



GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Purpose Permit Number: 4256/1
File Number: 2011/001682-1
Duration of Permit: 16 May 2011 to 16 May 2013

PERMIT HOLDER

Shire of Plantagenet

LAND ON WHICH CLEARING IS TO BE DONE

Plantagenet Location 7546 (Reserve 23969), MOUNT BARKER 6324

PURPOSE FOR WHICH THE CLEARING MAY BE DONE

Clearing for the purpose of expanding a waste management facility.

CONDITIONS

1. The Permit Holder must not clear more than 2.16 hectares of native vegetation within the area cross hatched yellow on attached Plan 4256/1.

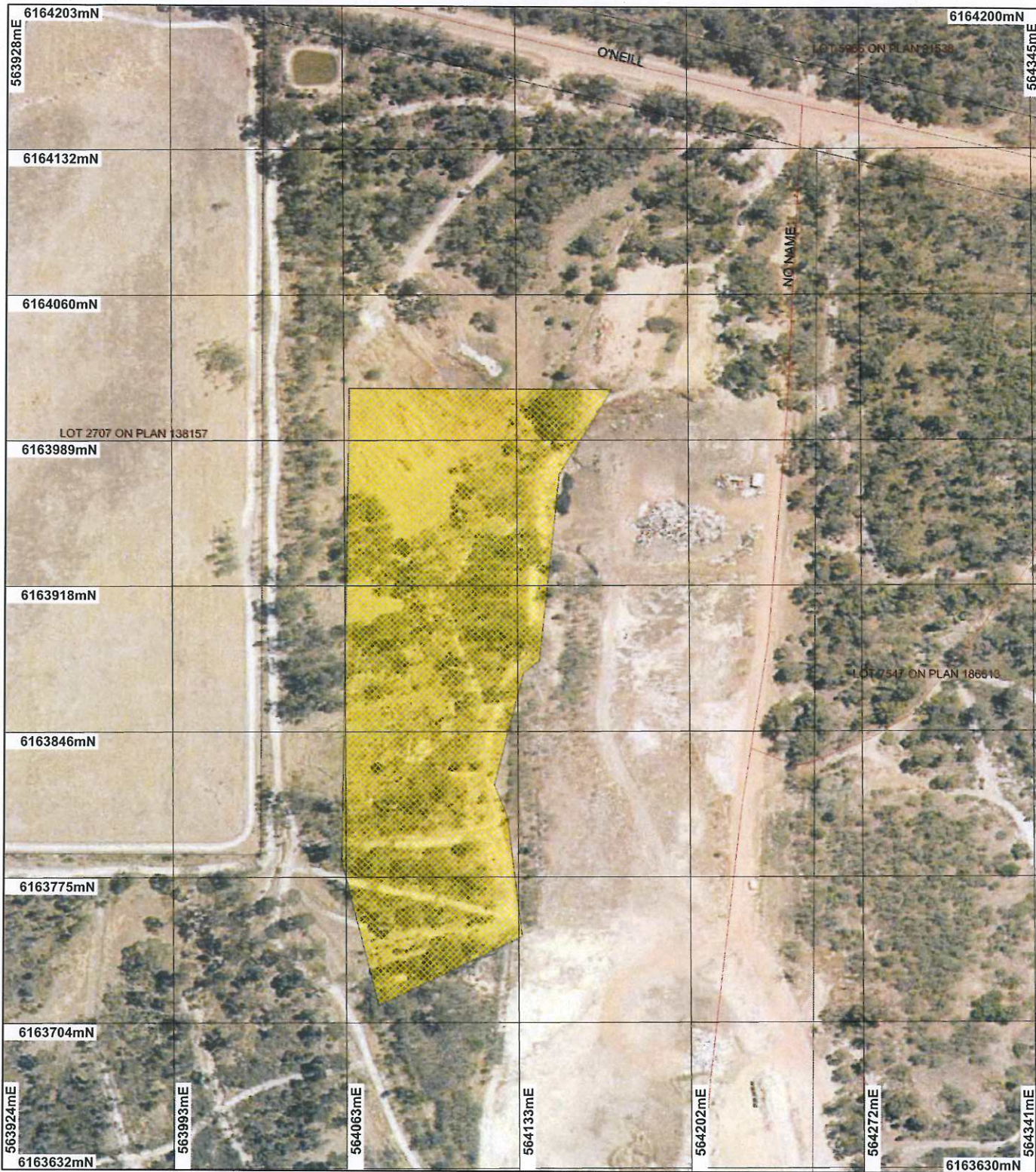
A handwritten signature in black ink, appearing to be 'K. Faulkner', written over a horizontal line.

Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

21 April 2011

Plan 4256/1

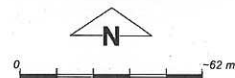


LEGEND

- Road Centrelines
- Cadastre for labelling
- Freehold
- Crown Reserve
- State Forest / Timber Reserve (cont)

- Marine Park
- Crown Lease
- Lease / Reserve
- Lease on State Forest / Timber Reserve
- Public Roads
- Unallocated Crown Land (cont)

- Water
- Clearing Instruments
- Areas Approved to Clear
- Mount Barker 50cm Orthomosaic - Landgate 2007**



Scale 1:2497
(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

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

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* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.



1. Application details

1.1. Permit application details

Permit application No.: 4256/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Plantagenet

1.3. Property details

Property: PLANTAGENET LOCATION 7546 (MOUNT BARKER 6324)
Local Government Area:
Colloquial name:

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 21 April 2011

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
Beard Association: 3 - Medium forest; jarrah-marri (Shepherd, 2009)	The proposal is to clear up to 2.16ha of native vegetation in order to expand the existing Mt Barker Waste Management Facility westward, maintaining a 30m buffer to the western boundary of the property. The vegetation under application is the outer part of an ~400ha remnant of native vegetation, with ~230ha of this remnant an 'A' class nature reserve. The existing rubbish tip is located between the application area and the nature reserve. Vegetation under application is highly disturbed and adjacent to cleared areas to the east (existing tip) and west (open farmland). The majority of the vegetation is likely to be in degraded to good (Keighery, 1994) condition, with some cleared areas in completely degraded condition.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The condition of the vegetation was established through aerial photography (Mount Barker 50 cm Orthomosaic - Landgate 2007)

3. Assessment of application against clearing principles

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

Comments

Proposal is not likely to be at variance to this Principle

The vegetation under application is the outer part of a ~400ha remnant of native vegetation, with ~230ha of this remnant an 'A' class nature reserve. The existing rubbish tip is located between the application area and the nature reserve. Vegetation under application is highly disturbed and adjacent to cleared areas to the east (existing tip) and west (open farmland).

The majority of the vegetation is likely to be in degraded to good (Keighery, 1994) condition, with some cleared areas in completely degraded condition.

The proposed clearing occurs within a highly cleared area with 15% of pre-European vegetation remaining. However the application area is in close proximity to large tract of remnant vegetation, part of which is held as

nature reserve. Given this and the degraded condition for the vegetation, it is not considered for the proposed clearing to contain significant fauna habitat.

In addition, the application is considered to be in a degraded condition and unlikely to contain habitat suitable for priority or rare flora found in the local area (10 km radius) (DEC 2011).

The proposed clearing is not considered at variance to this Principle.

Methodology References
-DEC (2011)
-Keighery (1994)
GIS Databases
-SAC Bio datasets (23 March 2011)

(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**
Threatened fauna species recorded within a 10 km radius of the application area include Carnaby's black Cockatoo (*Calyptorhynchus latirostris*), Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii* subsp. *naso*), Baudin's Black Cockatoo (*Calyptorhynchus baudinii*), Numbat (*Myrmecobius fasciatus*), Water rat (*Hydromys chrysogaster*), Quenda (*Isodon obesulus* subsp. *fusciventer*) and the Western Brush Wallaby (*Macropus irma*).

Vegetation under application is highly disturbed and adjacent to cleared areas to the east (existing tip) and west (open farmland).

The proposed clearing occurs within a highly cleared area with 15% of pre-European vegetation remaining. However the application area is in close proximity to large tract of remnant vegetation, part of which is held as nature reserve. Given this and the degraded condition for the vegetation, it is not considered for the proposed clearing to contain significant fauna habitat.

The proposed clearing is not at variance to this Principle.

Methodology GIS Databases
-SAC Bio Datasets (23 March 2011)
-Pre-European Vegetation
-NLWRA, Current Extent of Native Vegetation
- Mount Barker 50 cm Orthomosaic - Landgate (2007)

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

Comments **Proposal is not likely to be at variance to this Principle**
One DRF species in the local area has been recorded on the same mapped vegetation and soil types as the application area, *Conostylis misera*, which is located 3.9km south-southwest of the application area.

This species is grass or herb-like rhizomatous, tufted perennial growing 0.05-0.18 m high. It is found on white or grey sand, sandy loam and winter-wet flats (Western Australian Herbarium, 1998-). Soils in the application area is poorly drained plains and drainage floors on sandy deposits over deeply weathered mantle on granite and include wet soil, semi-wet soil and Grey deep sands (Northcote et al 1960-68).

However, given the high disturbance to the application area and the degraded (Keighery 1994) condition of the vegetation, it is not considered for the proposed clearing to contain habitat for rare flora. Therefore the proposed clearing is not at variance to this Principle.

Methodology References
-Keighery (1994)
-Western Australian Herbarium (1998-)
-Northcote et al (1960-68)
GIS Databases
- Pre-European Vegetation
-Soils, statewide
-SAC Bio datasets (23 March 2011)

(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

There are no known Threatened Ecological Communities (TECs) recorded within the local area (10km radius).

Therefore the proposed clearing is not at variance to this Principle.

Methodology GIS Databases
-SAC Bio datasets (23 March 2011)

(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 is not likely to be at variance to this Principle

The vegetation under application is described as Beard vegetation association 3 of which there is 69% of pre-European extent remaining, (Shepherd 2009).

The vegetation extent in the Shire of Plantagenet is 47% (Shepherd, 2009) and there is approximately 15% of vegetation remaining in the local area (10km radius).

The Beard association retains more than the threshold level (30%) recommended in the National Objectives Targets for Biodiversity Conservation, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Western Australia 2001).

Even though the local area of the area under application has been extensively cleared, the degraded (Keighery 1994) condition of the vegetation under application and that the Beard Vegetation Association has more than the recommended threshold, it is not considered for the application area to be a significant remnant.

Pre-European	Current extent	Remaining	% In reserves
	(ha)	(ha)	(%)
IBRA Bioregion Jarrah Forest*	4,506,656	2,514,549	56%
Shire of Plantagenet*	487,974	227,759	47%
Beard Vegetation Association within Bioregion*			
3 - Medium forest; jarrah-marri	2,390,591	1,657,963	69%

* (Shepherd, 2009)

Methodology References
-Keighery (1994)
-Shepherd (2009)
- Commonwealth of Western Australia (2001)
GIS Databases
-Pre-European vegetation
-Interim Biogeographic Regionalisation of Australia
-NLWRA, Current Extent of Native 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 may be at variance to this Principle

One minor non-perennial watercourse bisects the application area from the northern end in a south west direction, which then links up with a drain at the south west corner of the clearing area.

Given this, riparian vegetation may occur within the application area. Therefore, the proposed clearing may be at variance to this Principle.

Methodology GIS Databases
-Hydrography, linear

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

Comments Proposal is not likely to be at variance to this Principle

Soils in the application area is poorly drained plains and drainage floors on sandy deposits over deeply weathered mantle on granite and include wet soil, semi-wet soil and Grey deep sands (Northcote et al 1960-68).

Theses soils may have a high risk of wind erosion, however given the size of the proposed clearing (2.16ha) it is not considered for it to cause appreciable land degradation.

Methodology References

-Northcote et al (1960-68)
GIS Databases
-Soils, statewide

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments Proposal is not likely to be at variance to this Principle

There are three nature reserves in the local area with the closest being 85m to the east of the application area. The existing rubbish tip is located between the nature reserve and the application area.

It is not considered for the application area to be a part of an ecological linkage between these conservation areas and it is not considered for it to provide habitat for flora or fauna that utilize the nearby nature reserve due to its degraded condition.

Therefore, the proposed clearing is not at variance to this Principle.

Methodology GIS Databases

- DEC, Tenure

(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

One minor non-perennial watercourse bisects the application area from the northern end in a south west direction, which then links up with a drain at the south west corner of the clearing area.

The proposed clearing may involve clearing of riparian vegetation and therefore, may cause short term sedimentation of the surface water of this watercourse during the winter months.

Therefore, the proposed clearing may be at variance to this Principle.

Methodology GIS Databases

-Hydrography, linear

(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

One minor non-perennial watercourse bisects the application area from the northern end in a south west direction, which then links up with a drain at the south west corner of the clearing area.

Given the small area proposed to be cleared (2.13ha) it is not considered for the proposed clearing to cause or increase the intensity of flooding within the local area.

Methodology GIS Databases

-Hydrography, linear

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

Comments

The proposal is to clear up to 2.16ha of native vegetation in order to expand the existing Mt Barker Waste Management Facility westward, maintaining a 30m buffer to the western boundary of the property. The vegetation under application is the outer part of a ~400ha remnant of native vegetation, with ~230ha of this remnant an 'A' class nature reserve. The existing rubbish tip is located between the application area and the nature reserve.

The proposed clearing occurs within the EPA position statement No. 2. However the proposed clearing is not

for agricultural purposes.

The Shire of Plantagenet has a management order for the property for use of the site as 'rubbish disposal site'.

There are no known Aboriginal Sites of Significance within the application area.

Methodology GIS Database
-Aboriginal sites of significance
-EPA Position Statement No. 2

4. References

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

DEC (2011) Regional Advice for Clearing Permit Application CPS 4256/1 Reserve 23969 Mount Barker. Department of Environment and Conservation, Western Australia (DEC ref A385769).

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. (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 23/03/2011).

5. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment
DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DEC)