40 hectares of native vegetation that included *Banksia menziesii*, *Banksia attenuata*, *Banksia illicifolia*, *Eucalyptus todtiana*, *Eucalyptus rudis*, *Melaleuca preissiana*, *Jacksonia furcellata*, *Nuytsia floribunda*, *Xanthorrhoea preissii*, *Macrozamia riedlei* and *Adenanthos cygnorum* (DEC, 2010).

Within the local area (10km radius) there is one record of Carnaby's black cockatoo (*Calyptorhynchus latirostris*) and one record of Quenda (*Isoodon obesulus fusciventer*) located 7.9km south and 6.1km south west of the application area, respectively. Additionally there are two known Carnaby's black cockatoo roosting sites (DEC 19 and DEC 22) located 8.5km west and 8.6km south west of the application area, respectively.

Carnaby's black cockatoo (*Calyptorhynchus latirostris*) is listed as endangered, with populations declining due to land clearing for agriculture in regional areas and for urban development around Perth (Shah, 2006). Surveys of Carnaby's populations and their feeding and roosting habits show that the Northern Region of the Swan Coastal Plain appears to be an important area throughout the season (Shah, 2006). Clearing of feeding habitat on the Swan Coastal Plain poses a significant threat to the long term survival of Carnaby's black cockatoos.

The vegetation within the applied area contained *Banksia* woodland and is considered to have been suitable foraging and nesting habitat for a number of bird species, including Carnaby's black cockatoo. Given the understorey vegetation and proximity to a conservation category wetland the area under application would also have provide suitable habitat for Quenda and a number of other ground dwelling fauna species including small mammals, insects and reptiles.

Given the size and potential for the vegetation under application, if appropriately managed, to provide suitable habitat for a range of fauna species, including species of conservation significance, it is considered that the proposed clearing is at variance to this principle.

#### Methodology

##### References:

DEC (2010)

Keighery (1994)

Shah (2006)

GIS Databases:

- SAC Bio datasets - accessed 30/03/2010

- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC 11/04/07

- Heddle Vegetation Complexes - DEP 22/06/95

- Pre European Vegetation - DA 01/01

**(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 no records of rare flora within the local area (10km radius).

Given this the area under application is considered not likely to be at variance with this principle.

**Methodology** References:  
GIS Databases:  
- SAC Bio datasets - accessed 30/03/2010

**(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**  
Within the local area (10km radius) there is one record of a Threatened Ecological Community (TEC), (SCP 26a), described as *Melaleuca huegelii* - *Melaleuca acerosa* (currently *M. systema*) shrublands on limestone ridges. The closest record of this TEC is located 7.6km south west and does not occur within the same vegetation type as the area under application.

Given this the area under application is considered not likely to be at variance with this principle.

**Methodology** References:  
GIS Databases:  
- Heddle Vegetation Complexes - DEP 22/06/95  
- Pre European Vegetation - DA 01/01  
- SAC Bio datasets - accessed 30/03/2010  
- Soils, Statewide DA 11/99

**(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**

|  | Pre-European<br>(ha)<br>Land | Current extent<br>(ha) | Remaining %<br>DEC Managed | % In reserves<br>(%) |
|--|------------------------------|------------------------|----------------------------|----------------------|
| IBRA Bioregions*<br>Swan Coastal Plain^              | 1 501 209                    | 587 889                | 39.16                      | 33.10                |
| Shire*<br>Gingin                                     | 319 670                      | 176 644                | 55.26                      | 41.89                |
| Beard Vegetation Association*<br>1012                | 507                          | 138                    | 27.21                      | 0                    |
| Beard Vegetation Association with Bioregion*<br>1012 | 507                          | 138                    | 27.21                      | 0                    |
| Heddle Complex**<br>Karrakatta North                 | 25 579                       | 9 444                  | 36.9                       | 0.2                  |

\* (Shepherd et al. 2009)

\*\* (Heddle, 1980)

^ Area within Intensive Land Use Zone

The vegetation under application, if appropriately managed, has the capacity to regenerate to very good to excellent (Keighery, 1994) condition.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001). The local area (10km radius) is a moderately cleared landscape with approximately 50% remaining vegetated.

Given that the vegetation under application is considered to have the capacity to regenerate to very good to excellent (Keighery, 1994) condition, the extent of Beard Vegetation Association remaining is less than 30%, the vegetation under application is on the Swan Coastal Plain and contained *Banksia* woodland therefore providing significant habitat for fauna of conservation significance (including Carnaby's black cockatoo) and

contained significant wetlands it is considered that the area under application is a significant remnant of native vegetation in an extensively cleared area.

Therefore, the clearing as proposed is at variance to the principle.

**Methodology**

References:

Commonwealth of Australia (2001)

Hedde (1980)

Keighery (1994)

Shepherd (2009)

GIS Databases:

- Hedde Vegetation Complexes - DEP 22/06/95

- Interim Biogeographic Regionalisation of Australia - EA 18/10/00

- Local Government Authorities - DLI 8/07/04

- Pre European Vegetation - DA 01/01

- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

**(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**

The vegetation under application encompasses 40 hectares of native vegetation that, if appropriately managed, has the capacity to regenerate to very good to excellent (Keighery, 1994) condition.

There are five Conservation Category Wetlands (CCW) and five Resource Enhanced Wetlands (REW) within 1km of the application area. With one of the CCWs being within the area under application. There are also numerous Multi Use Wetlands and EPP Lakes within the local area and a major perennial watercourse, Moore River, is located 1.8km west of the area under application.

Water and Rivers Commission (2001) Position Statement: Wetlands, states that CCW's are recognised as wetlands that support a high level of ecological attributes and functions and are the highest priority wetlands with the objective of preservation of wetland attributes and functions. The Commission opposes any activity that may lead to further loss or degradation. The Commission also recommend a 200m buffer to protect wetlands on transmissive soils, such as those present within the area under application, from the negative effects of nutrient enrichment and chemical drift. (WRC, 2001)

CCW's support a high level of attributes and functions and are the highest priority for protection. CCW's are considered 'critical assets' which represent the most important environmental assets in the State that must be fully protected and conserved. Additionally REW's are considered priority wetlands which may have been partially modified but still retain substantial attributes and functions, with the potential for restoration towards conservation category. While not having the 'critical asset' status, REW should be retained and managed where possible (DEC, 2008).

The 40 hectares of native vegetation under application, as well as being part of a CCW, contains the remaining vegetated buffer for the CCW and an adjacent REW and is within 200m of another CCW and REW. The clearing will negatively impact on the environmental values of all nearby wetlands. This impact includes the clearing of riparian vegetation, reducing the vegetation condition, reducing biodiversity, impacting on fauna habitat and deterioration in ground and surface water quality.

Given the above the proposed clearing is at variance to this principle.

**Methodology**

References:

DEC (2008)

DEC (2010)

WRC (2001)

GIS Databases:

- CALM Managed Lands and Waters - CALM 01/06/05

- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005

- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC 11/04/07

- Hydrography linear - DOW 13/7/06

- Soils, Statewide DA 11/99

**(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 contains two soil types Cb39 and Jk9. Northcote et al. (1968) describes mapped soil type Cb39 as undulating to gently undulating plains with prominent shallow drainage depressions: dominant soils are deep mottled bleached sands (Uc2.22), with other deep sands (Uc2.21), (Uc5.22), and (Uc4.21) also occurring. Associated are deep sandy yellow earths (Gn2.74), (Gn2.34), and (Gn2.24). Sandy or

loamy bleached grey earths (Gn2.95, Gn2.94), and loamy mottled duplex soils (Dy3.43, Dy3.42) occur in the shallow drainage depressions. Northcote et al. (1968) describes mapped soil type Jk9 as Undulating dune landscape with some steep dune slopes and underlain by aeolianite at depth: chief soils are brown sands (Uc4.22). Associated are siliceous sands (Uc1.22) on the deeper dunes, especially on the western side of the unit; and leached sands (Uc2.21) on the more subdued dunes, especially on the eastern side of the unit.

The site has predominately grey/white sands (DEC, 2010) which are prone to wind erosion. Part of the area under application is mapped as having a low salinity risk but the majority of the southern boundary of the area under application is located within an area mapped with a high salinity risk. This coincides with the location of the CCW. The Commissioner of Soil and Land Conservation advises that the proposed clearing of the 40 hectares has a low risk of increased salinity impact, a moderate to high risk of soil erosion and may be at variance with principle g (Commissioner of Soil and Land Conservation, 2010).

Given the above the proposed clearing may be at variance to this principle.

**Methodology**

References:

Commissioner of Soil and Land Conservation (2010)

DEC (2010)

Northcote et al. (1968)

GIS Databases:

- Groundwater Salinity Statewide DoW 13/07/06

- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC 11/04/07

- Hydrography, linear - DOW 13/7/06

- Salinity Risk LM 25m - DOLA 00

- 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**

There are four areas reserved for conservation purposes within a 10km radius of the area under application, the closest being the Gingin Stock Route Nature Reserve which is located approximately 2.9km to the south of the application area. However, given the distance and remaining vegetation cover (50%) in the local area, the proposed clearing is not likely to impact on the environmental values of these conservation areas.

Therefore the area under application is not likely to be at variance to this Principle.

**Methodology**

References:

GIS Databases:

- CALM Managed Lands and Waters - DEC Sept 08

- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02

- System 1 to 5 and 7 to 12 areas - DEC 11/7/06

- SAC Bio datasets - accessed 30/03/2010

- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

**(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 at variance to this Principle**

The vegetation under application encompasses 40 hectares of native vegetation that, if appropriately managed, has the capacity to regenerate to very good to excellent (Keighery, 1994) condition.

There are five Conservation Category Wetlands (CCW) and five Resource Enhanced Wetlands (REW) within 1km of the application area. With one of the CCWs being within the area under application. Part of the area under application is mapped as having a low salinity risk but the majority of the southern boundary of the area under application is located within an area mapped with a high salinity risk. This coincides with the location of the CCW. The Commissioner of Soil and Land Conservation advises that the proposed clearing of the 40 hectares has a low risk of increased salinity impact (Commissioner of Soil and Land Conservation, 2010).

The soils on site are mainly grey/white sands (DEC, 2010), which have poor nutrient retention ability. The proposal to removal 40 hectares of native vegetation has the potential to increase infiltration of rainwater and further elevate the rate of nutrient infiltration into groundwater. The Commissioner of Soil and Land Conservation advises that the proposed clearing may contribute to nutrient enrichment of surface and groundwater bodies (Commissioner of Soil and Land Conservation, 2010). A minimum wetland buffer of 200 m is required to protect wetland values and functions (WRC, 2001). The removal of native vegetation within this 200 buffer may increase sediment levels within the adjacent wetlands.

Given the above it is considered likely that the proposal will result in an increase in the discharge of nutrients, and the transport of pollutants into this wetland. It is also possible that the clearing of the wetland buffers will impact on the hydrology within the nearby wetlands.

Therefore the area under application is considered at variance with this principle.

- Methodology**    **References:**  
Commissioner of Soil and Land Conservation (2010)  
DEC (2010)  
WRC (2001)  
**GIS Databases:**  
- Groundwater Salinity Statewide DoW 13/07/06  
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC 11/04/07  
- Hydrography, linear - DOW 13/7/06  
- Salinity Risk LM 25m - DOLA 00  
- Topographic Contours, Statewide - DOLA 12/09/02

**(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 Commissioner of Soil and Land Conservation advises that the risk of flooding is low and that the proposed clearing of the 40 hectares is unlikely contribute to flooding due to the sandy soils types present in the area under application (Commissioner of Soil and Land Conservation, 2010).

Given the above the area under application is considered not likely to be at variance to this principle.

- Methodology**    **References:**  
Commissioner of Soil and Land Conservation (2010)  
**GIS Databases:**  
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DEC 11/04/07  
- Hydrography, linear - DOW 13/7/06

## Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

### Comments

An application was received on 22 June 2010 to clear 40 hectares for grazing and stock feed. The application area is currently under investigation (ICMS 18464) as clearing has occurred over the 40 hectares under application.

The application falls within the Gingin RIWI Groundwater Area.

A public submission was received and made comment on the application advising that;

- The property contains a Conservation Category Wetland (CCW).
- It appears that significant clearing has already occurred.
- If the proponent is intending the site be used for grazing and stock feed applications of fertilisers will be required. The soil has a low phosphorus retention index and nutrient export would be expected. This may damage adjoining vegetation and cause eutrophication of the CCW.
- If the proposal is permitted then protection of the wetland should be affected by establishment of a revegetated buffer of 100 meters. The vegetated area should also be fenced to prevent stock incursion. (Submission, 2010)

The issues raised in the public submission have been addressed in Principles (f), (g) and (i).

The Shire of Gingin advised that it has no comment on the proposed clearing (Shire of Gingin, 2010).

Carnaby's black cockatoo has the status of endangered under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999. Actions which are likely to have a significant impact on the species require approval under this legislation. The Commonwealth Department of Sustainability, Environment, Water, Population and Communities has indicated that the clearing of more than one hectare of foraging habitat on the Swan Coastal Plain may be a controlled action.

The applicant responded to issues raised within DEC correspondence dated 19 August 2010 on the 18 October 2010 and stated the following:

- Lot 877 was purchased in 1980, and at this time the land was cleared and consisted of regrowth. Over the years the land was cleared in order to make it more productive. The area under application has also been chained and cleared twice by contractors over the last 30 years.
- The vegetation under application was in very poor condition and consisted mainly of woolly bush and prickly bush and the area had a fair amount of dieback. There was also a lot of dead and dried timber which was a potential fire hazard threatening the neighbours and surrounding area.
- On one side of the property stands a multi million dollar chicken farm and on the other side there is nearly one thousand acres of natural vegetation with a good standing of Banksia, Blackbutt and many more native plants and wildlife. This land has never been cleared, and could have devastating consequences if a fire was to escape from this property.
- A comparison of the vegetation on the neighbouring property is not a fair one, as the vegetation under application is low lying scrub in a poor condition.
- Due to the land being cleared steadily over 30 years, impacts such as salinity and adverse impact to groundwater are not likely to have been caused by the clearing of regrowth vegetation.
- The numbers of Carnaby's black cockatoos do not appear to have declined as good flock numbers still frequent the application area.
- In 30 years of living in the surrounding area, a Quenda has never been sighted.

### Methodology

References:

Submission (2010)

Shire of Gingin (2010)

GIS database:

- Cadastre - Landgate Dec 07
- Native Title Claims - LA 2/5/07
- RIWI Act, Groundwater Areas - DoW 13/07/06
- Town Planning Scheme Zones - MFP 31/08/98

## 4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Commissioner of Soil and Land Conservation (2010) Advice. Department of Agriculture and Food. DEC Ref: A328948
- DEC (2008) Memo re Standard Wetlands Advice for Native Vegetation Conservation Branch. Dated 17/07/2008. Species and Communities Branch, Department of Environment and Conservation, Western Australia (TRIM Ref. DOC59490).
- DEC (2010) Site Inspection Report for Clearing Permit Application CPS 3808/1, Lot M877 on Diagram 3103, Gingin Brook Road, Neergabby. Site inspection undertaken 30/07/2010. Department of Environment and Conservation, Western Australia (Ref. A324129).
- 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.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of

WA (Inc). Nedlands, Western 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.

Shah, B. (2006) Conservation of Carnaby's Black-Cockatoo on the Swan Coastal Plain, Western Australia. December 2006. Carnaby's Black-Cockatoo Recovery Project. Birds Australia, Western Australia.

Shepherd, D.P. (2009) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

Shire of Gingin (2010) Direct Interest Submission for CPS 3808/1 - Alan Stanley. DEC Ref A318541

Submission (2010) Direct Interest Submission for CPS 3808/1. DEC Ref A316929

Water and Rivers Commission (2001) Position Statement: Wetlands, Water and Rivers Commission, Perth.

## 5. 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)                    |