



GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 2658 / 1

File Number: DEC8791

Duration of Permit: From 13 September 2009 to 13 September 2011

PERMIT HOLDER

Todd Fysen Morris

Alison Barbara Morris

LAND ON WHICH CLEARING IS TO BE DONE

Lot 262 on Plan 238252

AUTHORISED ACTIVITY

Clearing of up to 120 hectares within the areas cross-hatched yellow on attached Plan 2658/1.

CONDITIONS

Weed management

- (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 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:

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*.



Keith Claymore
A/ASSISTANT DIRECTOR
NATURE CONSERVATION DIVISION

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

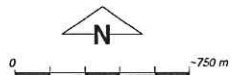
13 August 2009

Plan 2658/1



LEGEND

- | | |
|---|--|
| <p>Clearing Instruments</p> <ul style="list-style-type: none"> <input type="checkbox"/> Areas Approved to Clear <input checked="" type="checkbox"/> Road Centrelines <input type="checkbox"/> Cadastre for labelling (cont) | <ul style="list-style-type: none"> <input type="checkbox"/> Freehold <input type="checkbox"/> Crown Reserve <p>Western Australia Landsat Mosaic 25m - AGO 2006</p> |
|---|--|



Scale 1:30652
(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.

Kevin Claymore 17/8/09
Date

K Claymore
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

WA Crown Copyright 2002

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



1. Application details

1.1. Permit application details

Permit application No.: 2658/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: Todd and Alison Morris

1.3. Property details

Property: LOT 262 ON PLAN 238252 (LAGRANGE 6725)
 LOT 262 ON PLAN 238252 (LAGRANGE 6725)
 LOT 262 ON PLAN 238252 (LAGRANGE 6725)

Local Government Area: Shire Of Broome

Colloquial name:

1.4. Application

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

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 699: Shrublands, pindan; Acacia eripoda shrubland with scattered low bloodwood (Eucalyptus dicromophloia) & E. setosa over soft & curly spinifex on sandplain	The area proposed to be cleared contains a structure of trees (i.e Grevillea, Acacia, Hakea), shrubs (Jacksonia, Senna, Codonocarpus), grasses (Triodia, Sorghum, Eriachne) and herbs (Ptilotus, Solanum, Zornia, Cleome). Grazing is currently being undertaken on the land.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The area proposed to be cleared is within a pastoral station in the Kimberely region. The proponent has applied to clear 120ha for the purpose of horticulture. Condition of vegetation assessed by proponents comments, photos and a desktop assessment.

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 may be at variance to this Principle**
 The area proposed to be cleared is a pastoral station subject to current, and historical, grazing. The proponent has applied to clear 120ha for the purpose of horticulture.

The application area is part of a continuous landscape mapped within the same vegetation (Beard vegetation association 699) and soil type. Broad scale mapping describes the area as Acacia shrublands with scattered low bloodwood over spinifex (Shepherd, 2007). There is approximately 99% of this vegetation association remaining.

There is no mapped change in ecosystem diversity compared with the surrounding landscape, however given the size of the proposed clearing and broadness of the vegetation mapping it is likely that numerous vegetation structures and microhabitats exist, offering a diversity of habitats for flora and fauna species.

It is considered that the proposed clearing may be at variance to this principle. To mitigate the impact to biodiversity levels a weed management condition will be placed upon the permit.

Methodology SAC Biodatasets - accessed 9 October 2008
 Shepherd, 2007
 GIS Databases:
 - Western Australia Landsat Mosaic 25m - AGO 2006
 - Soils, Statewide

(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

The area proposed to be cleared is pastoral station with little surrounding development and approximately 99% of vegetation remaining. The condition and structure of vegetation varies throughout the lot, thereby supplying a diversity of habitat types for native fauna. The proposed clearing is for 10 lots at 10-12ha each in size, evenly spaced with vegetation corridors.

There are DEC records and sightings of Bilby (*Macrotis lagotis*) activity in the lot under application within the last 8 years. A recent DEC inspection of one known Bilby site found no activity. Given the large size of the proposed clearing, and the broad habitat requirements of the Bilby, it is unknown if they are still utilizing the lot under application for habitat. The Department of Environment, Water, Heritage and the Arts (2007) advise that habitat destruction is a major threat to Bilby populations.

The regional area (50km radius) is also known to contain Spectacled hare-wallabies (*Lagorchestes conspicillatus leichardti*) and Princess Parrot (*Polytelis alexandrae*).

The design of the proposed clearing areas allows for fauna movement around the application areas. Given that fauna corridors have been created, and the surrounding landscape is undeveloped, it is unlikely each of the 10-12ha blocks would be providing significant habitat for native fauna.

Methodology SAC Biodatasets - accessed 14 October 2008
DEWHA, 2007
GIS Databases:
- Western Australia Landsat Mosaic 25m - AGO 2006

(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

There are no known rare or priority flora within the region (50km radius). It is unlikely given the high percentage of native vegetation remaining in the local area (close to 100% in the local area - 50km radius) that the proposed clearing would be at variance to this principle.

Methodology SAC Biodatasets, accessed 20 October 2008
Shepherd, 2007
Northcote et al 1960-1968
GIS Databases:
- Soils, Statewide

(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) within the proposed clearing area. Within the greater region (50km radius) there is one known TEC located within the Roebuck Bay inter-tidal mud flats. This habitat is not found in the application area and is unlikely to be impacted by the proposed clearing. The proposed clearing area does not display any known TEC habitat characteristics and it is unlikely that the proposed clearing is at variance to this principle.

Methodology SAC Biodatasets, accessed 7 October 2008

(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 area proposed to be cleared is within Beard vegetation association 699 which is estimated to have 99% of pre-European vegetation remaining. Land use within this area is predominantly pastoral, however the regional area (50km radius) is mostly uncleared, with close to 100% native vegetation. It is unlikely the proposed clearing is at variance to this principle.

Methodology SAC Biodatasets - accessed 20 October 2008
Shepherd, 2007
GIS Databases:
- Western Australia Landsat Mosaic 25m - AGO 2006

(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

There are no mapped watercourses or wetlands within the area proposed to be cleared. Given its location on the edge of the Great Sandy Desert it is unlikely that the proposed clearing would be at variance to this principle.

Methodology GIS Databases:
- Hydrography, linear
- Western Australia Landsat Mosaic 25m - AGO 2006

(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

The area proposed to be cleared contain 'Pindan' soils. These are commonly low lying sand plains with through going drainage. Soils are red sands/yellow loam with little clay (DAFWA, 2008).

DAFWA (2008) advise that given the porous soils and low topography water erosion is unlikely to be an issue. Groundwater in the area has low salinity levels and water is reported to be of good quality. DAFWA (2008) state that the proposed clearing is unlikely to impact on salinity.

DAFWA (2008) have provided advice on this lot for a larger clearing area (528ha). DAFWA advised that this proposal was likely to result in wind erosion due to the soils and lack of buffering. The current proposal is for 10 individual areas of 10-12ha in size with vegetation buffering all sides. It is unlikely that significant erosion would be caused by the proposed clearing.

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

Methodology DAFWA, 2008
GIS Databases:
- Soils, Statewide
- Western Australia Landsat Mosaic 25m - AGO 2006

(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 conservation areas nearby to the proposed clearing. It is unlikely that the proposed clearing will impact upon any conservation areas.

Methodology SAC biodatasets, accessed 17 October 2008
GIS Databases:
- CALM Managed Lands and Waters

(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

The area proposed to be cleared is above the large Broome Sandstone aquifer. This aquifer is reported to be deep inland and shallower as it approaches the coast. Salinity levels are very low, becoming more brackish towards the coast line.

Groundwater for the aquifer is predominantly sourced from rainfall at the outcrop area of Broome Sandstone (Dept Fisheries, 2004). Clearing 120 ha of native vegetation is likely to increase recharge, however the impact is likely to be minimal given that the application area is not within the Broome outcrop and there are large areas of uncleared land surrounding the proposed clearing area.

Methodology Department of Fisheries, 2004
GIS Databases:
- Western Australia Landsat Mosaic 25m - AGO 2006
- Groundwater Salinity, Statewide

(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

The area proposed to be cleared has low elevation and sandy soils. Clearing 120 ha of native vegetation is likely to result in an increase of surface water runoff, however given the low elevation on site and permeable

substrate it is unlikely these impacts will be significant. DAFWA (2008) have advised that overland is likely to drain to the north west coastal plain and evaporate or seep into the water table. The proposed clearing is unlikely to be at variance to this principle.

Methodology Northcote et al 1960-1968
DAFWA, 2008
GIS Database:
- Topographic Contours, Statewide
- Western Australia Landsat Mosaic 25m - AGO 2006

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

Comments

A Diversification Permit has been granted by the Pastoral Lands Board. TRIM ref DOC93137 and DOC93138.

A licence to take water has been issued by the Department of Water. TRIM ref DOC92864.

There is one native title claim over the area under application. DEC has advised the Kimberley Land Council of the clearing permit application. An objection to the proposal has been raised by the representative body on behalf of the claimants (Trim Ref DOC 69020), based upon the original application and not the amended application. The environmental issues raised in this submission have been addressed under the appropriate clearing principles.

Methodology

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing maybe at variance to principle (a) and is not likely to be at variance to the remaining principles.

5. References

- DAFWA, 2008, Regional advice for clearing permit application 2658/1, Department of Agriculture and Food WA. Perth. (TRIM ref DOC 67388 and DOC 67493)
- Department of Environment, Water, Heritage and the Arts, 2007, Bilby (*Macrotis lagotis*), accessed 14 October 2008, <http://www.environment.gov.au/biodiversity/threatened/publications/bilby.html>
- Department of Fisheries, 2004, Aquaculture Groundwater Resource Atlas - West Kimberley Coast - Pardoo to King Sound, http://www.fish.wa.gov.au/docs/pub/AquaGroundWater/west_kimberley_coast.php-0304 last updated December 2004, accessed 21 October 2008
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Shepherd, D.P. (2007). 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. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

6. 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)