



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

<b>Purpose Permit number:</b>	CPS 5265/1
<b>Permit Holder:</b>	City of Busselton
<b>Duration of Permit:</b>	3 May 2013 – 3 May 2018

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

### PART I – CLEARING AUTHORISED

**1. Purpose for which clearing may be done**

Clearing for the purpose of a shared use pathway.

**2. Land on which clearing is to be done**

Lot 4857 on Deposited Plan 188917 (Reserve 23572, Anniebrook)  
Lot 4748 on Plan 10146 (Reserve 29844, Quindalup)  
Caves Road reserve (PINs 11621122 and 11846216, Anniebrook)

**3. Area of Clearing**

The Permit Holder must not clear more than 0.68 hectares of native vegetation within the area hatched yellow on attached Plan 5265/1a.

**4. Application**

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

**5. Type of clearing authorised**

This Permit authorises the Permit Holder to clear native vegetation for the activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those activities under the *Local Government Act 1995* or any other written law.

**6. Compliance with Assessment Sequence and Management Procedures**

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

## **PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES**

### **7. Avoid, minimise etc clearing**

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- (a) avoid the clearing of native vegetation;
- (b) minimise the amount of native vegetation to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

### **8. Vegetation management**

- (a) Before 3 December 2013, the Permit Holder shall construct a fence on the north and sound boundary of the area outlined in red on attached Plan 5265/1b, so as to exclude pedestrian access; and
- (b) Within one month of installing the fence the Permit Holder shall notify the CEO in writing that the fence has been completed.

### **9. Weed control**

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

## **PART III - RECORD KEEPING AND REPORTING**

### **10. Records must be kept**

The Permit Holder must maintain the following records in relation to the clearing of native vegetation authorised under this Permit:

- (a) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
- (b) the date that the area was cleared; and
- (c) the size of the area cleared (in hectares).

### **11. Reporting**

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
  - (i) of records required under condition 10 of this Permit; and
  - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.
- (c) Prior to 3 February 2018 the Permit Holder must provide to the CEO a written report of records required under condition 10 of this Permit where these records have not already been provided under condition 11(a) of this Permit

**DEFINITIONS**

The following meanings are given to terms used in this Permit:

*fill* means material used to increase the ground level, or fill a hollow;

*mulch* means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

*weed/s* means any plant -

- (a) that is declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*;  
or
- (b) published in the Department of Environment and Conservation Regional Weed Assessments, regardless of ranking; or
- (c) not indigenous to the area concerned.

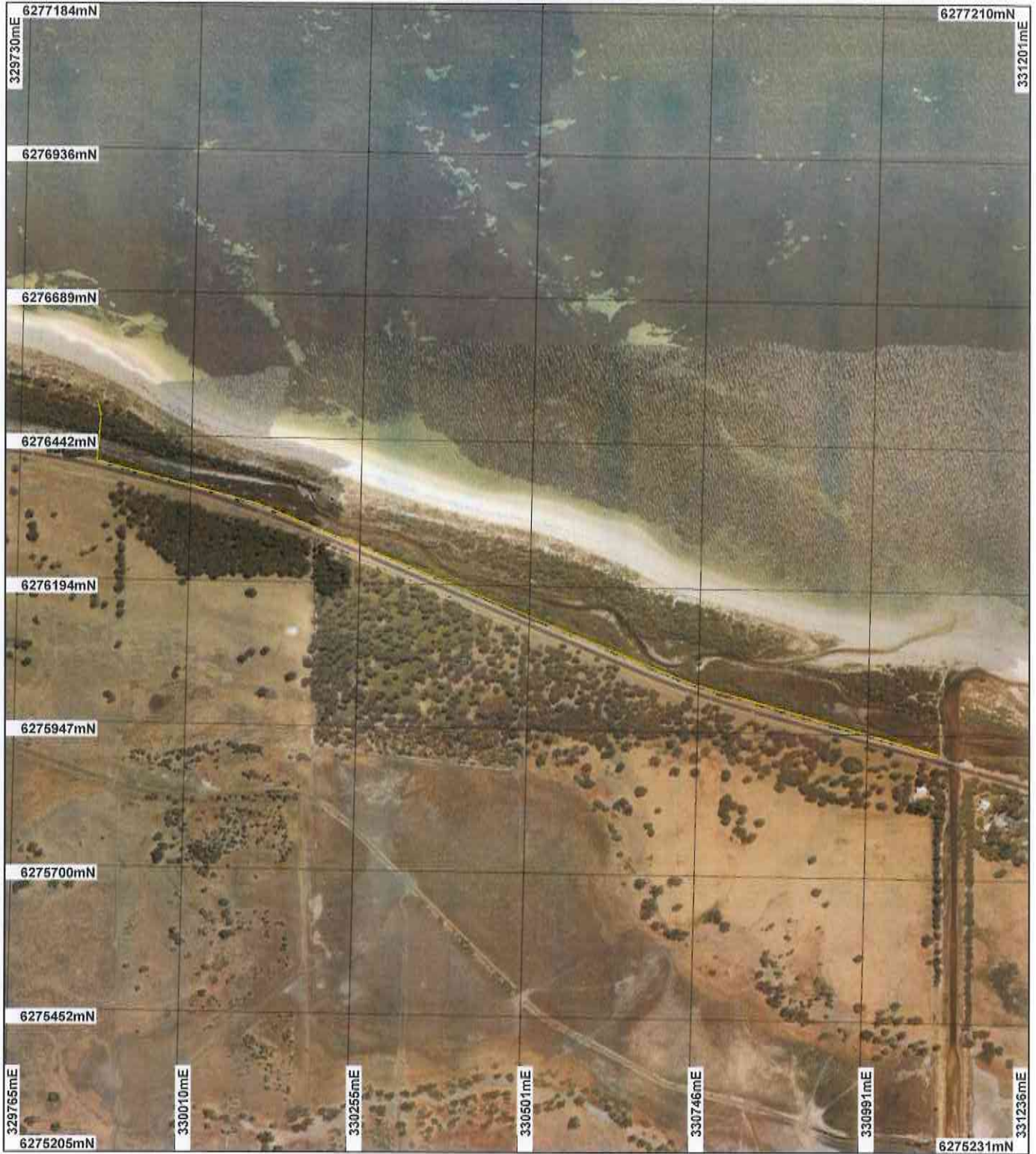


M Warnock  
MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

*Officer delegated under Section 20  
of the Environmental Protection Act 1986*

11 April 2013

# Plan 5265/1a



## LEGEND

### Clearing Instruments

- Areas Approved to Clear
- Busselton Townsite 20cm Orthomosaic - Landgate 2008



0 ————— 250 m

Scale 1:8717

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies

*Andrew* Date 11/4/13

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



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# Plan 5265/1b



## LEGEND

-  Road Centrelines
-  Clearing Instruments
-  Areas Subject to Conditions
-  Busselton Townsite 20cm Orthomosaic - Landgate 2008



Scale 1:2557  
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

*ambush* Date 11/4/13

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## 1. Application details

### 1.1. Permit application details

Permit application No.: 5265/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: City of Busselton

### 1.3. Property details

Property: ROAD RESERVE ( ANNIEBROOK 6280)  
LOT 4857 ON PLAN 188917 (Lot No. 4857 CAVES ANNIEBROOK 6280)  
LOT 4748 ON PLAN 10146 (Lot No. 4748 GEOGRAPHE BAY QUINDALUP 6281)  
ROAD RESERVE ( QUINDALUP 6281)  
Local Government Area: City of Busselton  
Colloquial name: Caves Rd

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 11 April 2013

## 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 990: Low forest: peppermint ( <i>Agonis flexuosa</i> ) (Shepherd et al, 2001).	The application is to clear 0.68 hectares of native vegetation for the purpose of a shared use pathway.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The condition of the vegetation under application was obtained from a site inspection undertaken by the Department of Environment and Conservation (DEC) and aerial photography.
Beard vegetation association 37: Shrublands; teatree thicket (Shepherd et al, 2001).	The vegetation within the applied area consists of <i>Agonis flexuosa</i> , <i>Spyridium globulosum</i> , <i>Hibbertia cunififormis</i> , <i>Acacia littorea</i> , <i>A. saligna</i> , <i>A. rostellifera</i> and <i>Lepidosperma gladiatum</i> . Weeds and annual grasses were also recorded within the application area (DEC, 2012).	To	
	The vegetation under application is in a completely degraded to very good (Keighery, 1994) condition (DEC, 2012).	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	

## 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**  
The application is to clear 0.68 hectares of native vegetation over a linear shape approximately 1.4kms in length. The application area is approximately 4km east from the townsite of Quindalup.

The vegetation under application consists of *Agonis flexuosa*, *Spyridium globulosum*, *Hibbertia cunififormis*, *Acacia littorea*, *A. saligna*, *A. rostellifera* and *Lepidosperma gladiatum*. Weeds such as rose pelargonium and annual grasses were also recorded within the application area (DEC, 2012). The vegetation under application is considered to be in a completely degraded to very good (Keighery, 1994) condition (DEC, 2012).

The vegetation within the application area on the north side of Toby Inlet is in very good (Keighery, 1994) condition (DEC, 2012) and is considered to be a part of the Consolidated Dunes plant community of Geographe Bay (Webb et al, 2009). This plant community is highly restricted and much of it has been cleared with intact examples of this community being uncommon. In addition to this, the vegetation on the north side of Toby Inlet proposed to be cleared, along with other remnant vegetation areas such as the Locke Nature Reserve and Captain Baudins Shire Reserve, are the only areas where vegetated transects remain linking Busselton Coastal Wetland System to the ocean (Webb et al, 2009). The vegetation adjacent to Toby Inlet is the largest and most intact example of this linkage. The clearing, as proposed will lead to fragmentation of the linkage and edge effect degradation (DEC, 2012).

The area under application is represented by Beard vegetation association 990, which has 18 per cent and 359 hectares of its pre-European vegetation remaining in the Swan Coastal Plain Bioregion. The application occurs within an extensively cleared landscape, with approximately 15 per cent of native vegetation remaining within a 5km radius of the application area.

The western section of the application area that crosses the Toby Inlet is mapped as an unnamed Conservation Category Wetland (CCW). The Toby Inlet wetland is an Environmental Protection Policy listed Swan Coastal Plain lake, the extent of the mapping of the lake stops approximately 100 metres west of the applied area, however the Toby Inlet system is a continuous perennial system of the same condition for some distance to the east (DEC, 2012), thus encompasses the application area.

Given that the vegetation under application is representative of underrepresented vegetation and unique vegetation community within an extensively cleared local area, is within a CCW, the proposed clearing is considered to comprise a high level of biological diversity, therefore the application is at variance to this principle.

**Methodology**    **References**  
-DEC (2012)  
Government of Western Australia (2011)  
-Keighery (1994)  
-Webb et al (2009)  
GIS Databases  
- Pre-European Vegetation  
-NLWA, Current Extent of Native Vegetation

**(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**  
Several conservation significant fauna species have been recorded within a 10km radius of the area under application. This includes but is not limited to, the Quenda (*Isodon obesulus fusciventer*), Western brush wallaby (*Macropus irma*), Dunsborough Burrowing Crayfish (*Engaewa reducta*), Chuditch (*Dasyurus geoffroii*) and the Western Ringtail Possum (*Pseudocheirus occidentalis*) (DEC 2007-).

Of these species the application area is likely to provide suitable habitat for the Western Ringtail Possum (WRP), listed as Vulnerable under the Environment Protection and Biodiversity Conservation Act 1999 and as 'Threatened' under the Wildlife Conservation Act 1950. The vegetation under application consists of their preferred habitat, *Agonis flexuosa* trees, and is considered to be in a completely degraded to very good (Keighery, 1994) condition (DEC 2012). The proposed clearing requires the removal of approximately four spindly 4 metre high *Agonis flexuosa*, therefore it is not likely the WRP or their habitat will be significantly impacted upon.

The application is not likely to be at variance to this principle

**Methodology**    **References**  
-DEC (2012)  
-DEC (2007)  
- Keighery (1994)

**(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**  
Two species of rare flora have been recorded within 5km of the area under application. Both species have been mapped approximately 4km south west of the proposed clearing within different soil and vegetation types to the area under application.

Given that the rare flora species have been recorded in different soil and vegetation types to the area under application, it is not likely that the application area comprises of suitable habitat for these species.

The application is not likely to be at variance to this principle.

**Methodology** GIS Databases  
 -SAC Bio Datasets (November 2012)  
 -Pre-European Vegetation  
 -Soils, Statewide

**(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**  
 One threatened ecological community (TEC) has been recorded within the 5 km of the application area. The recorded TEC is referred to as SCP 1b, Eucalyptus calophylla woodlands on heavy soils of the southern Swan Coastal Plain.

The vegetation within the area under application consists of Agonis flexuosa, Spyridium globulosum, Hibbertia cunifolmis, Acacia littorea, A. saligna, A. rostellifera and Lepidosperma gladiatum (DEC 2012) and therefore is unlikely to comprise of or be necessary for the maintenance of the TEC listed above.

The proposed clearing is not likely to be at variance to this Principle.

**Methodology** References  
 -DEC (2012)  
 GIS Databases  
 -SAC Bio Dataset (November 2012)

**(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**  
 The area under application has been mapped as Beard vegetation association 990 (approximately 95 per cent of the application area) and 37 (approximately 5 per cent of the application area) which have approximately 18 per cent and 35 per cent respectively of their pre-European vegetation remaining in the Swan Coastal Plain Bioregion (Government of Western Australia, 2011). Beard vegetation association 990 has only 359 hectares remaining within the Bioregion.

Beard vegetation association 990 retains less than the 30 per cent threshold recommended in the National Objectives Targets for Biodiversity Conservation of which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001).

In addition, the area under application exists within an extensively cleared landscape with approximately 15 per cent of pre-European vegetation remaining in the local area (5km radius).

Given that the Beard vegetation association 990 under application is poorly represented within the Bioregion, and the application occurs within an extensively cleared landscape, the vegetation under application is significant as a remnant.

The application is at variance to this principle.

Fencing the edges on both sides of the existing bike path from the end of Geographe Bay Road up to and including the proposed new section of path leading to the northern edge of the proposed bridge will protect the adjoining remnant vegetation.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion				
Swan Coastal Plain	1,501,209	587,889	39.1	33.3
Shire*				
City of Busselton	146,478	62,298	42.53	66.11
Beard Vegetation Association in Bioregion*				
990	1,948	359	18.47	10.72
37	15,616	5,617	35.97	37.84

**Methodology** References  
 -Commonwealth of Australia (2001)  
 - Government of Western Australia (2011)



GIS Databases  
-Pre-European Vegetation  
-Interim Biogeographic Regionalisation of Australia  
-NLWA, Current Extent of Native Vegetation

**(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 western section of the proposed clearing intersects with the Toby Inlet. This section of the Inlet has been mapped as a Conservation Category Wetland (CCW). CCW's are considered to support a high level of ecological attributes and functions (Water and Rivers Commission, 2001). The Toby Inlet has also been mapped as an Environmental Policy Protection (EPP) Swan Coastal Plain Lake. The boundary of the EPP Lake is mapped as concluding approximately 100 metres west from the proposed clearing. However, the Toby Inlet system is a continuous perennial system of the same condition for some distance to the east which would include the western section of the application.

The applicant has advised that the bridge abutments will be positioned back from the banks of the inlet to avoid as much vegetation as possible thus reducing impacts upon the banks stability.

The proposed clearing falls within a CCW and therefore despite the applicant's best efforts some wetland vegetation may be cleared.

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

**Methodology** References  
Water and Rivers Commission (2001)  
GIS Databases  
- EPP Lakes  
-Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain  
-Hydrography, linear

**(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 under application has been mapped as consisting of coastal dune formations backed by the low-lying deposits of inlets and estuaries with chief soils of calcareous sands (Northcote et al, 1960-1968). The removal of vegetation has the potential to increase wind erosion given the sandy nature of the soils within the application area. However, given the relatively small amount of proposed clearing along with its linear shape, it is considered unlikely that significant land degradation will occur.

The application is not likely to be at variance to this principle.

**Methodology** References  
-Northcote et al (1960-68)  
GIS Databases  
-Soils, Statewide

**(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 at variance to this Principle**

There has been no conservation areas recorded within 5km of the area under application.  
The application is not at variance to this principle.

**Methodology** GIS Databases  
-DEC Tenure

**(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**

The western section of the proposed clearing intersects with the Toby Inlet, this section of the Inlet has been mapped as a Conservation Category Wetland. Approximately 100 metres to the west of the application, the Toby Inlet has been mapped an Environmental Protection Policy (EPP) Swan Coastal Plain Lake. The Toby Inlet system is a continuous perennial system of the same condition for some distance to the east which would include the western section of the application.

CCW's are wetlands that support a high level of ecological functions and attributes and are high priority

wetlands that require protection against possible degradation to their values (Water and Rivers Commission, 2001).

EPP Swan Coastal Plain Lakes are protected lakes as published in the Western Australian Government gazette on the 18 December 1992. The purpose of the policy is to provide statutory protection for Swan Coastal Plain Lakes from filling, draining, mining and effluent discharge (Environmental Protection Authority, 1999).

The clearing as proposed may increase sedimentation into the Toby Inlet causing a degradation of the water quality and degradation of the CCW and EPP Swan Coastal Plain Lake. However, the impacts are considered to be short term and not likely to have significant or accumulative impacts long term to the values of the both the wetland and EPP lake.

The application may be at variance to this principle.

**Methodology**    **References**  
- Environmental Protection Authority (1999)  
- Water and Rivers Commission (2001)  
**GIS Databases**  
- EPP Lakes  
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain  
- Hydrography, linear

**(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 at variance to this Principle**  
Given the linear shape of the proposed clearing, the porous nature of the sandy soils and that the clearing is less than a hectare, it will not increase the incidence or intensity of flooding.

The application is not a variance to this principle.

**Methodology**    **GIS Databases**  
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain  
- Hydrography, linear

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

**Comments**  
The western section of the area under application is within an environmental sensitive area being a Conservation Category Wetland.  
  
Under the town planning scheme the applied area has been zoned for recreational purposes.  
  
Previous studies have identified that the Toby Inlet Sediments have significant Acid Sulfate Soil issues of which disturbance of could have impact on the larger EEP and Conservation Category wetland system.

**Methodology**    **GIS Database**  
- Environmental Sensitive Areas  
- Town Planning Schemes

**4. References**

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.  
DEC (2007 - ) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed November 2012  
DEC (2012) Regional Advice for Clearing Permit Application CPS 5265/1 City of Busselton. Site inspection undertaken 5/11/2012. Department of Environment and Conservation, Western Australia (DEC Ref A572572).  
EPA (1999) Review of the Environmental Protection (Swan Coastal Plains Lakes) Policy 1992, Environmental Protection Authority, Western Australia.  
Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.  
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.  
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.

Water and Rivers Commission (2001) Position Statement: Wetlands, Water and Rivers Commission, Perth.  
Webb, Keighery, Keighery, Longman, Black and O'conner (2009) The Flora and Vegetation of the Busselton Plain (Swan Coastal Plain). Department of Environment and Conservation, Perth Western Australia.

## 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)