GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS
Area Permit Number: CPS 8465/1
File Number: DWERVT2676
Duration of Permit: 7 September to 7 September 2021

PERMIT HOLDER
City of Stirling

LAND ON WHICH CLEARING IS TO BE DONE
Lot 500 on Plan 410718, Balga
Lot 501 on Plan 410718, Balga

AUTHORISED ACTIVITY
Type of Clearing Authorised/Method
The Permit Holder shall not clear more than 0.53 hectares of native vegetation within the area cross-hatched yellow on attached Plan 8465/1.

CONDITIONS

1. **Avoid, minimise and reduce the impacts and extent of 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) ensure that no known *dieback* or *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.

3. **Records must be kept**
   The Permit Holder must maintain the following records for activities done pursuant to this Permit, 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 or decimal degrees;
   (b) the date that the area was cleared;
   (c) the size of the area cleared (in hectares);
   (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 1 of this Permit; and
   (e) actions taken to minimise the risk of the introduction and spread of weeds in accordance with condition 2 of this Permit.

4. Reporting

The Permit Holder must provide to the *CEO* the records required under condition 3 of this Permit, when requested by the *CEO*.

DEFINITIONS

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

CEO means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;

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

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 a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
(b) Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or
(c) not indigenous to the area concerned.

Mathew Gannaway
MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

8 August 2019

Plan 8465/1

Legend

CPS areas approved to clear

Image

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Officer delegated under section 20 of the Environmental Protection Act 1986

GOVERNMENT OF WESTERN AUSTRALIA

Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8465/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: City of Stirling
Application received date: 15 April 2019

1.3. Property details

Property: Lot 500 on Plan 410718
Lot 501 on Plan 410718
Local Government Authority: City of Stirling
Localities: Balga

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
0.53		Mechanical Removal	Recreation

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 8 August 2019
Reasons for Decision: The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986* (EP Act). It has been concluded that the proposed clearing may be at variance to principle (b), and is not likely to be at variance to the remaining principles.

Through the assessment, it was determined that the application area may increase the risk of weeds and dieback. A weed and dieback management condition has been placed on the clearing permit to minimise the risk of weeds and dieback spreading.

The Delegated Officer notes that the proposed clearing is within an extensively cleared landscape. However as the proposed clearing will be of individual trees, with the grass trees relocated within the suburb of Balga, and the applicant committing to undertake planting of 63 trees within Lots 500 and 501, the proposed clearing is not likely to have any significant residual impacts or considered to be a significant remnant.

The Delegated Officer noted the measures to minimise and mitigate the impact of the proposed clearing and determined that the proposed clearing is not likely to result in unacceptable environmental impacts.

2. Site Information

Clearing Description The application is to clear approximately 0.53 hectares of native vegetation, comprising 23 native trees (Eucalypt species mostly in poor health or dead, and two dead Banksia trees), 19 saplings, and 65 grass trees to be relocated within Lots 500 and 501 on Plan 410718, Balga, for the purpose of recreation (Figure 1).

Vegetation Description The vegetation of the application area is broadly mapped as the Swan Coastal Plain vegetation complex Karrakatta Complex – Central and South, which is described as a predominantly open forest of *Eucalyptus gomphocephala* (Tuart) - *Eucalyptus marginata* (Jarrah) - *Corymbia calophylla* (Marri) and woodland of *Eucalyptus marginata* (Jarrah) - Banksia species.

Vegetation Condition A site inspection undertaken by a Department of Water and Environmental Regulation (DWER) environmental officer determined that due to the parkland nature of the application area, the vegetation condition of the application area is 'Completely Degraded', whereby the structure of the vegetation is no longer intact and the area is completely or almost completely without native species (Keighery, 1994).

Soil type The application area is mapped within the EnvGeol S7 Phase soil system, described as sand – pale and olive yellow, medium to coarse-grained, sub-angular quartz, trace of feldspar, moderately sorted, of residual origin.

Local area The local area referred to in the assessment of this application is defined as a five kilometre radius measured from the perimeter of the application area.

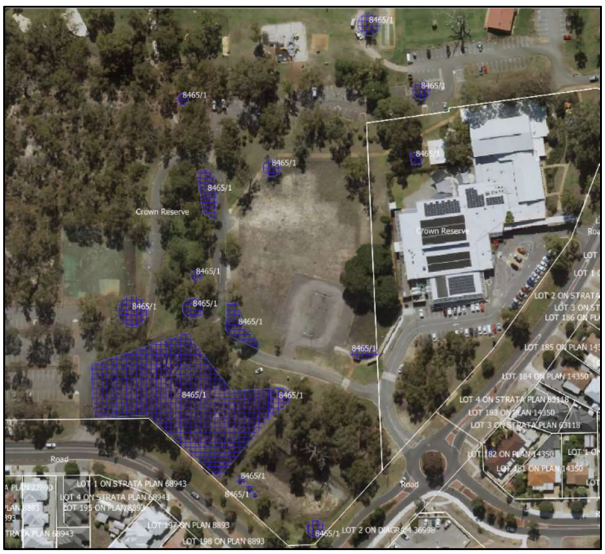

Figure 1: Application area (outlined and cross hatched in blue)


Figure 2: Southwest aspect of application area, absence of understorey. Majority of trees to be retained.

Figure 3: Facing northwest within southern aspect of application area, grass trees in foreground to be relocated.

3. Minimisation and mitigation measures

The applicant has applied to clear 23 native trees and 19 saplings, and to relocate 65 grass trees. The 23 native trees were among the 220 trees surveyed in a Quantified Tree Risk Assessment (QTRA) by Paperbark Technologies (2019), which were mostly identified to be in poor health and/or structural condition that therefore present a safety risk. The design of the proposed recreational infrastructure by landscape consultant Ecoscape has also given consideration to the findings of the QTRA and strived to incorporate proposed recreational infrastructure into natural surroundings (City of Stirling, 2019), resulting in the retention of majority of the trees within the parkland. The 19 saplings are located in clusters which will compete for water and nutrients, the applicant has proposed to retain the largest tree out of each cluster for it to establish and thrive. The 65 grass trees will be relocated to various areas across the parkland and the suburb of Balga.

The applicant has committed to undertake planting of 63 trees within the parkland to mitgate the clearing (City of Stirling, 2019). The trees planted will comprise plant species of the vegetation complex Karrakatta – Central and South, and other native species including but not limited to: *Banksia attenuata, Banksia grandis, Banksia menziesii, Banksia prionotes, Eucalyptus gomphocephala* and *Eucalyptus marginata*. Due to the retention of majority of the trees within the parkland and the additional planting to be undertaken, the measures taken to avoid and minimise the potential impacts from the proposed clearing are considered to be adequate.

4. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biodiversity.

Proposed clearing is not likely to be at variance to this Principle

The application area is located within Princess Wallington Reserve in Balga, which is a parkland with some remnant mid to upper storey vegetation. Considering that the application area is within a parkland, the native vegetation is considered to be in 'Completely Degraded' condition (DWER, 2019).

According to available databases, no Threatened flora has been recorded within the local area, and the following priority flora were recorded:

- *Acacia benthamii* (Priority 2), a shrub that has been recorded in a degraded area of a public use space;

- *Amanita preissii* (Priority 3), a mushroom that has been recorded in a park with weed species, grasses and interspersed gum trees; and
- *Jacksonia sericea* (Priority 4), a low spreading shrub that has been recorded in a parkland.

Based on the nature of the recorded locations of the above flora species, these priority flora species could potentially occur within the application area. However, the site inspection determined that there was an absence of understorey within the application area and the native vegetation proposed to be cleared comprises individual trees (Eucalypt species, mostly in poor health or dead, and two dead Banksia trees) and *Xanthorrhoea preissii* (grass trees) (DWER, 2019). Noting this, the proposed clearing is not likely to have a significant impact on the conservation status of the conservation significant species above.

As assessed under principle (b), while the application area is not likely to be utilised by black cockatoos for foraging or breeding, the tall trees within the application area may provide roosting habitat for black cockatoos. However, the proposed clearing is for 23 native trees out of an area where 220 trees were surveyed, some of which could potentially provide roosting habitat as well. Considering this and numerous confirmed roosting habitat within the local area, the proposed clearing is not likely to significantly impact black cockatoo habitat.

The application area is located adjacent to the 'Banksia Dominated Woodlands of the Swan Coastal Plain' Priority 3 ecological community (PEC) and federally listed Threatened Ecological Community (TEC). Noting that the proposed clearing will be restricted to the removal of the identified trees and grass trees only, no adverse impacts to this PEC or TEC are expected from the proposed clearing.

The tree survey undertaken by Paperbark Technologies Pty Ltd (2019) involved auditing 220 trees within Princess Wallington Reserve, comprising 19 species of which 10 are non-native to Western Australia. Considering the parkland nature of the area, it is expected that some of the trees would have been planted or self-sown and are therefore not considered to be native vegetation under the *Environmental Protection Act 1986*. Weeds were observed during the site inspection (DWER, 2019), further spread of weeds as a result of the proposed clearing may be minimised by the implementation of weed management practices.

Given the above, the application area is not considered to comprise a high level of biodiversity. The proposed clearing is not likely to be at variance to this principle.

(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.

Proposed clearing may be at variance to this Principle

According to available databases, four threatened fauna species, three Priority 3 fauna species, five Priority 4 fauna species, two fauna species classified as specially protected fauna and eight fauna species protected under international agreement have been recorded within the local area (DBCA, 2007-).

Noting the habitat requirements of these species, the application area may comprise suitable habitat for Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudin's cockatoo (*Calyptorhynchus baudinii*), and forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*) (collectively known as black cockatoos). The nearest record of black cockatoos is approximately 506 metres northwest of the application area, where roosting sites were recorded.

Carnaby's and Baudin cockatoo are listed as Endangered and forest red-tailed cockatoo is listed as Vulnerable under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Black cockatoos nest in hollows in live or dead trees of karri, marri, wandoo, tuart, salmon gum, jarrah, flooded gum, York gum, powder bark, bullich and blackbutt (Commonwealth of Australia, 2012). During the site inspection, no hollows large enough for black cockatoos were observed from the mature trees within the application area (DWER, 2019). Considering this and that there are no records of confirmed breeding areas located within application area, it is not likely that the application area is used by black cockatoos for breeding purposes.

Black cockatoos have a preference for foraging habitat that includes jarrah and marri woodlands and forest heathland and woodland dominated by proteaceous plant species such as *Banksia* sp., *Hakea* sp. and *Grevillea* sp. (Commonwealth of Australia, 2012). Noting the lack of proteaceous plant species, the application area is not likely to comprise foraging habitat for this species. The Banksia woodland adjacent to the application area is likely to provide significant foraging habitat for black cockatoos. The proposed clearing will be restricted to the application area and is not likely to have a significant impact on potential foraging habitat.

While it is unlikely that the application area provides suitable breeding and foraging habitat for black cockatoos, Carnaby's and Baudin's cockatoos mainly use night roost sites in non-breeding areas, and both breeding and non-breeding forest red tailed black cockatoos use night roosting sites. All three black cockatoos use communal night roosting sites (Commonwealth of Australia, 2012). The application area may provide roosting habitat for black cockatoos given that groups will roost in a suitable tree or group of tall trees within an area of quality foraging habitat and close to an important water source (Commonwealth of Australia, 2012). The proposed clearing is for 23 native trees out of an area where 220 trees were surveyed, the vast majority of the trees retained may potentially provide roosting habitat as well. Considering this and numerous confirmed roosting habitat within the local area, the proposed clearing is not likely to significantly impact black cockatoo habitat.

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

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.

Proposed clearing is not likely to be at variance to this Principle

There are no known records of Threatened flora within the application area or the local area. Considering the 'Completely Degraded' condition of the application area, the application area is not likely to support suitable habitat for Threatened flora.

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

(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.

Proposed clearing is not likely to be at variance to this Principle

No threatened ecological communities are mapped within the application area. The nearest State listed TEC is the 'SCP20a: *Banksia attenuata* woodlands over species rich dense shrublands', located approximately 1.7 kilometres southeast and three kilometres northeast of the application area. Noting the distance and that the proposed clearing will be limited to the application area, it is unlikely that the proposed clearing will impact this TEC.

The application area comprises parkland and is not considered to be Banksia woodland (DWER, 2019), therefore it is not likely to comprise the whole or part of, or be necessary for the maintenance of a TEC.

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

(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.

Proposed clearing is not likely to be at variance to this Principle

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) recognises the Perth Metropolitan Region to be a constrained area, within which a minimum 10 per cent representation threshold for ecological communities is recommended (EPA, 2008). Noting that the EPA considers a constrained area to be an area where there is an exception that development will proceed, and that the application area is zoned 'Urban' in the Perth Metropolitan Region Scheme, the 10 per cent threshold applies in this instance.

The application area falls within the Swan Coastal Plain Interim Biogeographic Regionalisation for Australia (IBRA) Bioregion. Approximately 38 per cent of the pre-European vegetation still exists in the Swan Coastal Plain IBRA Bioregion. The application area is located within the mapped extent of the Perth Metropolitan Region Scheme and is situated within the Swan Coastal Plain vegetation complex Karrakatta Complex – Central and South. This vegetation complex retains approximately 23 per cent of its pre-European extent (Government of Western Australia, 2018; Table 1). The current vegetation extent for the local area is under 10 per cent (Table 1).

Whilst the application area is located within an extensively cleared landscape, as the application area represents a completely degraded remnant of the mapped vegetation complex and does not contain any conservation significant flora, fauna or community values, the application area is not considered to be significant as a remnant. In addition, the applicant will be undertaking additional planting of 63 native trees within the parkland to mitigate the removal of the trees which will improve the ecological value of the local area.

Table 1: Vegetation extents (Government of Western Australia, 2018)

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Current Extent in DBCA Managed Lands	
				(ha)	(%)
IBRA Bioregion					
Swan Coastal Plain	1,501,221.93	578,813.47	38.62	222,916.97	38.45
Swan Coastal Plain Vegetation Complex					
Karrakatta Complex – Central and South	53,080.99	12,467.20	23.49	4,282.73	8.07
Local area					
5 kilometre radius	8,272.63	566.29	6.8	-	-

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

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Proposed clearing is not likely to be at variance to this Principle

There are several wetlands within the local area, the nearest is approximately three kilometres from the application area. There are no watercourses or wetlands mapped within the application area, and the site inspection confirmed that the native vegetation proposed to be cleared is not associated with a watercourse or wetland (DWER, 2019).

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

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Proposed clearing is not likely to be at variance to this Principle

The mapped soil type within the application area, 'EnvGeol S7 Phase', is described as sand – pale and olive yellow, medium to coarse-grained, sub-angular quartz, trace of feldspar, moderately sorted, of residual origin (DPIRD, 2017).

While the soil associated with the application area has high to extreme risk of wind erosion and moderate to high risk of salinity, subsurface acidification and compaction (Table 2), the proposed activities involve removing individual trees in a parkland area where a large portion of trees will remain. Additionally, the applicant will undertake planting of 63 native trees within the parkland to mitigate the tree removals (City of Stirling, 2019). Therefore it is considered that the risk of wind erosion and salinity is low.

Table 2: Land degradation risk levels

Risk categories	EnvGeol S7 Phase soil system
Wind erosion	>70% of map unit has a high to extreme wind erosion risk
Water erosion	10-30% of map unit has a high to extreme water erosion risk
Salinity	30-50% of map unit has a moderate to high salinity risk or is presently saline
Subsurface Acidification	50-70% of map unit has a high subsurface acidification risk or is presently acid
Subsurface compaction	50-70% of the map unit has a high subsurface compaction risk
Flood risk	<3% of the map unit has a moderate to high flood risk
Waterlogging	<3% of map unit has a moderate to very high waterlogging risk
Water repellence	30-50% of map unit has a high water repellence risk
Phosphorus export risk	10-30% of map unit has a high to extreme phosphorus export risk

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

(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.

Proposed clearing is not likely to be at variance to this Principle

According to available databases, the nearest conservation area is Marmion Marine Park, which is approximately eight kilometres west of the application area. There is also Department of Biodiversity, Conservation and Attractions (DBCA) managed land north of the application area, approximately four kilometres away. Noting the distance to these areas and the nature of the proposed clearing, it is unlikely to impact on the environmental values of these areas.

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

(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.

Proposed clearing is not likely to be at variance to this Principle

According to available databases, the groundwater within the application area is <500 milligrams per litre of Total Dissolved Solids (TDS). It would not be expected that the proposed clearing would cause salinity levels within the application or surrounding area to alter. The proposed clearing of approximately 0.53 hectares of native vegetation adjacent to an area where approximately five hectares of remnant vegetation remains, is unlikely to deteriorate the quality of groundwater.

As assessed under principle (f), there are no watercourses or wetlands within the application area. Noting this, the proposed clearing is unlikely to deteriorate the quality of surface water.

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

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Proposed clearing is not likely to be at variance to this Principle

As assessed within principle (f), there are no watercourses or wetlands present within the application area. Noting the absence of watercourses and wetlands within the application area, it is unlikely that the proposed clearing will cause, or exacerbate, the incidence or intensity of flooding.

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

Planning instruments and other relevant matters.

The City of Stirling is proposing to develop an underutilised area of Princess Wallington Reserve in Balga into a community parkland to enhance the recreational infrastructure for the community, requiring the removal of native vegetation assessed under this application. The applicant has stated that the material acquired from the proposed clearing will be recycled both on and off site. Large logs and tree trunks will be used as nature play elements across the reserve, particularly in the proposed playground. Some logs will also be donated to local environmental organisations such as Kaarakin Black Cockatoo Rescue and Native Animal Rescue, and remaining material will be mulched, and spread on site in garden beds (City of Stirling, 2019).

No Aboriginal sites of significance have been mapped within the application area.

The clearing permit application was advertised on the DWER website on 17 May 2019 with a 21 day submission period. No public submissions have been received in relation to this application.

5. References

City of Stirling (2019) Clearing permit application and supporting documents for CPS 8465/1. (DWER ref. A1800737)

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.

Commonwealth of Australia (2012) EPBC Act referral guidelines for three threatened black cockatoo species. Department of Sustainability, Environment, Water, Populations and Communities, Canberra.

Department of Biodiversity, Conservation and Attractions (DBCA) (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: http://naturemap.dpaw.wa.gov.au/. Accessed July 2019.

Department of Primary Industries and Regional Development (DPIRD) (2017). NRInfo Digital Mapping. Accessed at https://maps.agric.wa.gov.au/nrm-info/ Accessed July 2019. Department of Primary Industries and Regional Development. Government of Western Australia.

Department of Water and Environmental Regulation (DWER) (2019). CPS 8465/1 Site inspection report. (DWER ref. A1811943)

Environmental Protection Authority (EPA) (2008) Environmental Guidance for Planning and Development. Guidance Statement No. 33. Environmental Protection Authority. Western Australia.

Government of Western Australia (2018) 2018 South West Vegetation Complex Statistics. Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth, https://catalogue.data.wa.gov.au/dataset/dbca

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Paperbark Technologies (2019) Tree survey – Princess Wallington Reserve. Report prepared for City of Stirling, by Paperbark Technologies Pty Ltd, 2019.

GIS Databases:

- Aboriginal Sites of Significance
- Black Cockatoo Roost sites
- Black Cockatoo records
- Department of Biodiversity, Conservation and Attractions, Managed Tenure
- Geomorphic Wetlands Management Category
- Hydrography Linear – Linear
- Hydrography WA 250K – Surface Water Lines
- SAC bio datasets
- TPFL March 2019
- Vegetation Complexes; pre – European Vegetation
- WA Herb Data March 2019
- WA TEC PEC Boundaries