



## CLEARING PERMIT

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

### PERMIT DETAILS

Area Permit Number: 8362/1  
File Number: DWERVT2302  
Duration of Permit: From 15 August 2019 to 15 August 2021

### PERMIT HOLDER

Housing Authority

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 10 on Plan 33233, Brabham

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.22 hectares of native vegetation within the area cross-hatched yellow on attached Plan 8362/1.

### 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 *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 *dieback* and *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) published in a Department of Biodiversity, Conservation and Attractions Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



Samara Rogers  
MANAGER  
NATIVE VEGETATION REGULATION

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

19 July 2019

# Plan 8362/1

115°58'31.800"

115°58'37.200"

115°58'42.600"

115°58'48.000"



-31°49'37.200"

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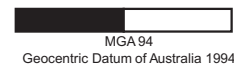
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## Legend

-  CPS areas approved to clear
-  Local Government Authorities
-  Cadastre
-  Roads
-  Image



0 50 100 m



*Samara Rogers*

**Samara Rogers**

**2019.07.19**

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



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WA Crown Copyright 2018





# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 8362/1  
Permit type: Area Permit

### 1.2. Applicant details

Applicant's name: Housing Authority  
Application received date: 8 February 2019

### 1.3. Property details

Property: Lot 10 on Diagram 33233, Brabham  
Local Government Authority: City of Swan  
Localities: Brabham

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
0.22		Mechanical Removal	Bulk earth works

### 1.5. Decision on application

Decision on Permit Application: Granted  
Decision Date: 19 July 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 is at variance to principle (f), and is not likely to be at variance to the remaining principles.

Through the assessment it was determined that the application area is mapped as a resource enhancement wetland and therefore some of the vegetation is associated with a wetland. The Delegated Officer noted the small amount of clearing proposed, and the wetland having already been extensively cleared. The Delegated Officer determined that the proposed clearing will not significantly impact this wetland and associated vegetation.

The proposed clearing may increase the risk of weeds spreading into the adjacent vegetated areas. A weed management condition has been placed on the permit to mitigate the impact of spreading weeds into adjacent vegetation.

In determining to grant a clearing permit subject to conditions, the Delegated Officer determined that the proposed clearing is unlikely to lead to any unacceptable risk to the environment.

## 2. Site Information

**Clearing Description** The application is to clear 0.22 hectares of native vegetation within Lot 10 on Diagram 33233, Brabham, for the purpose of bulk earth works.

**Vegetation Description** The application area has been mapped as Swan Coastal Plain (previously Heddle) Southern River Complex, which is described as "open woodland of *Corymbia calophylla* (Marri), *Eucalyptus marginata* (Jarrah), Banksia species with fringing woodland and *Eucalyptus rudis* (Flooded Gum), *Melaleuca raphiophylla* (Swamp Paperbark) along creek beds" (Heddle et al., 1998).

A flora survey undertaken in July 2018 (Emerge Associates, 2019) identified two vegetation types within the application area;

Parkland cleared: Consisting of scattered *Corymbia calophylla*, *Eucalyptus rudis* and *Melaleuca sp. trees*, bare ground and non-native vegetation (Figure 2).

Cleared: Consisting of bare ground or non-native vegetation (Figure 3).

**Vegetation Condition**

Completely degraded: The structure of the vegetation is no longer intact and the area is completely or almost completely without native species.

**Soil Type**

The application area has been mapped as Bassendean Yanga Phase (Bassendean) Phase, which is described as "Flat, poorly drained complex landscape; soils include shallow sand over limestone or ferruginous pan, deep leached sand, and saline soils; dense Melaleuca spp. along drainage lines" (Schoknecht et al., 2004).

**Comments**

The local area considered in the assessment of this application is defined as a 10 kilometre radius measured from the centre of the application area.

The majority of the site was predominately cleared prior to 1953, with vegetation reduced to scattered trees with limited cover. Past disturbance is significant and the lack of understorey suggests that the site had previously been used for stock grazing (Emerge Associates, 2019).



Figure 1 Application Area cross-hatched blue



Figure 2 Parkland cleared vegetation type (Emerge Associated, 2019).



Figure 3 Cleared vegetation type (Emerge Associated, 2019).

### 3. Minimisation and mitigation measures

The Housing Authority has advised that where possible, vegetation within the clearing permit area will be retained and integrated into the urban design as street trees and within areas of public open space (Housing Authority, 2019a).

The applicant initially applied to clear 0.84 hectares of native vegetation. On 20 June 2019 the applicant reduced the application area from 0.81 hectares to 0.24 hectares (Housing Authority, 2019b). On 18 July 2019 the applicant reduce the application area again, to exclude trees that are located outside of the existing Development Approval. The final application area is 0.22 hectares (Housing Authority, 2019c).

### 4. Assessment of application against clearing principles

According to available databases nine threatened flora species and 44 priority flora species have been recorded within the local area. *Hydrocotyle striata* (Priority 1), *Carex tereticaulis* (Priority 3), *Isopogon drummondii* (Priority 3), *Amanita fibrillopes* (Priority 3), *Amanita preissii* (Priority 3), *Eryngium sp. Subdecumbens* (G.J. Keighery 5390) (Priority 3), *Stylidium paludicola* (Priority 3), *Drosera occidentalis* (Priority 4), *Thysanotus glaucus* (Priority 4) and *Verticordia lindleyi subsp. lindleyi* (Priority 4) have been mapped within similar soil, landform and vegetation type than that mapped within the application area. The remaining flora have been mapped within different soil, landform and vegetation type than that mapped within the application area.

A flora survey undertaken in July 2018 (Emerge Associates, 2019) did not observe any threatened or priority flora species within the application area and therefore the vegetation is not likely to support significant habitat for the conservation significant flora.

According to available databases, 14 threatened fauna, eight fauna species protected under international agreement, six Priority 3, four Priority 3, one Priority 2 and two fauna species classified as other specially protected fauna, have been mapped within the local area. From these, forest red-tailed black cockatoo (*Calyptorhynchus banksii subsp. naso*), Baudin's cockatoo (*Calyptorhynchus baudinii*), and Carnaby's cockatoo (*Calyptorhynchus latirostris*), may occur within the application area.

The fauna assessment and targeted black cockatoo survey undertaken in August 2018 (Emerge Associates, 2019), identified two *Corymbia calophylla* (Marri) trees having a Diameter at Breast Height (DBH) >500 millimetres (Figure 3). Both trees contained hollows that were too small, the entrances were restricted by protruding wood, and too shallow to be considered suitable for breeding black cockatoos. Therefore, the application area does not comprise significant breeding habitat for black cockatoos.

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). The fauna survey positively identified evidence of black cockatoo foraging via chewed banksia cones and marri fruit. However, due to the small size of the proposed clearing and vegetation in similar or better condition located to the south and east of the application area, the vegetation within the application area is not likely to comprise significant foraging habitat for black cockatoos.

While no other conservation significant species were observed during the survey (Emerge Associates, 2019), it is unlikely that any of the above are likely to persist within the application area due to the completely degraded (Keighery, 1994) condition and predominately cleared landscape.

The application area just falls outside of the South West Regional Ecological Linkages (SWREL) (Molloy et al., 2009) and the Gnaragara Sustainability Strategy Linkages (GSS) (Brown et al., 2009). Additionally, aerial imagery demonstrates substantial amounts of vegetation surrounding the application area, effectively acting as a vegetation corridor for flora and fauna (Figure 5). Therefore the proposed clearing of 0.81 hectares does not impact on an ecological linkage.

According to available databases, nine threatened ecological communities (TEC) and two priority ecological communities (PEC) were mapped within the local area. The Commonwealth-listed TEC "Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region" (listed as endangered), and "Banksia attenuata woodlands over species rich dense shrublands" (listed as endangered) occurs approximately 63 metres south and 5981 metres south west of the application area. The State-listed PEC "Communities of Tumulus Springs (Organic Mound Springs, Swan Coastal Plain)" (listed as endangered) occurs 6285 metres north from the application area. The remaining TECs and PECs occur approximately greater than 7200 metres from the application area. Noting the species composition and key diagnostic characteristics of these TECs and PECs, the vegetation structure and composition within the application area and the extent of the proposed clearing, the application area is not likely to comprise of any TEC or PEC. Additionally, the flora survey did not identify any TEC or PEC within the application area. Therefore, the vegetation within the application area is not likely to comprise the whole or a part of, or is necessary for the maintenance of a TEC.

The National Objectives and Targets for Biodiversity Conservation include a target to prevent the clearance of ecological communities with an extent below 30 per cent of that present pre-European settlement (Commission of Australia, 2001). The application area falls within the Swan Coastal Plain Interim Biogeographic Regionalisation of Australia (IBRA) bioregion and is mapped as the Swan Coastal plain (previously Hedde) Southern River vegetation complex, retaining 38.57 per cent and 18.42 per cent of their pre-European extents respectively (Government of Western Australia, 2018a; Government of Western Australia, 2019b). The Environmental Protection Authority (EPA) recognises the Perth Metropolitan region as a constrained area, which provides for the reduction of vegetation complexes to a minimum of ten per cent of the pre-European extent (EPA, 2006). Given the mapped vegetation complexes are above this 10 per cent threshold, the application area is not considered a significant remnant in an area that has been extensively cleared.



According to available databases, one wetland has been recorded within the application area. This wetland is classified as a Resource Enhancement Sumpland (Figure 4). Resource Enhancement wetlands are priority wetlands that have been partially modified but still support substantial ecological functions and attribute (Water and Rivers Commission, 2001). Given the above, and the riparian vegetation including *Melaleuca sp.*, identified in the survey (Emerge Associates, 2019), vegetation within the application area is growing in an environment associated with a wetland or watercourse. Noting the relatively small size of vegetation associated with the wetland, the proposed clearing is not considered significant.

Soils within the application area have been mapped as having a high water logging risk (>70% of map unit has a moderate to very high waterlogging risk). Given the surrounding landscape is parkland cleared, the application area is not likely to cause appreciable land degradation.

According to available databases, 30 conservation areas have been mapped within the local area. The closest conservation area is an un-named river reserve that occurs approximately 1936 metres from the application area. The remaining conservation areas occur greater than 4300 metres from the application area. Given the distance between the application area and the conservation area, the proposed clearing is unlikely to have an impact on the environmental values of any adjacent or nearby conservation areas.

Bush Forever (BF) site 200 is located approximately 42.58 metres south of the application area. This BF site is zoned for Parks and Recreation. The proposed clearing may increase the risk of weeds spreading into this adjacent BF site. To minimise any impacts to this BF site, a weed management condition has been included on the clearing permit to mitigate the impact of spreading weeds.

According to the available databases, no watercourses have been mapped within the application area. As mentioned above, a small portion of the application area falls within a Resource Enhancement wetland. Groundwater salinity is mapped as between 500 and 1000 milligrams per litre total dissolved solids which is considered "marginal" salinity. Due to the relatively small size of the proposed clearing, and the majority of the application area being cleared, the application area is unlikely to increase sedimentation and runoff into the wetlands. Therefore, the application area is not likely to cause deterioration in the quality of surface or underground water or cause or exacerbate the incidence or intensity of flooding.

Given the above, the application area is at variance to principle (f) and not likely to be at variance to the remaining clearing principles.

### **Planning instruments and other relevant matters**

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

The clearing permit application was advertised on the DWER website on 07 March 2019 with a 14 day submission period.

One public submissions have been received in relation to this application. Their concerns are summarised as follows (Submission, 2019);

- Fauna surveys conducted for the proponent identified potential habitat trees for black cockatoos, namely the scattered, large mature eucalyptus trees that may also be 'locally or regionally significant due to their size';
- The area is in close proximity to remnant vegetation to the west (Whiteman park and to the south (Bush Forever Site No 200));
- Clearing not justified because scattered remnant trees such as these provide linkages for avian fauna;
- These trees serving as an ecosystem function that is irreplaceable in terms of carbon and heat sequestration, reducing wind speed, absorbing Co2 and other harmful gases; and
- Asked DWER to encourage the proponents to retain these trees as part of their urban development.

These concerns have been addressed in the Sections 3 and 4 of Decision Report.

The application area is located within land zoned Urban under the Metropolitan Regional Scheme, and Special use Zone under the Local Planning Scheme (City of Swan, 2019).

The City of Swan (the City) has advised that a Local Structure Plan for this area is currently under assessment, and that some trees applied to be cleared are located within areas proposed for area of POS where they could be retained.

The City of Swan advises that trees, including dead ones, do have some environmental benefits such as nesting hollows for black cockatoos, and most are in a healthy condition and a healthy Diameter at Breast Height making them large enough to be suitable for nesting habitat for cockatoos (City of Swan, 2019).

The City of Swan granted Planning Approval on 2 July 2019 for Bulk Earthworks. The planning approval area aligns the area proposed to be cleared.

## **5. References**

- Brown et al., (2009) Ecological linkages proposed for the Gngara groundwater system, report for the Department of Environment and Conservation, Perth
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2006, 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 February 2019
- Emerge Associates (2019) Flora and Vegetation Survey and Fauna Survey, Emerge Associates, Western Australia.

EPA (2006) Guidance for the Assessment of Environmental Factors – Level of Assessment for Proposals Affecting Natural Areas Within the System 6 Region and Swan Coastal Plain Portion of the System 1 Region. Guidance Statement No 10. Environmental Protection Authority, Western Australia.

Government of Western Australia (2018a) 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of February 2018. WA Department of Parks and Wildlife, Perth.

Government of Western Australia (2018b) 2017 South West Vegetation Complex Statistics. Current as of October 2017. WA Department of Parks and Wildlife, Perth.

Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.

Housing Authority. (2019a). Application for a clearing permit (area permit) form. DWER Ref: A1763810.

Housing Authority. (2019b). Supporting information in relation to clearing permit application CPS 8362/1. DWER Ref: A1804356.

Housing Authority. (2019c). Supporting information in relation to clearing permit application CPS 8362/1. DWER Ref: A1806985.

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

Molloy, et al. (2009) South West Regional Ecological Linkages Technical Report, Western Australian Local Government Association and Department of Environment and Conservation, Perth.

Schoknecht et al. (2004) Soil-landscape mapping in south-Western Australia: an overview of methodology and outputs, Department of Agriculture and Food, Perth.

Submission (2019) Public Submission received 21 March 2019, Western Australia.

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