



## CLEARING PERMIT

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

### PERMIT DETAILS

Area Permit Number: 5087/1  
File Number: DEC13697  
Duration of Permit: From 5 October 2012 to 5 October 2017

### PERMIT HOLDER

Minister for Transport

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 501 on Deposited Plan 56133 (Reserve 49218), Munster

### AUTHORISED ACTIVITY

The Permit Holder must not clear more than 0.112 hectares of native vegetation within the area hatched yellow on attached Plan 5087/1a.

### CONDITIONS

#### 1. 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.

#### 2. Dieback and 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* and *dieback*:

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

#### 3. Rehabilitation and weed control plan

- (a) By 5 January 2013 the Permit Holder must, prepare and submit to the CEO for the CEO's approval a rehabilitation and weed control plan for the area cross hatched red on attached Plan 5087/1b.
- (b) The rehabilitation and weed control plan must include but not be limited to information relating to:
  - (i) Soil preparation
  - (ii) Rehabilitation activities
  - (iii) Weeding
  - (iv) Fencing
  - (v) Success criteria
  - (vi) monitoring

- (c) The Permit Holder shall implement the rehabilitation and weed control plan approved by the CEO.
- (d) If it is necessary to modify the rehabilitation and weed control plan, then the Permit Holder must provide that modified rehabilitation and weed control plan to the CEO for the CEO's approval.

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

##### **4. Records must be kept**

The Permit Holder must maintain the following records for activities done in relation to the revegetation and rehabilitation of areas pursuant to condition 3 of this Permit:

- (a) the location of any areas revegetated and rehabilitated, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
- (b) a description of the rehabilitation activities undertaken;
- (c) the size of the area rehabilitated (in hectares);
- (d) the species composition, structure and density of rehabilitation, and
- (e) a copy of the rehabilitation and weed control plan.

##### **5. 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 4 of this Permit; and
  - (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 5 July 2012, the Permit Holder must provide to the CEO a written report of records required under condition 4 of this Permit where these records have not already been provided under condition 5(a) of this Permit.

#### **DEFINITIONS**

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

**dieback** means the effect of *Phytophthora* species on native vegetation;

**dry conditions** means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

**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;

**rehabilitate/ed/ion** means actively managing an area containing native vegetation in order to improve the ecological function of that area; and

**weeds** means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.



Roxane Shadbolt  
A/MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

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

14 September 2012

# Plan 5087/1a



## LEGEND

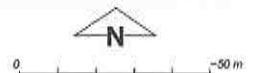
### Clearing Instruments

- Areas Approved to Clear
- Road Centrelines
- Cadastre
- Image Index (cont)

Recently added

Coverage

Perth Metropolitan Central  
15cm Orthomosaic - Landgate  
2011



Scale 1:1902  
(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.

*R. Shadbolt* Date *14/9/12*

R Shadbolt

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

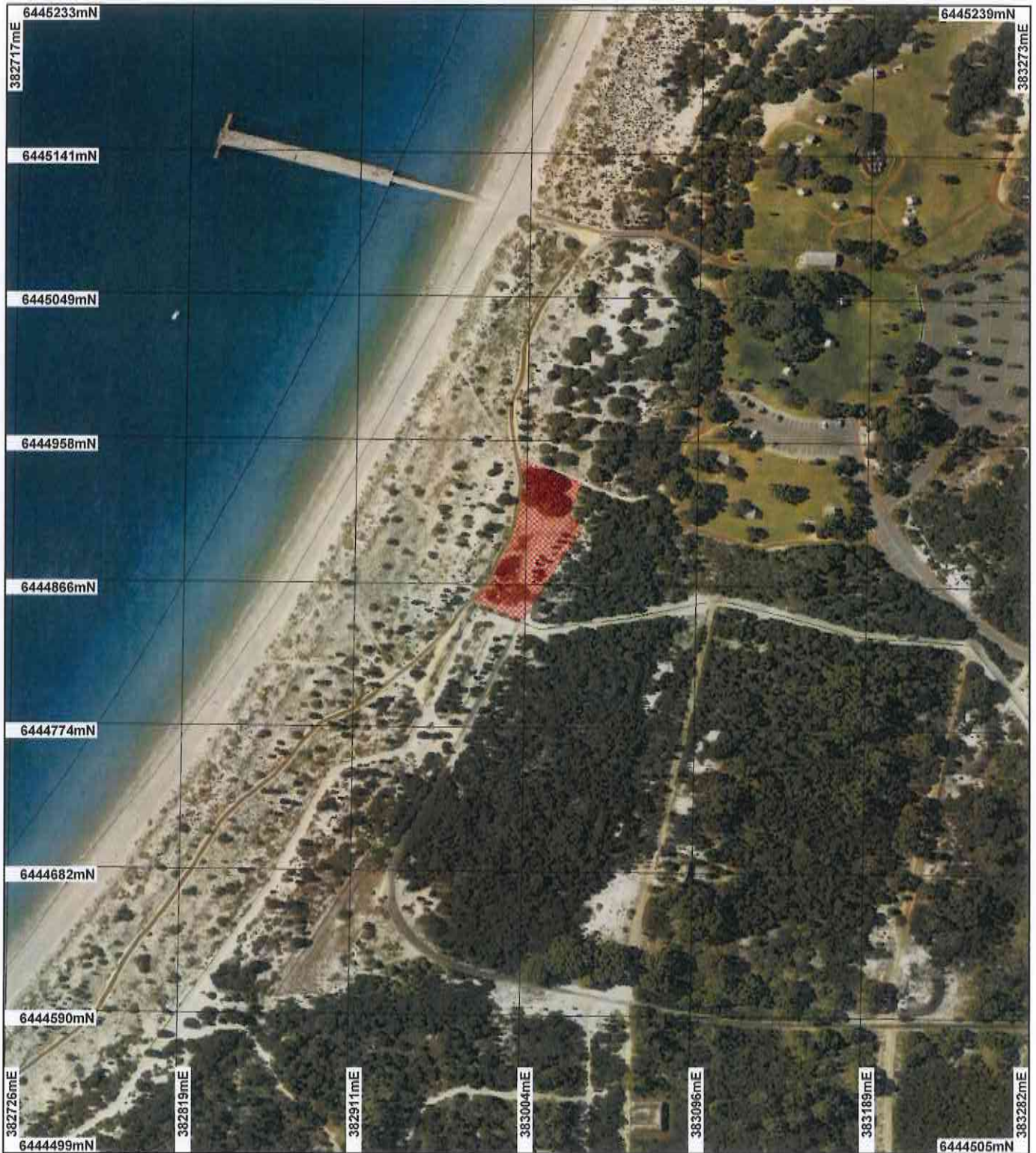
Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



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# Plan 5087/1b



## LEGEND

### Clearing instruments

- Areas Subject to Conditions
- Road Centrelines
- Cadastre
- Image Index (cont)

- Recently added
- Coverage

Perth Metropolitan Central  
15cm Orthomosaic - Landgate  
2011



Scale 1:3256  
(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.

*R. Shadbolt* Date *14/9/12*

R Shadbolt

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

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



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## 1. Application details

### 1.1. Permit application details

Permit application No.: 5087/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Department of Transport

### 1.3. Property details

Property: LOT 501 ON PLAN 56133 (Lot No. 501 JERVOISE BAY MUNSTER 6166)  
Local Government Area: City of Cockburn  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.112		Mechanical Removal	Road construction or maintenance

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 14 September 2012

## 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 mapped Beard vegetation association 3048 is described as 'Shrublands; scrub-heath on the Swan Coastal Plain' (Shepherd et al, 2001).	This application is to clear 0.112 ha of native vegetation within Lot 501 on Deposited Plan 56133 (Reserve 49218), Munster, for the purpose of road improvements, shared path realignment and drainage works, including a new drainage bubble-up pit.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994).	The vegetation condition and description was determined from a Department of Environment and Conservation (DEC) site visit undertaken on 5 July 2012 (DEC, 2012).
The mapped Heddle Vegetation Complex is half Cottesloe Complex and half Quindalup complex (Heddle et al, 1980).	The area under application ranges from a completely degraded condition to a good condition. The application area consists predominantly of a low, closed forest of Summer-scented wattle ( <i>Acacia rostellifera</i> ) over <i>Acanthocarpus preissii</i> with scattered <i>Clematis linearifolia</i> . There is no distinct native ground cover layer with heavy weed infestation including a weed of national significance, <i>Asparagus asparagoides</i> (bridal creeper), and <i>Pennisetum setaceum</i> (Fountain Grass).	To  Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (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**  
This application is to clear 0.112 ha of native vegetation within Lot 501 on Deposited Plan 56133 (Reserve 49218), Munster, for the purpose of road improvements, shared path realignment and drainage works, including a new drainage bubble-up pit.

A brief vegetation and flora field survey was conducted in April 2011 involving one 10m x 10m and one 20m x 5m quadrat. Nineteen flora species were identified of which 7 were native and 12 were introduced (GHD, 2012). A fauna survey has not been undertaken however evidence of the threatened fauna species, the Quenda (*Isodon obesulus fusciventer*) was observed.

The entire application area is mapped as a Threatened Ecological Community (TEC) 'Callitris preissii forests and woodlands, Swan Coastal Plain'. This TEC is classed as 'Vulnerable' under the Wildlife Conservation Act 1950 and is poorly reserved with 627 hectares remaining. The community at Woodman Point, including the application area, covers a total of 121 hectares.

The vegetation across the extent of the proposed development site, comprises the floristic community type SPC30a 'Callitris preissii (or Melaleuca lanceolata) forests and woodlands' (DEC, 2009 and 2012). This community type is in degraded to good (Keighery, 1994) condition (DEC, 2012) and is considered to represent this TEC. The proposed clearing may also impact on areas of this TEC in good or better condition as it will increase the degradation of adjacent TEC bushland that was previously buffered by the area under application.

As the vegetation under application is representative of a TEC which is poorly reserved, the vegetation under application comprises a high level of biodiversity.

The application area lies within a number of designated conservation areas including Bush Forever Site 341 (Woodman Point, Coogee/Munster), and the Woodman Point Regional Park and the Woodman Point Natural Area registered under the Register of National Estate. The vegetation under application is part of a significant remnant in a highly cleared area (20 percent native vegetation remaining in 10km radius) due predominantly to residential and industrial development in the local area and has been recognised as supporting a 'Contiguous or largely contiguous Regionally Significant Bushland/Wetland Linkage' (Government of Western Australia, 2000).

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

In response to the above assessment the applicant has committed to an offset which will see the rehabilitation of a 0.27ha area within the Woodman Point Recreational Park.

**Methodology**

**References**

- Keighery (1994)
- DEC (2009)
- DEC (2012)
- GHD (2012)
- Government of Western Australia (2000)

**GIS Databases**

- SAC Bio Datasets - Accessed 5 July 2012

**(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 applied clearing area lies within the Woodman Point Regional Park (WPRP) which provides habitat for fauna in an area that has been extensively cleared predominantly for residential development.

Twenty three threatened and priority fauna species have been recorded within the local area (10km radius) (DEC, 2007- ). Carnaby's Cockatoos (*Calyptorhynchus latirostris*) have been seen foraging within the Rottneest Island Pine (*Callitris preissii*) nearby the application area (DEC, 2009). The site may also be visited by a number of priority and threatened fauna including the 'rare or likely to become extinct' (Wildlife Conservation Act 1950), Australian Lesser Noddy (*Anous tenuirostris melanops*) and Southern Giant Petrel (*Macronectes giganteus*), Priority 3 Lined skink (*Lerista lineata*) and Priority 5 Quenda (*Isodon obesulus fusciventer*).

The vegetation survey identified utilisation of the area by woodland birds and Quenda (GHD, 2012) however due to the predominantly degraded (Keighery, 1994) condition of the vegetation under application and small size of clearing (0.112ha) it is not considered significant habitat for these species. Therefore the proposal is unlikely to be at variance to this principle.

**Methodology**

**References**

- DEC (2007- )
- Keighery (1994)

**GIS Databases:**

- SAC Bio Datasets- Accessed 5 July 2012

**(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 declared rare flora species have been recorded within the local area (10km radius), *Caladenia huegelii*, and *Verticordia plumosa* var. *anneotes*.

*Verticordia plumosa* var. *anneotes* is known from only one record within the local area from 1900. This species inhabits sandy soils in open *Eucalyptus marginata* (jarrah) woodland and sandy plains (Western Australian Herbarium 1998- ).

Caladenia huegelii inhabits areas of deep sandy soil below Eucalyptus marginata (jarrah) and Banksia woodland and tends to favour areas of lush undergrowth (Western Australian Herbarium 1998- ).

A flora and vegetation field survey of the application area did not record any rare or priority flora species within the applied clearing area.

Due to the predominantly degraded (Keighery, 1994) condition of the vegetation under application and small size of clearing (0.112ha) it is not considered significant habitat for these rare flora species.

- Methodology**
- References**
- DEC (2012)
  - Western Australian Herbarium (1998-)
- GIS Databases**
- SAC Bio Datasets - Accessed 5 July 2012

**(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 at variance to this Principle**
- The application areas are mapped as floristic community type (FCT) SPC30a, 'Callitris preissii (or Melaleuca lanceolata) forests and woodlands, Swan Coastal Plain,' (DEC, 2012). FCT SPC30a is a threatened ecological community (TEC) classed as 'Vulnerable' under the Wildlife Conservation Act 1950 and is poorly reserved (Gibson et al, 1994).
- This TEC is known from six areas, including Garden and Rottnest Islands and covers a total of about 627ha. The occurrences at Woodman Point are in the best condition, largest intact areas of vegetation, and are the most protectable of the mainland occurrences, being located in a large Regional Park. The community at Woodman Point, including the application area, covers a total of 121 hectares.
- The vegetation under application ranges from degraded to good (Keighery, 1994) condition (DEC, 2012). The clearing will result in 0.02 per cent of the existing 121 hectares TEC at Woodman Point being cleared (DEC, 2012).
- Although no Callitris preissii trees were found in any of the application areas, this TEC generally intergrades with vegetation of similar composition that does not include Callitris preissii for various reasons such as exposure to recent fire, or historical exposure to too frequent fire and subsequent inability of Callitris to regenerate in isolated areas. Callitris preissii trees are present in close proximity to the areas proposed for clearing and areas of vegetation in good (Keighery, 1994) condition within the application area are considered to be extant areas of this TEC.
- The proposed clearing may also impact on areas of this TEC in good or better condition as it will increase the degradation of adjacent TEC bushland that was previously buffered by the area under application.
- The proposed clearing is associated with a TEC, therefore the proposed clearing is at variance to this principle.
- In response to the above assessment the applicant has committed to an offset which will see the rehabilitation of a 0.27ha area within the Woodman Point Recreational Park.

- Methodology**
- References**
- Keighery (1994)
  - Gibson et al. (1994)
  - DEC (2012)
- GIS Databases**
- Sac Bio Datasets
  - Pre-European Vegetation
  - etc

**(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**
- The application area is representative of the mapped Heddle's Cottesloe Complex, of which 39 per cent is remaining and 13 per cent protected in DEC managed lands as well as Heddle's Quindalup Complex, of which 61 per cent is remaining and 6 per cent protected in DEC managed lands (Heddle et al, 1980). The application area is also representative of the mapped Beard vegetation association 3048 of which 32 per cent remains and 25 per cent is protected in DEC managed lands (Government of Western Australia, 2011).

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 Environmental Protection Authority (EPA, 2006) recognises the Perth metropolitan Region as a constrained area, providing for the reduction of vegetation complexes to a minimum of 10 per cent of the pre-European extent.

The three mapped vegetation associations are all above this 10 per cent minimum, consistent with the EPA's recommendation. However the local area (10kms) has been extensively cleared with approximately 20 per cent vegetation remaining in the local area.

The application area may be significant as a remnant in an extensively cleared landscape as it contains regionally significant native coastal vegetation, a TEC and is part of a remnant of vegetation that contributes to a north-south bushland ecological corridor that is a largely continuous wetland/bushland linkage of regional significance (Government of WA, 2000).

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

	Pre-European (ha)	Current Extent Remaining (ha)	(%)	Extent in DEC Managed Lands (%)	
IBRA Bioregion*					
Swan Coastal Plain	1,501,209	587,889	39.1	33.3	
Shire*					
City of Cockburn	17,087	5,339	31.24	17.3	
Beard Vegetation Association in Bioregion*					
3048	10,416	3,317	31.84	25.2	
Hedde Vegetation Complex **					
Quindalup Complex (Qw)	49,028.19	30,128.95	61.45	6.19	
Cottesloe Complex - Central And South		44,818.43	17,528.26	39.11	13.30

\* Government of Western Australia (2011)  
\*\*Hedde et al (1980)

**Methodology** References:  
Commonwealth of Australia (2001)  
EPA (2006)  
Government of Western Australia (2000)  
Government of Western Australia (2011)  
Hedde et al (1980)  
Shepherd et al (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 not likely to be at variance to this Principle**

Lake Coogee is mapped 1.1km east of the application area. The closest watercourse to the applied clearing area is the Swan River, a major, perennial watercourse approximately 10km north of the applied clearing areas.

Given the distance of the applied clearing area to the nearest wetland, it is unlikely that the proposed clearing is growing in association with an environment associated with a watercourse or wetland and therefore it is not likely to be at variance to this Principle.

**Methodology** GIS Databases:  
- Geomorphic wetlands (Mgmt 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 chief soils within the applied clearing area have been mapped by Northcote et al (1960-68) as being siliceous white sands within an undulating dune landscape.

The majority of this site is mapped as having a low salinity risk with some areas towards the southeast of the site mapped as medium to high. The groundwater salinity ranges between 500 -1000mg/L total dissolved solids.



Given the small application areas (0.112ha) it is unlikely the proposed clearing will cause appreciable land degradation and it is therefore not likely to be at variance to this Principle.

**Methodology** References:  
-Northcote et al (1960-68)  
GIS Databases:  
- Groundwater Salinity  
- 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 at variance to this Principle**

The applied clearing area is part of the Bush Forever Site 341 (Woodman Point, Coogee/Munster) and is within the Woodman Point Regional Park (WPRP), a Conservation Park vested with the Conservation Commission.

Bush Forever Site 341 (Woodman Point, Coogee/Munster) has been included for special protection due to its representation of ecological communities, rarity, general criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation (Government of Western Australia, 2000). The removal of the vegetation under application will result in the clearing of a portion of a threatened ecological community (TEC) as well as areas of conservation significance.

The vegetation on the edge of the TEC provides a buffer to the adjacent vegetation. In the case of the clearing for the proposed drainage basin is proposed to be over 30m wide of good (Keighery, 1994) condition vegetation. This vegetation is important as a vegetated buffer to prevent degradation through the introduction and spread of weeds and rubbish into the adjacent TEC.

Given that the applied clearing area will result in a loss of 0.112ha of vegetation within Bush Forever Site 341, entirely within the Woodman Point Regional Park, the proposed clearing is at variance to this principle.

In response to the above assessment the applicant has committed to an offset which will see the rehabilitation of a 0.27ha area within the Woodman Point Recreational Park.

**Methodology** References:  
- Government of Western Australia (2000)  
- Keighery (1994)  
GIS Databases:  
- Bushforever  
- DEC Tenure  
-Sac Bio datasets (Accessed 5 July 2012)

**(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 vegetation under application lies within the Coastal Hydrographic Catchment within the Murray River Basin.

Lake Coogee is mapped 1.1km east of the application area. The closest watercourse to the applied clearing area is the Swan River, a major, perennial watercourse approximately 10km north of the applied clearing areas.

The chief soils within the applied clearing area have been mapped by Northcote et al (1960-68) as being siliceous white sands within an undulating dune landscape. These soils have a high permeability and groundwater at this location flows towards the ocean.

The majority of the application area is mapped as having a low salinity risk with some areas towards the southeast of the site mapped as medium to high. The groundwater salinity ranges between 500 -1000mg/L total dissolved solids.

Given the small size for the proposed clearing, it is not considered likely for it to cause deterioration in the quality of surface or groundwater.

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

**Methodology** GIS Databases:  
- Groundwater Salinity  
- Hydrography, linear  
- Hydrography, catchments  
- Salinity Risk LM 25m  
- Soils, Statewide

**(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**

Lake Coogee is mapped 1.1km east of the application area. The closest watercourse to the applied clearing area is the Swan River, a major, perennial watercourse approximately 10km north of the applied clearing areas.

Given the proximity of the applied clearing area to the nearest watercourse or wetland and small size of proposed clearing (0.112ha), the proposal is not likely to cause, or exacerbate, the incidence or intensity of flooding and is therefore not likely to be at variance to this principle.

**Methodology** GIS Databases:  
- Hydrography, linear

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

**Comments**

In accordance with clause 5.1.2.1 of State Planning Policy (SPP) 2.8 there is a presumption against clearing of regionally significant bushland. Proposals or decisions should seek to protect regionally significant bushland as a priority, except where a proposal is consistent with the overall purpose and intent of an existing reserve and can be reasonably justified with regard to wider environmental, social and economic considerations, all reasonable alternatives have been considered in order to avoid or minimise any direct loss of regionally significant bushland, and reasonable offset strategies are secured to offset any loss of regionally significant bushland where appropriate and practical (DoP, 2012).

The Department of Planning's Policy Development Branch (2012) considers the proposed works are consistent with the overall purpose and intent of Woodman Point and are justified in terms of the wider social benefit and therefore has no objection subject to the following conditions being applied to the clearing permit:

- An offset package is prepared and approved by the Department of Environment and Conservation prior to the clearing of any native vegetation,.
- Other than the 0.112 ha of native vegetation proposed to be cleared, the development including construction, access, drainage and ongoing maintenance shall not result in further disturbance or clearing of any native vegetation within Bush Forever area 341.
- No building materials, rubbish or other matter is to be deposited into Bush Forever Area 341 during or after development.

The Department of Transport has committed to an offset which will see the rehabilitation of a 0.27ha area within the Woodman Point Recreational Park. A Rehabilitation and Weed Control Plan will be prepared and submitted to the Department of Environment and Conservation for endorsement within three months of the commencement date of the permit to clear. The Department of Transport (DoT, 2012) has advised that they will engage a contractor to manage the project which will include:

1. Fencing the site with temporary rabbit-proof fence;
2. Rehabilitating the site with native species consistent with the community type proposed to be cleared;
3. Bagging and stacking of seedlings;
4. Weed control within the site and within a 50m buffer east of the site; and
5. 5 year monitoring program.

There is potential groundwater contamination from the proposed open bubble up pit, as the pit doesn't have a concrete base and there are fuel bowsers nearby within the road drainage area. It is not clear if the drainage infrastructure incorporates mechanisms to deal with a fuel spill.

The area under application is zoned as Parks and Recreation under the Metropolitan Regional Scheme and Recreation in the Woodman Point Regional Park Management Plan.

**Methodology** References  
DoP (2012)  
DoT (2012)  
  
GIS Databases  
-Metropolitan Regional Scheme  
-ICMS polygons

#### 4. References

- DEC (2007 - ) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed 5/7/2012.
- DEC (2009) Site Inspection Report for Clearing Permit Application CPS3349/1, Lot 172 on Plan 93642 Powell Road, Coogee and Railway Reserve and Lot 304 on Plan 50276, Munster. Site inspection undertaken 11/11/2009. Department of Environment and Conservation, Western Australia (TRIM ref DOC106874).
- DEC (2012) Site Inspection Report for Clearing Permit Application CPS 5087/1, within Lot 501 on Deposited Plan 56133-Reserve 49218, Munster. Site inspection undertaken 5 July 2012 Department of Environment and Conservation, Western Australia (DEC REF A524282).
- DoP (2012) Direct Interest Submission for clearing permit application CPS 5087/1. Received 16/7/2012. Strategic Biodiversity Planning team, Department of Planning, Western Australia (DEC REF A524196).
- DoT (2012) Letter of commitment with DEC's clearing permit offset proposal in Woodman Point Recreational Boating Precinct for access road upgrade purposes, 12 September 2012. Department of Transport, Western Australia (DEC Ref: A545573).
- GHD (2012) Woodman Point Marine Service Area Environment and Heritage Report, GHD Pty Ltd, Perth, Western Australia.
- Gibson N., Keighery B., Keighery G., Burbidge A. and Lyons M. (1994) A Floristic Survey of the Southern Swan Coastal Plain. Western Australian Department of Conservation and Land Management and the Western Australian Conservation Council.
- Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth WA.
- Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.
- 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.
- 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.

#### 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)