



## CLEARING PERMIT

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

### PERMIT DETAILS

Area Permit Number: 4260/1  
File Number: 2011/001706  
Duration of Permit: From 6 June 2011 to 6 June 2013

### PERMIT HOLDER

Minister for Lands

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 503 on Plan 64542 (South Hedland 6722)

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 11.9 hectares of native vegetation within the area hatched yellow on attached Plan 4260/1.

### CONDITIONS

#### 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*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *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.

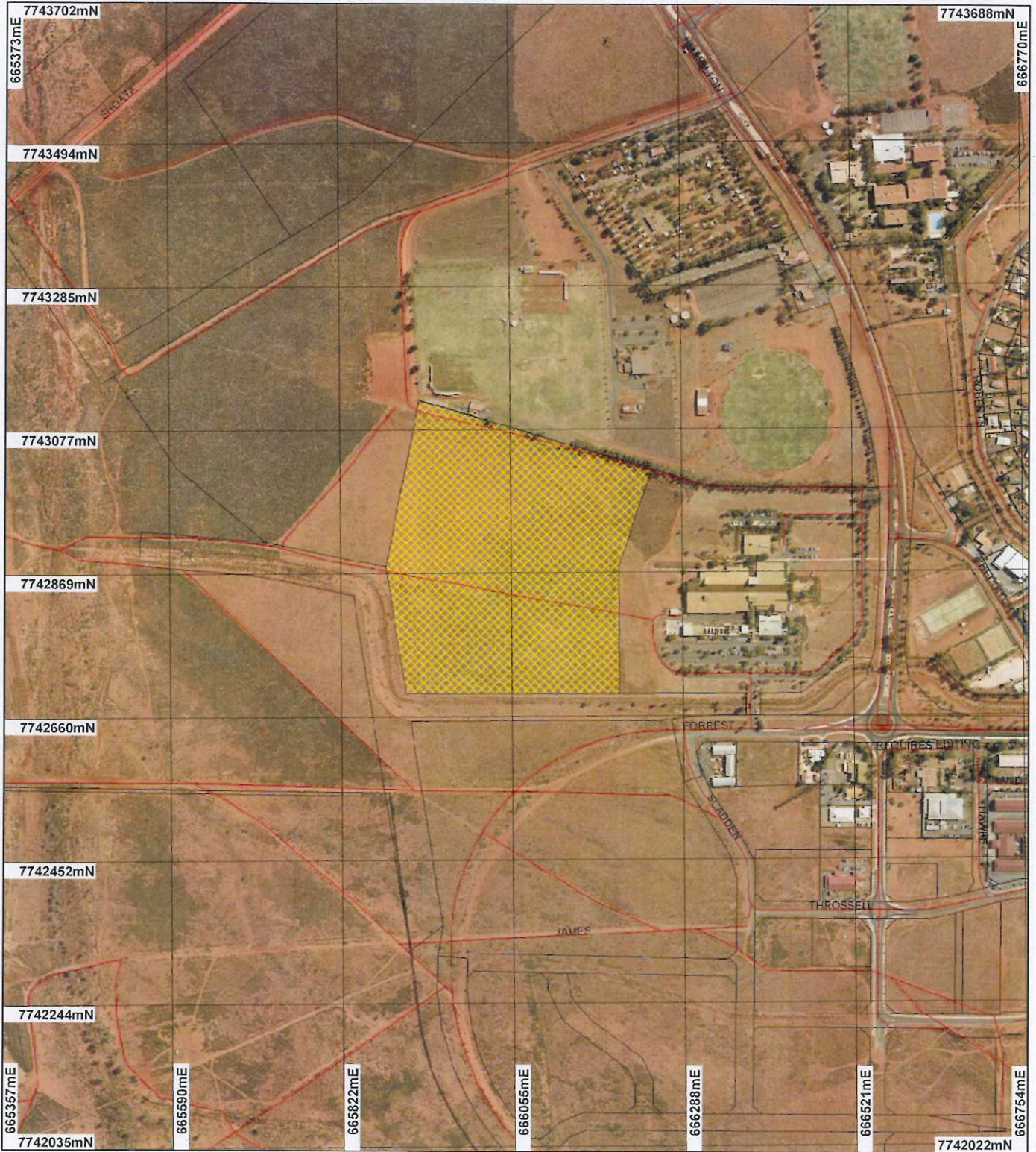
A handwritten signature in black ink, appearing to be "K Faulkner", written over a horizontal line.

Kelly Faulkner  
MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

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

12 May 2011

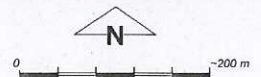
# Plan 4260/1



## LEGEND

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

Port Hedland Townsite 20cm  
Orthomosaic - Landgate  
2002



Scale 1:7687

(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.

*[Signature]* Date 12/5/11

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**

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## 1. Application details

### 1.1. Permit application details

Permit application No.: 4260/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Minister for Lands

### 1.3. Property details

Property: LOT 503 ON PLAN 64542 (Lot No. 503 FORREST SOUTH HEDLAND 6722)  
Local Government Area: Town of Port Hedland  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
11.9		Mechanical Removal	Building or Structure

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 12 May 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
The vegetation under application has been identified as Beard vegetation associations 647 and 589. Shepherd (2009) describes these vegetation types as:	The proposal is to clear up to 11.9ha of native for the purpose of developing a worker's accommodation village and residential dwellings. The vegetation under application is in a very good (Keighery, 1994) condition. Disturbance within the clearing site is due an unsealed road which bisects the site and to its proximity to urban areas.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The condition of the vegetation under application was determined via digital imagery (Port Hedland 50cm Orthomosaic - Landgate 2004) and through information provided in the Flora and Vegetation Assessment (Western Botanical, 2011).
647 - Hummock grasslands, dwarf-shrub steppe; Acacia translucens over soft spinifex.		To	
589 - Mosaic: Short bunch grassland - savanna / grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex.		Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	

## 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 proposal is to clear up to 11.9ha of native vegetation from Lot 503 on Plan 64542, South Hedland for the purpose of developing a worker's accommodation village and residential dwellings.

There are records of seven priority flora species in the local area, with the closest (*Tephrosia rosea* var. *venulosa*, Priority 1) being mapped 235 metres to the west of the application area, on the same vegetation and soil types as the vegetation under application. *Goodenia nuda* (Priority 4), *Heliotropium muticum* (Priority 1) and *Ptilotus appendiculatus* var. *minor* (Priority 1) are also known from records on the same vegetation and soil types as the application area. Western Botanical (2011) conducted a flora and vegetation survey over the application area and did not identify any conservation significant flora.

The disturbance resulting from the proposed clearing will increase the risk of weeds spreading into adjacent land. A weed condition will assist in mitigating this risk.

The local area (20km radius) is well vegetated containing approximately 95 per cent vegetation.

The application area is unlikely to represent an area of higher biodiversity value when compared to representative vegetation in a local and regional context.

Considering the above the proposed clearing is not likely to be at variance to this Principle.

**Methodology** References:  
Western Botanical (2011)

GIS Databases:  
- Port Hedland 50cm Orthomosaic - Landgate 2004  
- Pre-European vegetation - DA 01/01  
- SAC Biodatasets - accessed April 2011  
- Soils, Statewide - 30/11/99

**(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**

Four terrestrial fauna species listed as rare or likely to become extinct have been recorded within the local area (20km radius)(DEC,2007); *Dasyercus cristicauda* (Crest-tailed Mulgara), *Dasyurus hallucatus* (Northern Quoll), *Lagostrophus fasciatus* subsp. *fasciatus* (Bernier Is. Banded Hare-wallaby) and *Macrotis lagotis* (Bilby, Dalgyte).

The fauna habitats within the area proposed to be cleared are well represented elsewhere within the local and regional area, and no significant loss of habitat for fauna indigenous to Western Australia is expected. The area to be cleared does not represent a fauna corridor and therefore the clearing will not remove an ecological linkage that is necessary for the maintenance of fauna.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** References:  
DEC (2007)

GIS Databases:  
- Port Hedland 50cm Orthomosaic - Landgate 2004  
- Pre-European vegetation - DA 01/01  
- SAC Biodatasets - accessed April 2011

**(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**

No records of rare flora were identified within the local area (20km radius).

In addition, Western Botanical (2011) conducted a flora and vegetation survey over the application area and did not identify any rare flora.

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

**Methodology** References:  
Western Botanical (2011)

GIS Databases:  
- Port Hedland 50cm Orthomosaic - Landgate 2004  
- Pre-European vegetation - DA 01/01  
- SAC Biodatasets - accessed April 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**

No known threatened ecological communities have been recorded within the local area (20km radius).

A flora and vegetation survey (Western Botanical, 2011) has been carried out over the application area and no TECs were observed.

Therefore, the clearing as proposed is not likely to be at variance to this principle.

**Methodology** References:  
Western Botanical (2011)

GIS Databases:

- Port Hedland 50cm Orthomosaic - Landgate 2004
- Pre-European vegetation - DA 01/01
- SAC Biodatasets - accessed April 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 at variance to this Principle**

The vegetation proposed to be cleared is well represented in the surrounding area and the Town of Port Hedland retains approximately 99.8 per cent of its pre-European vegetation extent (Shepherd, 2009). The area under application is mapped as containing vegetation of Beard Vegetation Association 589 and 647, of which approximately 100 per cent of the pre-European extent remain within the Pilbara IBRA Bioregion (Shepherd, 2009).

The local area (20km radius) has approximately 95 per cent vegetation 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).

The area under application is not considered to be a significant remnant within an area that has been extensively cleared.

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

**Methodology**

References:

- Commonwealth of Australia (2001)
- Shepherd (2009)

GIS Databases:

- Local Government Authorities - DLI 8/07/04
- Port Hedland 50cm Orthomosaic - Landgate 2004
- Pre-European vegetation - DA 01/01
- SAC Biodatasets - accessed 6/12/2010

**(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 at variance to this Principle**

There are no wetlands or watercourses mapped within the application area.

The closest water feature is a minor, non perennial water course which is located approximately 500 meters west of the area under application. Additionally, there are mangroves and saline coastal flats in the local area (20km radius) and an ANCA wetland Leslie (Port Hedland) saltfields system, mapped 16.5km north east of the application area.

Given the information above, the vegetation under application is not growing in or is it associated with a watercourse or wetland, therefore the proposal is not at variance to this principle.

**Methodology**

GIS Databases:

- ANCA, Wetlands - 26/03/99
- Hydrography, linear - DoW 13/7/06

**(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 of the applied area are sandy plains with chief soils of red earthy sands with some hard red soils along creek lines (Northcote, 1960-68). The area under application does not include coastal dunes and is considered not to be overly susceptible to erosion.

The topography of the site is relatively flat and rainfall is low (400mm) therefore water erosion is not likely to an issue.

The proposed clearing is not likely to cause appreciable land degradation and is therefore not likely to be at variance to this clearing principle.

**Methodology** References:  
Northcote et al. (1960 - 1968)

GIS Database:  
- Average Annual Rainfall Isohyets - WRC 29/09/98  
- Hydrogeology, Linear - DOC13/07/06  
- SAC Biodatasets - accessed April 2011  
- Topographic contours statewide - DOLA and ARMY 12/09/02

**(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 at variance to this Principle**

No conservation reserves have been recorded within a 20km radius of the application area.

The clearing as proposed will not impart on the environmental values of any conservation reserves. Therefore, this proposal is not at variance to this clearing principle.

**Methodology** GIS Databases:  
- DEC Managed Lands & Waters - DEC 28/10/09  
- Pre-European vegetation - DA 01/01

**(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 topography of the site is relatively flat thus little water is likely to leave the site as runoff and is unlikely to have a significant impact on the quality or quantity of surface water.

The existing vegetation consists of shallow rooted grasses and shrubs with minimal tree root systems, thus the proposed clearing of vegetation is unlikely to significantly affect the level of the ground water table.

Given the above the proposed clearing is not likely to cause deterioration in the quality of surface or underground water. Therefore, this proposal is not likely to be at variance to this principle.

**Methodology** GIS Database:  
- Evapotranspiration Isopleths - WRC 29/09/98  
- Hydrography, linear - DOW 13/7/06  
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05

**(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 average annual rainfall of the region is relatively low (400mm) however, high intensity rainfall in the wet season may cause waterlogging within the cleared area.

Although the proposed clearing may cause localised waterlogging it is not likely that it will increase the incidence or intensity of flooding, therefore this proposal is not likely to be at variance to this clearing principle.

**Methodology** GIS Database:  
- Hydrography, linear - DoW 13/7/06  
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05  
- Topographic Contours, Statewide - DOLA 12/09/02

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

**Comments**

The applicant has provided a copy of the Government Gazette (2 November 2010) which show that the rezoning of Lot 503 south Hedland from "Community-Education" to "Urban Development" has been completed.

Native Title: The applied area is within the boundaries of the Kariyarra People's registered native title claim. The claimants and their representatives have been notified of this proposal. No comments have been received.

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

The area under application falls within an area (Pilbara surface and groundwater area) which is proclaimed under the Rights in Water and Irrigation Act 1914.

- Methodology** GIS Database:
- Native Title Claims - LA 2/5/07
  - RIWI Act, Groundwater Areas - DoW 13/07/06
  - RIWI Act, Surface Water Areas - DoW 13/07/06
  - Town Planning Scheme Zones - MFP 31/08/98
  - Aboriginal Sites of Significance 26 April 2007

#### 4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2007) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed April 2011
- 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 Botanical (2011) Lot 503 South Hedland, Flora and Vegetation Assessment, January 2011. Prepared for Hatch Associates (DEC Ref: A378410).

#### 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)

