



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 6334/1
File Number: 2011/001173-1
Duration of Permit: From 21 March 2015 to 30 June 2015

PERMIT HOLDER

Jamie Peter Burton
Victoria Jane Burton

LAND ON WHICH CLEARING IS TO BE DONE

Lot 263 on Deposited Plan 194605, WATERBANK 6725

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 493.13 hectares of native vegetation within the areas hatched yellow on attached Plan 6334/1.

CONDITIONS

1. 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*:
- (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (ii) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - (iii) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (b) At least once in the term of this Permit, the Permit Holder must remove or kill any *weeds* or species permitted for planting under a Pastoral Diversification Permit granted under Part 7 Division 5 of the *Land Administration Act 1997* which are growing within 50 meters outside of the area hatched yellow on attached Plan 6334/1.

DEFINITIONS

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

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 mean 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; and
- (d) that is a species permitted for planting under a Pastoral Diversification Permit issued by the Department of Regional Development and Lands.



M Warnock
SENIOR MANAGER
CLEARING REGULATION

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

19 February 2015

Plan 6334/1



LEGEND

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> Road Centrelines Cadastre for labelling <input type="checkbox"/> Freshfield <input type="checkbox"/> Crown Reserve <input type="checkbox"/> State Forest / Timber Reserve (cont) | <ul style="list-style-type: none"> <input type="checkbox"/> Marine Park <input type="checkbox"/> Crown Lease <input type="checkbox"/> Lease / Reserve <input type="checkbox"/> Lease on State Forest / Timber Reserve <input type="checkbox"/> Public Roads (cont) | <ul style="list-style-type: none"> <input type="checkbox"/> Unallocated Crown Land <input type="checkbox"/> Water Clearing Instruments <input checked="" type="checkbox"/> Areas Approved to Clear |
|--|---|---|

Lake Eda 50cm Orthomosaic - Landgate 2005



Scale 1:29375
(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.

M Warnock Date 19/2/15

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.



Government of Western Australia
Department of Environment Regulation

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



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6334/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: MR Jamie Burton

1.3. Property details

Property: LOT 263 ON PLAN 194605 (WATERBANK 6725)
Local Government Area: Shire of Broome
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
493.13		Mechanical Removal	Pastoral Diversification

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 12 February 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
Beard Vegetation Association 750 - Shrublands, pindan; Acacia tumida shrubland with grey box & cabbage gum medium woodland over ribbon grass & curly spinifex (Shepherd et al. 2001).	The clearing of 493.13 hectares is for the purpose of non-irrigated cultivation of sorghum (<i>Sorghum bicolor</i>) and maize (<i>Zea mays</i>).	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Vegetation condition established from applicants pastoral diversification application submitted to Department of Regional Development and Lands (Burton 2011) and a site visit undertaken by Department of Environment Regulation (DER) officers in January 2015 (DER 2015). The application area is largely comprised of open Pindan woodland. Portions of the application area have been heavily disturbed by a recent fire and impacted by significant grazing with few native understorey species (DER, 2015).

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 clearing of 493.13 hectares is for the purpose of non-irrigated cultivation of sorghum (*Sorghum bicolor*) and maize (*Zea mays*).

The application area is largely comprised of open Pindan woodland. Portions of the application area have been heavily disturbed by a recent fire and impacted by significant grazing with relatively few emergent native understorey species (DER, 2015).

The local area (20 kilometre radius) surrounding the application is highly vegetated, retaining approximately 99 percent native vegetation cover.

Three occurrences of a priority flora species (P1) have been recorded within a 15 kilometre radius of the application area. This species inhabits sandy pindan country (Western Australian Herbarium, 1998-) which is considered likely to occur within the application area. This species is known from five locations within a range of 220 kilometres. Plants are scattered and uncommon where it has been recorded (Parks and Wildlife 2014a). A site inspection undertaken by Department of Environment Regulation officers in January 2015 observed that the application area was heavily impacted by grazing and was in a good (Keighery 1994) condition. The understorey was also impacted by weeds (DER 2015). In addition, this priority species was not observed within

the application area (DER 2015). Therefore, it is not considered likely for the application area to contain significant priority flora habitat.

Macrotis lagotis (bilby), declared as specially protected under the state Wildlife Conservation Act 1950 and vulnerable under the federal Environment Protection and Biodiversity Conservation Act 1999 has been recorded within 17 kilometres of the application area (DEC, 2007-). Some of these records date from as recently as 2012 (Parks and Wildlife 2014b). The proposed clearing is not considered likely to impact on significant habitat for *Macrotis lagotis* given that the majority of area has been heavily impacted by cattle grazing. No *Macrotis lagotis* burrows were observed during the site inspection (DER 2015).

The local area (20 kilometre radius) surrounding the application is highly vegetated, retaining approximately 99 percent native vegetation cover.

Given that the application area is not likely to contain significant habitat for conservation significant flora or fauna species and is surrounded by a highly vegetated undisturbed area which is likely to contain higher biodiversity than the application area, the proposed clearing is not considered to be at variance to this Principle.

Methodology **References**
-DER (2015)
-DEC (2007-)
-Parks and Wildlife (2014a)
-Parks and Wildlife (2014b)
-Western Australian Herbarium (1998-)
GIS Databases
-SAC Bio datasets (4-11-2014)

(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 may be at variance to this Principle**
The local area (20 kilometre radius) surrounding the application is highly vegetated, retaining approximately 99 percent native vegetation cover.

Macrotis lagotis (bilby), declared as specially protected under the state Wildlife Conservation Act 1950 and vulnerable under the federal Environment Protection and Biodiversity Conservation Act 1999 has been recorded within 17 kilometres of the application area (DEC, 2007-). Some of these records are from as recently as 2012 (Parks and Wildlife 2014b).

A site visit undertaken by Department of Environment Regulation officers in January 2015 did not observe any Bilby burrows within the application area (DER 2015). The application area is largely comprised of open Pindan woodland. Portions of the application area have been heavily disturbed by a recent fire and impacted by significant grazing with relatively few native understorey species (DER, 2015).

Given that no burrows were observed within the application area and that the area is impacted by cattle grazing and lacks native understorey, it is not considered likely that the application area represents significant fauna habitat, including for the Bilby, particularly considering the surrounding highly vegetated undisturbed landscape.

Other conservation significant fauna have been recorded within the local area (20 kilometre radius) however all of these consist of birds of prey such as *Falco hypoleucos* (grey falcon) (priority 4), *Falco peregrinus* (peregrine falcon) (Other Specially Protected Fauna) (DEC, 2007-) and wetland bird species associated with the ANCA wetland occurring 1.1 kilometres to the south of the application area.

Given the above, it is not considered likely that the proposed clearing will impact on significant habitat for fauna and the proposed clearing is therefore not likely to be at variance to this principle.

Methodology **References**
-DEC (2007-)
-DER (2015)
-Keighery (1994)
-Parks and Wildlife (2014b)
GIS Databases
-SAC Bio datasets (4-11-2014)

(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**
The nearest record of rare flora is over 62 kilometres from the proposed clearing, on a different mapped vegetation and soil type to the application area.

Therefore, the vegetation under application is unlikely to support rare flora and the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Databases
 -SAC Bio Datasets (4-11-2014)
 -Soils, Statewide
 - Pre-European Vegetation

(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**
 One threatened ecological community (TEC), Roebuck Bay mudflats (vulnerable) has been recorded within 40 kilometres southwest of the application area. This TEC falls on a different mapped soil and vegetation type to the application area.

As the application area does not occur along the coast, it is not likely to be at variance to this clearing principle

Methodology GIS Databases
 -SAC Bio Datasets (4-11-2014)
 -Soils, Statewide
 -Pre-European Vegetation

(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 local area (20 kilometre radius) is approximately 99 per cent vegetated. The vegetation has been mapped as Beard vegetation association 750, of which there is approximately 99 per cent pre-European extent remaining (Government of Western Australia, 2013).

The application area comprises 493.13 hectares of native vegetation that is not considered an area of high biodiversity due to it being under significant grazing pressure. In addition, the application area does not fall within a highly cleared landscape.

The vegetation under application is unlikely to be significant as a remnant of native vegetation and the application is not likely to be at variance to this clearing principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed Lands (%)
IBRA Bioregion* Dampierland	8,345,172	8,321,243	99	1
Shire* Shire of Broome	5,469,435	5,436,145	99	1
Beard Vegetation Association in Bioregion* 750	1,229,182	1,225,280	99	2

Methodology References:
 *Government of Western Australia (2013)
 GIS Databases:
 - Interim Biogeographic Regionalisation of Australia
 - Lake Eda 50cm Orthomosaic - Landgate 2005
 - Pre-European Vegetation
 - SAC Bio datasets (4-11-2014)

(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 not likely to be at variance to this Principle**
 A major non-perennial watercourse (Deep Creek) occurs 100 meters south of the application area and is separated from the application area by contiguous native vegetation.

The Roebuck Plains System ANCA wetland occurs 880 meters south and an area subject to inundation associated with this wetland occurs 437 meters south of the application area.

Given the distance to this wetland and watercourse, it is not considered likely that the application consists of vegetation growing in association with a watercourse or wetland. Therefore the proposed clearing is not considered to be at variance to this principle.

Methodology GIS Databases
-Hydrography, linear
-ANCA, wetlands
-Lake Eda 50cm Orthomosaic - Landgate 2005

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

Comments **Proposal may be at variance to this Principle**

The clearing of 493.13 hectares is for the purpose of non-irrigated cultivation of sorghum (*Sorghum bicolor*) and maize (*Zea mays*).

The chief soils covering the area are deep red sands to yellowish loamy soils with little clay (DAFWA 2014). The application area is located on flat country that generally has a slope of less than 0.5 percent. There is very little overland flow due to the porous nature of the soils and flat topography. Any run off from the sandplain that may occur during heavy rainfall would run into the watercourse occurring 100 metres south of the application area (DAFWA 2014). Water erosion is not considered likely due to the porous nature of the soils within the application area and the 100 meter vegetated buffer to the watercourse (DAFWA 2014).

Given the sandy soils present and the large area proposed to be cleared, appreciable wind erosion may occur, especially during the initial development period and if crops were to fail due to the lack of rainfall. Appropriate management strategies such as clearing shortly before planting at the onset of the wet season and retaining vegetation buffers around cultivated areas will provide wind breaks and reduce the risk of wind erosion (DAFWA 2014). The applicant has advised that they will plant shortly after clearing, maintain a generous stubble base to protect the soil and undertake staged clearing to ensure wind erosion is kept to a minimum.

The proposed clearing may be at variance to this Principle.

Methodology References
-DAFWA (2014)
GIS Databases
-Soils, statewide
-Hydrography, linear
-Lake Eda 50cm Orthomosaic - Landgate 2005

(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 no mapped conservation areas within the local area (20 kilometre radius).

Therefore, this application is not likely to be at variance to this principle.

Methodology GIS Databases
-Parks and Wildlife 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 is not likely to be at variance to this Principle**

A major non-perennial watercourse (Deep Creek) occurs 100 meters south of the application area and is separated from the application area by contiguous native vegetation.

The Roebuck Plains System ANCA wetland occurs 880 meters south and an area subject to inundation associated with this wetland occurs 437 meters south of the application area.

The application area is located on flat country that generally has a slope of less than 0.5 per cent. There is very little overland flow due to the porous nature of the soils and flat topography. Any run off from the sandplain that may occur during heavy rainfall would run into the watercourse occurring 100 metres south of the application area (DAFWA 2014). Water erosion is not considered likely due to the porous nature of the soils within the application area and the 100 meter vegetated buffer to the watercourse (DAFWA 2014). Therefore, it is not considered likely for the proposed clearing to cause sedimentation of the nearby watercourse and cause deterioration in the quality of surface water.

The deep free drainage soils within the application area have a low salt store therefore the proposed clearing is not considered likely to cause salinity and affect underground water quality (DAFWA 2014).

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

Methodology References
-DAFWA (2014)
GIS Databases
-Hydrography, linear
-ANCA, wetlands
-Lake Eda 50cm Orthomosaic - Landgate 2005

(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**
A major non-perennial watercourse (Deep Creek) occurs 100 meters south of the application area and is separated from the application area by contiguous native vegetation.

The Roebuck Plains System ANCA wetland occurs 880 meters south and an area subject to inundation associated with this wetland occurs 437 meters south of the application area.

The chief soils covering the area under application have been mapped as red earthy sands (Northcote et al. 1960-68). There is very little overland flow within the application area given the porous nature of the soils and flat (0.5 percent) topography) (DAFWA 2014).

Given the sandy soils mapped within the areas under application and the highly vegetated local area (20 kilometre radius) it is not considered likely for the proposed clearing to cause or exacerbate flooding.

Methodology References
-DAFWA (2014)
GIS Databases
-Hydrography, linear
-ANCA, wetlands
-Lake Eda 50cm Orthomosaic - Landgate 2005
-Soils, statewide

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

Comments
The clearing of 493.13 hectares is for the purpose of non-irrigated cultivation of sorghum (*Sorghum bicolor*) and maize (*Zea mays*). A previous clearing permit (CPS 4236/1) granted in 2011 with a weed management condition existed over the application area and expired on 9 May 2013.

A letter was sent to the applicant on 4 December 2014 requesting further information on managing soil erosion and advising that a flora and fauna survey is required. A response was received from the applicant on 2 January 2015 providing information on wind erosion management. A site visit was undertaken by DER on 29 January 2015.

The area of proposed clearing falls within a proclaimed area under the Rights in Water Irrigation Act 1914. Crops to be grown are maize and sorgham under a minimum tillage production system which will not involve diverting surface water or extracting ground water, therefore no licences are required from the Department of Water.

A diversification permit was issued by Department of Regional Development and Lands, on 18 July 2011 and expires on the 30 June 2015.

Maize and sorgham, are permitted species for use in the rangelands under section 11 of the Biosecurity and Agriculture Management Act (2007) and are considered to have a low risk of spread (DAFWA 2014).

The applicant holds a Pastoral Lease over the area under application which expires on 30 June 2015.

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

Native title notification of this application was sent to the Kimberley Land Council and Bindunbur Native Title claimants. The Kimberley Land Council has responded stating that it is likely that a massacre site (Site of Aboriginal significance) exists within or in the near vicinity of the proposed clearing and requesting a heritage survey be undertaken (Kimberley Land Council 2014). It is the applicant's responsibility to ensure that their responsibilities under the Aboriginal Heritage Act (1972) have been fulfilled.

A submission has been received from the Yawuru Native Title Holders Aboriginal Corporation RNTBC (Yawuru RNTBC 2014). The Yawuru RNTBC are concerned that the proposed clearing will cause deterioration in the water quality of nearby wetlands and watercourses that flow into Yuwura land to the south and further south

near Roebuck Bay which contains significant environmental values such as threatened ecological communities, threatened wetlands and fauna habitat. These concerns have been addressed in the relevant principles above.

The Yawuru RNTBC has requested that a clearing permit is not granted unless and until the potential impact of the clearing on Roebuck Plains inundation area, Roebuck Bay wetlands and Lake Eda has been fully determined and have been found minimal. The Bindunbur native title claimants have been properly consulted about the possible heritage impacts (Yuwuru RNTBC 2014). It is the applicant's responsibility to ensure that their responsibilities under the Aboriginal Heritage Act (1972) have been fulfilled.

Methodology

References:

- Yuwuru RNTBC (2014)
- Kimberley Land Council (2014)
- DAFWA (2014)
- GIS database:
 - Native Title Claims
 - Aboriginal Sites of Significance

4. References

DAFWA (2014); Land Degradation Advice and Assessment Report for clearing permit application CPS 6334/1 received 24 November 2014; Department of Agriculture and Food Western Australia (DER ref A836075).

DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>.

Department of the Environment (2012) Species Profile and Threats Database, *Macrotis lagotis*. <http://www.environment.gov.au/cgi-bin/sprat>. Accessed 13 May 2013. Department of Sustainability, Environment, Water, Population and Community, Canberra, ACT

DER (2015) CPS 6334/1 - J and V Burton - Lot 263 on Deposited Plan 194605 Waterbank - Site inspection report for clearing application. Department of Environment Regulation. DER ref A863651

Parks and Wildlife (2014a) Flora advice for clearing permit application CPS 6334/1 received 24 November 2014; Department of Parks and Wildlife (DER ref A835140)

Parks and Wildlife (2014b) Fauna advice for clearing permit application CPS 6334/1 received 26 November 2014; Department of Parks and Wildlife (DER ref A836693)

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.

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

Kimberely land Council (2014) Native Title response for clearing application CPS 6334/1. DER ref A838969

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.

Yuwuru RNTBC (2014) Direct interest submission for clearing permit application CPS 6334/1 received 24 November 2014. Yuwuru Native Title Holders Aboriginal Corporation RNTBC Inc (DER ref A834488)