GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS
Area Permit Number: 5401/1
File Number: 2012/008711-1
Duration of Permit: From 15 February 2013 to 15 February 2015

PERMIT HOLDER
Minister for Lands

LAND ON WHICH CLEARING IS TO BE DONE
Lot 253 on Deposited Plan 218989, Port Hedland

AUTHORISED ACTIVITY
The Permit Holder shall not clear more than 5.8 hectares of native vegetation within the area shaded yellow on attached Plan 5401/1.

CONDITIONS

1. **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.

2. **Fauna management**
   (a) Prior to undertaking any clearing authorised under this Permit, the area shall be inspected by a *fauna specialist*, in accordance with *Guidance Statement No 56* for the presence of active *Dasycercus cristicauda* (Crest-tailed Mulgara) burrows.
   (b) Where active *Dasycercus cristicauda* (Crest-tailed Mulgara) burrows are identified in relation to condition 2(a) of this Permit, the Permit Holder shall ensure that no clearing occurs within 50 metres of the identified active *Dasycercus cristicauda* (Crest-tailed Mulgara) burrows, unless first approved by the CEO.

3. **Records must be kept**
   The Permit Holder must maintain records in relation to fauna management pursuant to condition 2 of this Permit, the location of each active *Dasycercus cristicauda* (Crest-tailed Mulgara) burrow recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees.

4. **Reporting**
   (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
      (i) of records required under condition 3 of this Permit; and
      (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.

(b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.
(c) Prior to 15 November 2014, the Permit Holder must provide to the CEO a written report of records required under condition 3 of this Permit where these records have not already been provided under condition 4(a) of this Permit.

DEFINITIONS

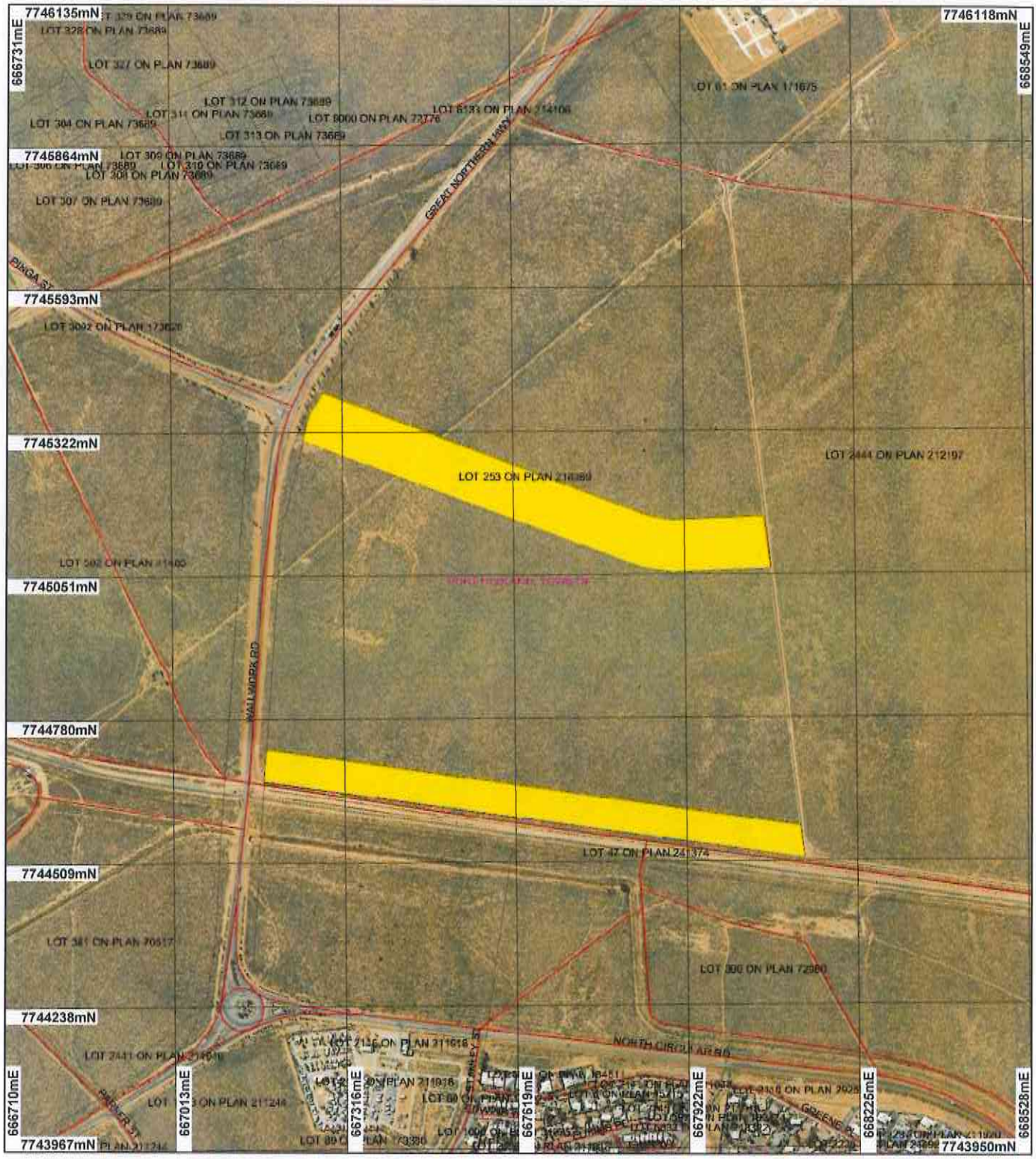
The following meanings are given to terms used in this Permit:
fauna specialist means a person with training and specific work experience in fauna identification or faunal assemblage surveys of Western Australian fauna;
fill means material used to increase the ground level, or fill a hollow;
Guidance Statement No 56 means Guidance for the Assessment of Environmental Factors: Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia. Guidance Statement No 56, Environmental Protection Authority (2004).
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 means any plant -
(a) that is declared under the section 37 of *Agriculture and Related Resources Protection Act 1976*; or
(b) published in the Department of Environment and Conservation Regional Weed Assessments, regardless of ranking; or
(c) not indigenous to the area concerned.

M Warnock
A/MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20
of the Environmental Protection Act 1986

24 January 2013

Plan 5401/1



LEGEND

- Local Government Authorities
- Cadastre
- Road Centrelines
- Clearing Instruments
- Areas Approved to Clear

Wedgefield Port Hedland
10cm Orthomosaic - Landgate
2008

N

0 ~300 m

Scale 1:10000
(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 24/1/13

Information derived from this map should be confirmed with the data custodian acknowleged by the agency acronym in the legend.

Department of Environment and Conservation
Our environment, our future

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

Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5401/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Minister for Lands

1.3. Property details

Property: LOT 253 ON PLAN 218989 (PORT HEDLAND 6721)
Local Government Area: Town of Port Hedland
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
5.8		Mechanical Removal	Road construction or maintenance

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 24 January 2013

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: 647 - Hummock grasslands, dwarf-shrub steppe; Acacia translucens over soft spinifex (Shepherd et al. 2001).	The application is to clear up to 5.8 hectares of native vegetation within Lot 253 on Deposited Plan 218989, Port Hedland for the purpose of constructing an access road and services infrastructure corridor.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994). To Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994).	Vegetation description and condition were determined through aerial imagery (Wedgefield Port Hedland 10cm Orthomosaic - Landgate 2008).

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 application is to clear up to 5.8 hectares of native vegetation within Lot 253 on Deposited Plan 218989, Port Hedland for the purpose of constructing an access road and services infrastructure corridor.

The vegetation under application is in excellent to degraded (Keighery 1994) condition, with the majority of the vegetation in excellent condition.

There are several records of priority flora within the local area (10 kilometre radius). The closest record occurring on the same soil and vegetation type as the application area is a priority one species. A flora and vegetation survey (Maia 2011) undertaken in the property adjacent to the application area identified this species and a priority three species within the property.

The priority one species was listed in 2008 due to a restricted distribution and small number of locations. Since 2008, several other small populations have been located within the Port Hedland area. Therefore, the species is represented at the local level and the potential loss of individuals over the application area would not severely impact the current extent of this species (DEC 2012). The priority three species has a wide known distribution and is considered to have low regional conservation significance (Maia 2011).

The application area is surrounded by vegetation in excellent (Keighery 1994) condition. The disturbance caused by the proposed clearing may increase the risk of weeds spreading into the adjacent vegetation. Weed management practices will assist in reducing the potential impacts

Given that the area under application is predominately in excellent (Keighery 1994) condition and may contain priority flora, the area under application may be at variance to this principle.

Methodology

References:
DEC 2012
Keighery 1994
Maia 2011
GIS Databases:
- Pre European Vegetation
- SAC Biodatabases
- 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 may be at variance to this Principle

There are numerous fauna species of conservation significance mapped within the local area (10 kilometre radius), including; Crest-tailed Mulgara (Dasycercus cristicauda), Northern Quoll (Dasyurus hallucatus) and Bilby (Macrotis lagotis). These species are listed as rare or likely to become extinct under the Wildlife Conservation Act 1950.

The application area does not represent a fauna corridor and is therefore not significant in providing an ecological linkage.

A fauna survey (Coffey Environments 2011) was undertaken in the property adjacent to the proposed clearing. Given the proximity of the areas and the apparent similarity in vegetation composition, the results of the fauna survey are likely to be applicable to the application area.

During the survey, several active Mulgara mounds were recorded and one Brush-tailed Mulgara (Dasycercus blythi; priority four) was captured (Coffey Environments 2011). The conservation significant Rainbow Bee Eater (Merops ornatus; migratory) and Australian Bustard (Ardeotis australis; priority four) were also identified within the property.

Fauna management practices will assist in mitigating impacts to the Mulgara.

Given the potential for active Mulgara mounds within the application area, the proposed clearing may be at variance to this principle.

Methodology

References:
Coffey Environments 2011
DEC 2007-
Wildlife Conservation Act 1950
GIS Databases:
- Wedgefield Port Hedland 10cm Orthomosaic - Landgate 2008

(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 records of rare flora within 10 kilometres of the application area. A flora and vegetation survey (Maia 2011) undertaken in the adjacent property to the application area did not identify the presence of any rare flora.

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

Methodology

References:
Maia 2011
GIS databases:
- SAC Biodatasets

(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 records of threatened ecological communities within 10 kilometres of the application area and therefore the proposed clearing is not likely to be at variance to this principle.

Methodology

References:
Maia 2011
GIS Databases:
- SAC Biodatasets

(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

Aerial photography indicates the local area (10 kilometre radius) is approximately 80 per cent vegetated.

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 vegetation association mapped over the application area retains over 30 per cent of the pre-European extent within the Pilbara IBRA Bioregion (Government of Western Australia 2011).

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

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Pilbara	17 804 427	17 729 352	100	8
Shire*				
Town of Port Hedland	1 847 403	1 818 670	98	0
Beard Vegetation Association in Bioregion*				
647	195 860	191 711	98	0

* Government of Western Australia 2011

Methodology

References:
Commonwealth of Australia 2001
Government of Western Australia 2011
GIS Databases:
- NLWRA, Current extent of Native Vegetation
- Pre-European Vegetation
- Wedgefield Port Hedland 10cm Orthomosaic - Landgate 2008

(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

The closest watercourse to the application area is a minor drain, which is located approximately 170 metres south of the application area. There are no mapped wetlands within the local area (10 kilometre radius).

Given the above, the proposed clearing is not likely to be at variance to this principle.

Methodology

GIS Databases:
- ANCA Wetlands
- Hydrography, Linear
- Ramsar Wetlands
- Wedgefield Port Hedland 10cm Orthomosaic - Landgate 2008

(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 soil within the application area is mapped as AB19, which Northcote et al. (1960 - 1968) describes as extensive sandy plains: chief soils are red earthy sands with extensive areas of red earths and with some hard red soils along creek lines.

The main land degradation risk associated with this sandy soil type is wind erosion. Given that the area under application will be buffered on all sides by vegetation, significant wind erosion is unlikely.

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

Methodology

References:
Northcote et al. 1960-1968
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 no lands managed for conservation within the local area (10 kilometre radius).

The area under application is surrounded by vegetation in excellent (Keighery 1994) condition. The disturbance caused by the proposed clearing may increase the risk of weeds spreading into the adjacent vegetation. Weed management practices will assist in reducing the potential impacts

Methodology

GIS Databases:
- Bush Forever sites
- DEC Tenure
- Wedgefield Port Hedland 10cm Orthomosaic - Landgate 2008

(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

There are no watercourses or wetlands within the application area. Given the flat topography of the application area, there will be minimal run off and the proposed clearing is unlikely to cause deterioration in the quality of surface water.

The groundwater salinity within the application area is 1000 - 3000 milligrams per litre of Total Dissolved Solids. This level of groundwater salinity is considered to be brackish to moderately saline. Given that the vegetation within and surrounding the application area is shallow rooted grasses and shrubs, the proposed clearing is unlikely to significantly affect the groundwater level or quality.

Given the above, the proposed clearing is not likely to be at variance to this principle.

Methodology

GIS Databases:
- CAWS Areas
- Groundwater Salinity
- Hydrography, Linear
- Topography, Statewide
- PDWS Areas

(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 soil within the application area is mapped as AB19, which Northcote et al. (1960 - 1968) describes as extensive sandy plains: chief soils are red earthy sands with extensive areas of red earths and with some hard red soils along creek lines.

Given the porous nature of the sandy soils of the application area, the proposed clearing is unlikely to cause or exacerbate flooding. Therefore it is not likely to be at variance to this principle.

Methodology

References:
Northcote et al. 1960 - 1968
GIS Datasets:
- Soils, Statewide

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

Comments

The application area is located within the Pilbara Groundwater Area and Pilbara Surface Water Area covered by the Rights in Water and Irrigation Act 1914.

The application area is located within a Native Title claim area determined by the Federal Court. The claimants were given the opportunity to make comment on the application. No comments were received.

The Town of Port Hedland has no objections to the proposed clearing (Town of Port Hedland 2012).

No public submissions have been received in response to this application.

Methodology References:
Town of Port Hedland 2012
GIS Databases:
- RIWI Act areas
- Native Title claims

4. References

Coffey Environments (2011) Level 1 Fauna Assessment and Targeted Fauna Survey, Hedland Airport Industrial Development, Port Hedland. November 2011 (DEC Ref: A579188).

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 19/12/2012.

DEC (2012) Species and Communities Branch advice on Tephrosia rosea var. venulosa Pedley (P1). Department of Environment and Conservation, Western Australia (DEC Ref: A646632).

Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). 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.

Maia (2011) Aurora Environmental: Level 1 Flora and Vegetation Assessment Port Hedland Airport. November 2011 (DEC Ref: A579188).

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.

Town of Port Hedland (2012) Response to Direct Interest Letter for clearing permit application CPS 5401/1. Received 17/12/2012. DEC REF: A581106.

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)