



GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 3839/1
Permit Holder:	Botanic Gardens and Parks Authority
Duration of Permit:	12 September 2010 – 12 September 2015

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 developing the Rio Tinto Naturescape in Kings Park project.

2. Land on which clearing is to be done

Lot 896 on Deposited Plan 213904 (KINGS PARK 6005)

3. Area of Clearing

The Permit Holder must not clear more than 0.9 hectares of native vegetation within the area cross hatched yellow on attached Plan 3839/1.

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. Compliance with Assessment Sequence and Management Procedures

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

PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

6. 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.

7. Dieback and weed control

- (a) 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*:
- (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (ii) shall only move soils in *dry conditions*;
 - (iii) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - (iv) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (b) At least once in each 12 month period for the *term* of this Permit, the Permit Holder must remove or kill any *weeds* growing within areas cleared under 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;

term means the duration of this Permit, including as amended or renewed;

weed/s 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*.



Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

12 August 2010

Plan 3839/1



LEGEND

- Clearing Instruments
- Areas Approved to Clear
 - Road Centrelines
 - Cadastre

Perth Metropolitan Area
Central 20cm Orthomosaic -
Landgate 2007



0 200 m

Scale 1:6788

(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.

Date 12/8/10

K. Faulkner
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.



Department of
Environment and Conservation

Our environment, our future
WA Crown Copyright 2002



1. Application details

1.1. Permit application details

Permit application No.: 3839/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Botanic Gardens and Parks Authority

1.3. Property details

Property: LOT 896 ON PLAN 213904 (Lot No. 772 MOUNTS BAY KINGS PARK 6005)
Colloquial name: Kings Park

1.4. Application

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

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
Vegetation association 6 is described as Medium woodland; tuart & jarrah (Shepherd, 2007).	The proposal is to clear 0.9 hectares of native vegetation for the 'Rio Tinto Naturescape in Kings Park' project. Vegetation observed during the site inspection includes; <i>Jacksonia sericea</i> (P4), <i>Eucalyptus Marginata</i> (Jarrah), <i>Eucalyptus erythrocorys</i> , <i>Eucalyptus victrix</i> , <i>Hibbertia hypericoides</i> , <i>Chamelaucium uncinatum</i> (Geraldton Wax), <i>Allocasuarina huegeliana</i> , <i>Allocasuarina fraseriana</i> , <i>Anigozanthos bicolor</i> and <i>Melaleuca</i> sp.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The condition of the vegetation under application was determined through a site visit conducted by Department of Environment and Conservation (DEC, 2010a).

3. Assessment of application against clearing principles

Comments

The Botanic Gardens and Parks Authority proposes to clear 0.9 hectares of native vegetation for the purpose of developing the Rio Tinto Naturescape in Kings Park project. The vision for this project is 'To provide an environment that inspires learning and positive environmental action through fun, discovery, immersion and connection with nature' (Botanic Gardens and Parks Authority, 2010). This project is an approved strategy in the current Kings Park and Botanic Garden Management Plan 2009-2014 and is described as a world class environmental educational venue.

This project is located with the Botanic Garden Arboretum not within the bushland boundary. The condition of the vegetation within this area is considered to be in a degraded to good (Keighery, 1994) condition however this area consists largely of species not native to the Perth area. In 1962, when the Arboretum was established and non native species were planted amongst the degraded native vegetation (Botanic Gardens and Parks Authority, 2010). The area under application has also been disturbed by the creation of existing tracks, rabbits, weed invasion and rubbish.

Two Priority 4 flora species are known to occur within the area under application; *Jacksonia sericea* (P4) and *Dodonaea hackettiana* (P4).

During the site visit (DEC, 2010a) *Jacksonia sericea* was observed within the area under application. This low spreading shrub (WA Herbarium, 1998 -) is known from a number of sites and is well represented in Kings Park and the loss of a small area in Kings Park will not affect its conservation status within or outside of the park (DEC, 2010b).

Dodonaea hackettiana within Kings Park is concentrated on the Mt Eliza escarpment but is also scattered naturally and planted throughout the Park (DEC, 2010c). The number of *Dodonaea hackettiana* found within the park is in excess of 1000. Given the numbers and distribution of *Dodonaea hackettiana* within Kings Park the possible removal of a couple of individual plants is not likely to affect this species conservation status.

Three fauna species were recorded within the Park boundary; Chuditch (*Dasyurus geoffroii*), Graceful Sunmoth (*Synemon gratiosa*) and Trapdoor spider (*Arbanitis inornatus*). Considering the area under application (0.9ha) falls within a relatively large intact area of bush land (392 ha) it is not considered to be significant habitat for fauna indigenous to Western Australia. Also, the area under application has been highly disturbed and many people use the tracks within this area for recreation which does not make it favourable habitat for native fauna.

Within the Swan Coastal Plain vegetation association 6 has approximately 26% of its pre European extent remaining. 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). Although, this vegetation type retains less than this 30% threshold level the 0.9 hectares proposed to be cleared is not considered to be a significant remnant within Kings Park.

Botanic Gardens and Kings Park falls within bush forever site 317, which incorporates the entire boundary of the Park and Gardens. Bush Forever site 317 covers developed areas within the park not only the bushland area which is protected and managed under the Botanical Gardens and Parks Authority Act 1998. The clearing as proposed is not likely to negatively impact on the environmental values of this conservation site. Parks and Botanic Gardens will develop weed management procedures and fence off areas for conservation which may in turn enhance the values of this site.

The clearing as proposed is not likely to cause appreciable land degradation nor is it likely to impact environmental water values. Kings Park has a high level of biodiversity however this area is within the arboretum and many introduced species have been planted. As the core business of the Botanic Gardens and Parks Authority is the conservation of native biodiversity as emphasised in their Act and Management Plan any impact on biodiversity is likely to be minimal.

Given the presence of the two priority species within the application area this application may be at variance to principle (a) but is not considered likely to be at variance to the remaining principles.

Methodology

References

Botanic Gardens and Parks Authority (2010)
Commonwealth of Australia (2001)
DEC (2010a)
DEC (2010b)
DEC (2010c)
Keighery (1994)
WA Herbarium (1998 -)

GIS Database:

- Clearing Regulations - Environmentally Sensitive Areas - 30 May 2005
- Hydrogeology, Linear - DOC13/07/06
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 27 July 2010

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

Comments

Botanic Gardens and Kings Park falls within bush forever site 317. Department of Planning/ State Strategic Policy have advised that they have no objections to the proposal with regards to impact on existing vegetation and Bush Forever area 317 (Department of Planning, 2010).

This project is an approved strategy in the current Kings Park and Botanic Garden Management Plan 2009-2014, which has had a two month public consultation phase and was approved by the Minister for Environment in July 2009 (Botanic Gardens and Parks Authority, 2010).

A Development Application was submitted to the Western Australian Planning Commission in early June (2010). Approval is still pending.

A Section 18 Application for this project under the Aboriginal Heritage Act 1972 was approved by the Minister of Health; Indigenous Affairs in March 2010 (Botanic Gardens and Parks Authority, 2010).

Methodology

References:

Botanic Gardens and Parks Authority (2010)
Department of Planning (2010)

GIS Database:

- Clearing Regulations - Environmentally Sensitive Areas - 30 May 2005

4. References

- Botanical Gardens and Parks Authority (2010), Supporting information submitted with clearing permit application CPS 3839/1 (DEC Ref: A317939).
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2010a) Site Inspection Report for Clearing Permit Application CPS 3839/1, Lot 896 on Plan 213904, Kings Park. Site inspection undertaken 30/07/2010. Department of Environment and Conservation, Western Australia (DEC Ref. A322612).
- DEC (2010b) Priority Flora Advice for Clearing Permit Application CPS 3839/1. Department of Environment and Conservation, Western Australia (DEC Ref: A322605).
- DEC (2010c) Threatened Flora Database, Search results for *Dodonaea hackettiana*. Department of Environment and Conservation, Western Australia. Accessed 5/08/2010 (DEC Ref: A323307)
- Department of Planning (2010) Bush Forever advice for Clearing Permit Application CPS 3689/1. Department of Planning, State Strategic Policy, Western Australia (DEC Ref: A323613).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Kings Park and Botanic Garden Management Plan (2009 - 2014), Botanic Gardens and Parks Authority, Western Australia.
- Shepherd, D.P. (2009) Adapted from: 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.
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed 2/08/2010).

5. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management (now DEC)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment (now DEC)
DoW	Department of Water
DMP	Department of Mines and Petroleum (ex DoIR)
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)