



## CLEARING PERMIT

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

<b>Purpose Permit number:</b>	CPS 6215/1
<b>Permit Holder:</b>	City of Gosnells
<b>Duration of Permit:</b>	8 August 2015 - 8 August 2017

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 fire hazard reduction burn.

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

Lot 5037 on Deposited Plan 38388, Southern River

**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 6215/1.

**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.

### PART II – MANAGEMENT CONDITIONS

**6. Weed Management Plan**

- Prior to undertaking any clearing authorised under this permit, the Permit Holder must submit a post fire *weed* management plan to the CEO for approval.
- The *weed* management plan must be approved by the CEO prior to being implemented.
- The approved *weed* management plan must be implemented by the Permit Holder.

## DEFINITIONS

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

*weed/s* means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



M Warnock  
SENIOR MANAGER  
CLEARING REGULATION



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

9 July 2015

# Plan 6215/1



## Legend

-  Imagery
-  Clearing Instruments Activities
-  POI



1:1,703

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

*M Warnock* Date *9/7/15*  
M Warnock

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.: 6215/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: City of Gosnells

### 1.3. Property details

Property: LOT 5037 ON PLAN 38388, SOUTHERN RIVER  
Colloquial name:  
Local Government Authority: City of Gosnells  
DER Region: Swan  
DPaW District:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.68		Burning	Hazard reduction or fire control

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 9 June 2015

## 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
Mapped Beard vegetation association 1001 is described as Medium very sparse woodland; jarrah, with low woodland; banksia & casuarina (Shepherd et al, 2001).	The clearing of 0.68 hectares of native vegetation is for the purpose of a fire hazard reduction burn.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994)	The vegetation condition was assessed through a site inspection conducted by Department of Environment Regulation (DER) officers (DER, 2014).
Mapped Heddle Southern River Complex: Open woodland of <i>Corymbia calophylla</i> (Marri) - <i>Eucalyptus marginata</i> (Jarrah) - Banksia species with fringing woodland of <i>Eucalyptus rudis</i> (Flooded Gum) - <i>Melaleuca raphiophylla</i> (Swamp Paperbark) along creek beds (Heddle et al, 1980).		To  Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (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 may be at variance to this Principle**

The application is to clear 0.68 hectares of native vegetation within Lot 5037 on Deposited Plan 38388, Southern River, for the purpose of a fire hazard reduction burn. The area under application is proposed to be burnt in accordance with a Basic Fire Management Plan established by the City of Gosnells with the intention to reduce the fuel buffer between vegetated Bush Forever lands to the east and west of the site in order to minimise the potential risk of bushfire threat and damage to the residential development that borders the proposal (City of Gosnells, 2014).

The vegetation under application forms part of Bush Forever Site No.125 Holmes Street Bushland, Southern River/Huntingdale and is known as the 'Bodallin Crescent Reserve'. Bush Forever Site No.125 is recognised as

an area of regionally significant vegetation that provides an important ecological linkage for fauna movement providing a connection between reserves within an area of urban development.

A site inspection of the application area undertaken by the Department of Environment Regulation determined that the vegetation proposed to be cleared is in a very good to excellent (Keighery, 1994) condition with degraded vegetation along the perimeter of the application area along Bodallin Crescent and Dalyup Road reserves (DER, 2014).

The application area consisted of three vegetation types. Wetland vegetation consisting of *Eucalyptus rudis*, *Melaleuca raphiophylla* and various sedge species occurring within swamp areas. Low woodland consisting of *Banksia* and *Allocasuarina* species over a dense native understorey occurring along the perimeter of the application area. The centre of the application area is closed, very dense shrubland dominated by *Melaleuca huegelli* which covered approximately 60 per cent of the application area.

Several occurrences of priority and rare flora species have been recorded within the local area (10 kilometre radius), which share the same soil type and vegetation association as the application area. The Department of Parks and Wildlife (Parks and Wildlife)(2014) has advised that although there is a possibility that the application area may provide habitat for some priority flora taxa, the potential impacts of the proposed burn is unlikely to significantly impact the conservation status of those species.

The area under application may contain suitable habitat for one rare flora species which has been recorded approximately 600 metres north-west of the application area. Parks and Wildlife (2014) has advised that the application area may contain potential habitat on the more sandy upland areas however impact to this species can be minimised if the burn occurs outside its flowering period during the months of October to April. The Applicant has advised that the proposed burn will occur during these months to minimise impact to rare flora (City of Gosnells 2015a).

The closest priority ecological community (PEC) to the application area is the priority 3 'Low lying banksia attenuata shrubland or woodlands'. This PEC has been mapped approximately 3.6 kilometres east of the application area. Given the distance of the application area to this mapped occurrence, it is not likely that the proposed clearing will impact on this community.

A number of conservation significant fauna listed under the Wildlife Conservation Act 1950 (WC Act) have been recorded within a 10 kilometre radius including: *Calyptorhynchus banksii* subsp. *naso* (Forest Red-tailed Black-cockatoo), *Calyptorhynchus baudinii* (Baudin's cockatoo) *Calyptorhynchus latirostris* (Carnaby's cockatoo), *Phascogale tapoatafa* subsp. *tapoatafa* (Southern Brush-tailed phascogale), *Dasyurus geoffroyi* (Chuditch) and the *Botaurus poiciloptilus* (Australian Bittern) (DEC, 2007- ). The vegetation under application is likely to provide suitable habitat for all of the above listed species, however, given the small size of the application area, the proposed burn is not likely to have a significant impact on habitat for these species.

The application area contains vegetation of an excellent condition, provides suitable habitat for conservation significant fauna and flora, and is recognised as an important ecological linkage, therefore it may contain a high level of biodiversity. The impacts from the proposed burn may be able to be managed with appropriate measures under the guidance of expert advice (Parks and Wildlife, 2014a).

In response to the above assessment the City of Gosnells commissioned 360 Environmental Pty Ltd to undertake a 'Fire Ecology Aspects of a Proposed Fire Hazard Reduction Burn Report' (fire assessment report). The fire assessment report states that the fire will occur after some rain and when temperature is cooler most likely resulting in partial loss of above ground vegetation such as herbs, grasses, sedges and some shrub species. The fire assessment report also stated that the burn is likely to cause some loss in vegetation cover however, is unlikely to impact movement of fauna as the vegetation is likely to regenerate in a relatively short time (360 Environmental 2015).

The fire assessment report provides general fire ecology information regarding some species occurring within the application area including that *Banksia menziesii*, *Corymbia calophylla*, *Eucalyptus todtiana* and *Xanthorrhoea preissii* are known to reproduce after fire and that the dominant plant species in some areas of the application area, *Regelia ciliata*, is known to resprout after fire and has been recorded flowering 24-36 months after a burn (360 Environmental 2015). Therefore the proposed burn is not likely to have a long-term impact on the structure and composition of the vegetation within the application area. In the short term it is likely for the proposed burn to allow coloniser species including weeds to invade the application area (Parks and Wildlife 2015). A weed management program will minimise this impact.

The proposed clearing may be at variance to this principle.

#### Methodology

#### References:

- City of Gosnells (2014)
- City of Gosnells (2015b)
- DER (2014)
- Parks and Wildlife (2014)
- Parks and Wildlife (2014a)
- Parks and Wildlife (2015)
- DEC (2007-)

- Keighery (1994)
  - 360 Environmental (2015)
- GIS Datasets:
- SacBiodataSets – accessed September 2014
  - Geomorphic Wetlands, Swan Coastal plain

**(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 fauna species of conservation significance have been recorded within the local area (10 kilometre radius), including *Calyptorhynchus banksii* subsp. *naso* (Forest Red-tailed Black-cockatoo), *Calyptorhynchus baudinii* (Baudin's cockatoo) *Calyptorhynchus latirostris* (Carnaby's cockatoo), *Phascogale tapoatafa* subsp. *tapoatafa* (Southern Brush-tailed phascogale), *Dasyurus geoffroyi* (Chuditch) and the *Botaurus poiciloptilus* (Australian Bittern) (DEC, 2007- ).

Forest Red-tailed black cockatoo, Baudin's cockatoo and Carnaby's cockatoo forage on the seeds, nuts and flowers of a large variety of plants including proteaceous species (*Banksia*, *Hakea*, *Grevillea*), as well as *Allocasuarina* and *Eucalyptus* species, *Corymbia calophylla* and a range of introduced species (Valentine and Stock, 2008). The perimeter of the application area comprises of these plant species, therefore providing preferable foraging habitat for the three above mentioned species of black cockatoo. However, foraging habitat within the application area is not considered to be significant given only a small portion of the application area provides suitable foraging habitat for these species and that there is suitable habitat located in adjacent bushland to the proposal. In addition, *Banksia* Woodland communities are known to respond well to fire encouraging the regeneration of many proteaceous species, which in turn is likely to result in a net increase in foraging habitat for black cockatoos.

The area of sumpland within the application area may provide suitable habitat for ground dwelling species that are commonly found near wetland areas on the Swan Coastal plain, particularly for those species that migrate between wetland and dryland areas (Parks and Wildlife, 2014a). These species include the Chuditch and Southern Brush-tailed Phascogale which are both listed as rare or likely to become extinct under the WC Act, the Quenda (*Isodon obesulus* subsp. *fusciventer*) listed as priority five, and the Rainbow Bee-eater (*Merops ornatus*) which is protected under international agreement. In addition, evidence of foraging by the Quenda and the Rainbow Bee-eater was observed within the application area during a site visit by 360 Environmental on January 2015 (360 Environmental 2015). However, given the small size of the application area, it is unlikely the proposed burn of 0.68 hectares will impact upon significant habitat for these species.

The application area may provide suitable habitat for the Australasian Bittern. This species favours freshwater habitats, particularly those dominated by sedges, rushes and reeds that grow over peaty substrates (Department of Environment, 2011). Open water surrounded by rushes and reeds were observed within the application area during a site visit by DER officers in October 2014 (DER 2014). However, given only a small portion of the proposed burn is a sumpland area suitable for this species and that favourable habitat is also located in close proximity to the application area, the clearing as proposed is not likely to have a significant impact on habitat for this species.

The application area is located within Bush Forever site No. 125 known as 'Holmes Street Bushland, Southern River'. The site is part of a regionally significant bushland and wetland linkage which provides ecological connectivity for fauna between reserves within an area of residential development. The proposed burn is likely to contribute to the short term degradation of this existing ecological linkage and may result in the disruption of migration patterns for conservation significant fauna within the area. However, this degradation is likely to be short term. Therefore the proposed clearing is not likely to be at variance to this Principle.

**Methodology**

**References:**

- DEC (2007-)
- DER (2014)
- Valentine and Stock (2008)
- Parks and Wildlife (2014a)
- Department of Environment (2011)
- 360 Environmental (2015)

**(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 variance to this Principle**

The closest species of rare flora to the application area is a tuberous perennial herb with a preference for sand to sandy clay soil amongst scattered shrub in areas subject to winter inundation (Brown et al, 1998). This species has been mapped approximately 600 metres away on a portion of adjoining vegetation consistent with that under application.

The Department of Parks and Wildlife (2014) has advised that the application area may contain potential habitat on the more sandy upland areas. As an alternative to confirming the presence of this species through a



targeted flora survey, it is recommended to assume this species occurs within the application area, and to limit the timing of the prescribed burn to a period which would minimise any potential impacts to this species. Specialist advice from the Department of Parks and Wildlife (2014) recommends that the prescribed burn be undertaken during October to April in order to minimise any potential impacts from the proposed burn to this species. In addition, post-fire monitoring of the site is recommended, given flowering is promoted for this species following fire (Parks and Wildlife, 2014).

The applicant has advised that they propose to do the burn between October 2015 and April 2016 (City of Gosnells 2015b).

Given the above, the proposed clearing is not likely to be at variance to this principle.

**Methodology**

**References:**

- Brown et al. (1998)
- Parks and Wildlife (2014)
- City of Gosnells (2015b)

**GIS Datasets:**

- SacBiodataSets – accessed September 2014

**(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**

The closest threatened ecological community (TEC) to the application area is situated approximately 2.7 kilometres south and is described as 'Shrublands and woodlands on Muchea Limestone'. The vegetation type under application is not considered analogous to this threatened ecological community and therefore it is not likely that the proposed clearing comprises the whole, or is necessary for the maintenance of this TEC.

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

**Methodology**

**GIS Databases:**

- SAC Biodatasets - accessed September 2014

**(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 local area surrounding the application (10 kilometre radius) retains approximately 20 per cent native vegetation.

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).

Within constrained areas (areas of urban development in cities and major towns) on the Swan Coastal Plain, the target for representation of the pre-clearing extent of a particular native vegetation complex is 10 per cent (EPA, 2006). The area under application is zoned as 'urban' under the Metropolitan Regional Scheme and is therefore classified as a constrained area.

The area under application is located within the Swan Coastal Plain Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion retains approximately 39 per cent of its pre-European vegetation extent (Government of Western Australia, 2013).

The City of Gosnells, Beard Vegetation Association (1001) and Heddle Southern River Complex retain approximately 28, 24 and 21 per cent pre-European vegetation within the Swan Coastal Plain respectively (Government of Western Australia, 2013).

These figures are greater than the above mentioned 10 per cent threshold in constrained areas, however this threshold does not account for vegetation remaining within the local area. The vegetation remaining in the local area is approximately 20 per cent, and given that the application area forms part of Bush Forever site No. 125 and provides an important regional ecological linkage for fauna movement, the proposed burn may be at variance to this Principle.

	Pre-European (ha)	Current Extent (ha)	Remaining Extent (%)	Extent in DPaW Managed Lands (%)
IBRA Bioregion				
Swan Coastal Plain	1,501,222	586,975	39	36
Shire				
City of Gosnells	12,716	3,672	28	16

Beard Vegetation Association in Bioregion 1001	57,410	14,151	24	5
Mapped Heddle Association in Bioregion Southern River Complex	57,171	12,059	21	1

**Methodology** References:  
 -Government of Western Australia (2013)  
 -Commonwealth of Australia (2001)  
 GIS Databases:  
 -NLWRA Current Extent of Native Vegetation  
 -Pre-European 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 application area is mapped within the northern linear section of a large wetland area identified as a Conservation category sumpland (seasonally inundated basin). The sumpland system is located within Bush Forever site No. 125, an important regional ecological linkage and within the Bennett Brook consanguineous suite (natural wetland group) of which only 19.4 per cent of the sumpland area is evaluated as Conservation Category (Parks and Wildlife, 2014a). Conservation Category wetlands are highest priority wetlands, which are considered to support a high level of ecological attributes and functions (Water and Rivers Commission 2001). Therefore, the sumpland system is important in terms of representative values.

The wetland vegetation within the application area has remained largely intact since 1953 (Parks and Wildlife, 2014a). A site inspection has confirmed that the wetland vegetation growing in association with this sumpland is in a very good to excellent (Keighery 1994) condition (DER, 2014).

The proposed burn will result in the direct loss of wetland vegetation growing in association with this sumpland. It would be expected that the regeneration of wetland vegetation will occur over the longer term.

An assessment of several fire ecology aspects of the application area was conducted in January 2015 (360 Environmental 2015). The fire assessment report states that the fire will occur after some rain and when temperature is cooler most likely resulting in partial loss of above ground vegetation such as herbs, grasses, sedges and some shrub species. The fire assessment report also states that the burn is likely to cause some loss in vegetation cover however, is unlikely to impact environmental values as the vegetation is likely to regenerate in a relatively short time (360 Environmental 2015).

In considering the above, the proposed burn is at variance to this principle.

**Methodology** References:  
 - Parks and Wildlife (2014a)  
 - DER (2014a)  
 - Keighery (1994)  
 - Water and Rivers Commission (2001)  
 -360 Environmental (2015)  
 GIS Databases:  
 -Geomorphic Wetlands, Swan Coastal Plain  
 -Hydrography, linear  
 -Hydrography, hierarchy

**(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 soils within the application area have been mapped by Northcote et al (1960-68) as sandy dunes with intervening sandy and clayey swamp flats with chief soils consisting of leached sands, sometimes with a clay D horizon below five feet, on the dunes and sandy swamps. Associated are various soils in the clayey swamps.

A site inspection of the application area identified two different soil types. Clay based soils were identified along swamp flats and leached white/grey sands existed in the dryland areas where low woodland and shrubland vegetation occurred (DER, 2014). The proposed burn may result in wind erosion in the areas where leached sands are present in the application area. The risk of waterlogging may be increased in wetland areas subject to inundation. However, given the small size of the area under application, impacts are likely to be minimal and the proposed burn is not likely to cause appreciable land degradation.

The Department of Parks and Wildlife (2014a) has identified the application area as being of high to moderate risk of acid sulfate soils. Fires within wetland areas can result in the exposure of acid sulphate soils, particularly when there is peat within the soil stratigraphy, however the risk of exposure of acid sulphate soils is considered minimal.



Given the above, it is not considered likely for the proposed clearing to cause appreciable land degradation and is not likely to be at variance to this principle.

**Methodology**    **References:**  
- DER (2014)  
- Northcote et al (1960-68)  
- 360 Environmental (2015)  
- Parks and Wildlife (2014a)  
**GIS Database:**  
- Hydrography, linear  
- Geomorphic Wetlands, Swan Coastal Plain

**(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 application area is located within Bush Forever site No. 125 known as 'Holmes Street Bushland, Southern River'. The site is part of a regionally significant bushland and wetland linkage which provides ecological connectivity for fauna between reserves within an area of residential development. The proposed burn is likely to contribute to the degradation of this existing ecological linkage and result in the disruption of migration patterns for conservation significant fauna within the area.

The proposed burn is likely to impact upon the environmental values of this reserve by modifying the density and composition of the existing vegetation, as the burn may result in the fire-tolerant species to regenerate and therefore become more dominant over fire-sensitive species that may not regenerate following a fire (Parks and Wildlife, 2014a).

An assessment of several fire ecology aspects of the application area was conducted in January 2015 (360 Environmental 2015). The fire assessment report states that the fire will occur after some rain and when temperature is cooler most likely resulting in partial loss of above ground vegetation such as herbs, grasses, sedges and some shrub species. The fire assessment report also stated that the burn is likely to cause some loss in vegetation cover however the vegetation is likely to regenerate in a relatively short time (360 Environmental 2015).

The disturbance caused by the proposed burn may increase the risk of weeds being spread within the application area. The applicant has advised that they will ensure a weed management regime is implemented post burn to reduce the risk of weed invasion (City of Gosnells 2015).

Bush Forever site No. 125 site supports approximately 90 hectares of Conservation Category wetlands of which approximately 0.6 hectares is within the proposed burn area. The area under application is within the northern linear section of a large wetland area identified in the Geomorphic Wetlands Swan Coastal Plain data set as a Conservation category sumpland (seasonally inundated basin). The proposed burn is likely to impact upon the natural values of this conservation category wetland, which has already been impacted by urban development, as well as result in the loss and degradation of habitat for flora and fauna within the site (Parks and Wildlife, 2014a).

Given the above assessment, the application is at variance to this principle.

**Methodology**    **References:**  
- Parks and Wildlife (2014a)  
- City of Gosnells (2015)  
- 360 Environmental (2015)  
**GIS Database:**  
- Bush Forever

**(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 application area is mapped within the northern linear section of a large wetland area identified as a Conservation Category sumpland (seasonally inundated basin). The sumpland system is identified within the Bennett Brook consanguineous suite (natural wetland group) of which only 19.4 per cent of the sumpland area within the Bennett Brook suite is evaluated as Conservation Category. Conservation Category wetlands are highest priority wetlands, which are considered to support a high level of ecological attributes and functions (Water and Rivers Commission 2001). Therefore the sumpland system is important in terms of representative values (Parks and Wildlife, 2014a).

The Department of Parks and Wildlife (2014a) has advised that the proposed fuel reduction burn is likely to significantly impact the natural values of this Conservation Category sumpland and its associated flora and fauna. The proposed burn is unlikely to result in the modification of the hydrology in the sumpland, however, is

likely to result in a number of short-term localised impacts prior to regeneration. There is the potential for a higher infiltration of rainfall to groundwater due to there being reduced vegetation in the area. Erosion and nutrient transportation across the wetland or down to the groundwater may also occur prior to regeneration. However, the risk of these impacts is likely to be low, given the small size of the application area in comparison to the sumpland system (Parks and Wildlife, 2014a).

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

**Methodology**   References:  
- Parks and Wildlife (2014a)  
- Waters and Rivers Commission (2001)  
GIS Databases:  
- Groundwater Salinity, Statewide  
- Geomorphic Wetlands, Swan Coastal Plain  
- Hydrography, linear  
- Hydrography, hierarchy

**(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 application area is mapped with a Conservation category sumpland.

Given the small size of the proposed burn and the flat topography of the land, it is unlikely the proposed burn will cause or exacerbate the incidence or intensity of flooding in the local area.

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

**Methodology**   GIS Databases:  
- Geomorphic Wetlands, Swan Coastal Plain  
- Hydrography, linear  
- Hydrography, hierarchy

**Planning instruments and other relevant matters.**

**Comments**       The area under application is proposed to be burnt in accordance with a Basic Fire Management Plan established by the City of Gosnells (2014). The proposed burn is intended to minimise the potential risk of bushfire threat to surrounding residential properties through the application of prescribed fire (City of Gosnells, 2014). The primary objective of the burn is to reduce fuel loadings within the subject site to below 8 tonnes per hectare.

A letter was sent to the applicant on the 14 October 2014 detailing the impacts of the proposed clearing and requesting for expert advice regarding the fire ecology of the application area. A letter was received from the applicant on the 31 March 2015 in response to the letter and providing a fire assessment report of the application area. A second letter was sent to the applicant on the 7 May 2015 requesting for further information regarding the fire ecology of the application area. A letter was received from the applicant in response on the 8 June 2015 advising that they propose to do the burn between the months of October to April to minimise the risk to rare flora and that a weed management regime will occur post burn to reduce the impacts of weeds (City of Gosnells 2015a and 2015b).

The application area is a Shire reserve (Bodallin Crescent Reserve) for the purpose of 'Public Recreation and Conservation'.

No submissions have been received for this application.

**Methodology**   References:  
- City of Gosnells (2014)  
- City of Gosnells (2015b)

**4. References**

- City of Gosnells (2014) Basic Fire Management Plan. Supporting information for CPS 6215/1. (DER Ref: A788723)
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- City of Gosnells (2015a) Letter dated 27 March 2015 for Clearing Application CPS 6215/1 (DER Ref: A889832)
- City of Gosnells (2015b) Letter dated 8 June 2015 for Clearing Application CPS 6215/1 (DER Ref: A917483)
- DEC (2007 - ) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>.
- Department of Environment (2011) Commonwealth Listing Advice on Botaurus poiciloptilus (Australasian Bittern) (Threatened Species Scientific Committee (TSSC), 2011v) [Listing Advice].
- Department of Parks and Wildlife (2014a) Species and Communities wetland advice CPS 6215/1. Department of Parks and Wildlife, Perth, Western Australia (DER Ref: A800669).
- Department of Parks and Wildlife (2014) Species and Communities advice for clearing permit CPS 6215/1. Department of

Parks and Wildlife, Perth, Western Australia (DER Ref: A809865).  
DER (2014) Site Inspection Report for Clearing Permit Application CPS 6215/1. Site inspection undertaken 22/08/2014.  
Department of Environment Regulation, Western Australia (DER Ref: A802687).  
Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. 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.  
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.  
Valentine, L.E. and Stock, W. (2008) Food Resources of Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) in the Gnangara Sustainability Strategy Study Area. Edith Cowan University and Department of Environment and Conservation. December 2008.  
Water and Rivers Commission (2001) Position Statement: Wetlands, Water and Rivers Commission, Perth.