



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 2025 / 3
File Number: DEC9308
Duration of Permit: From 26 July 2008 to 26 July 2010

PERMIT HOLDER

Town of Port Hedland

LAND ON WHICH CLEARING IS TO BE DONE

LOT 2444 ON PLAN 212197

AUTHORISED ACTIVITY

Clearing of up to 58 hectares of native vegetation within the area hatched yellow on attached Plan 2025/3.

CONDITIONS

Nil

A handwritten signature in black ink, appearing to read "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*

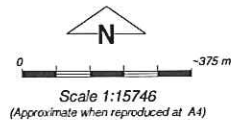
23 April 2009

Plan 2025/3



LEGEND

- Clearing Instruments
- Port Hedland Townsite 20cm Orthomosaic - Landgate 2002
- Areas Approved to Clear
- Road Centrelines
- Local Government Authorities
- Cadastre for labelling



Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

K Faulkner Date 23/4/09

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.



1. Application details

1.1. Permit application details

Permit application No.: 2025/3
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: Town of Port Hedland

1.3. Property details

Property: LOT 2444 ON PLAN 212197 (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:
58		Mechanical Removal	Building or Structure

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 area to be cleared consists of Beard Vegetation Association 647 - Hummock grasslands, dwarf-shrub steppe; <i>Acacia translucens</i> over soft spinifex (Shepherd et al., 2007).	The area applied to be cleared is within the airport reserve and has been cleared previously for airport purposes. The orthomosaic photography provided by GIS database was produced in 2002 and shows that the area had been extensively cleared just prior to the photograph being taken. The vegetation has since regrown and is maintained at a low level in line with airport standard practices. Currently the vegetation consists of grasslands (including <i>Triodia</i>) with small shrubs and the occasional <i>Acacia</i> shrub. The shrubs and grasses have regenerated quite densely and appear to be in good (Keighery, 1994) condition.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Current condition of vegetation has been gathered from photographs taken on site by the proponent. Applications in the near vicinity have noted that the vegetation is disturbed by vehicular tracks and weed species such as <i>Cenchrus ciliaris</i> .

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 area to be cleared consists of Beard vegetation association 647 of which there is approximately 100% of the Pre-European extent remaining (Shepherd et al., 2007). The vegetation on site has been previously cleared for the purposes of airport safety and security and has regenerated to good (Keighery, 1994) condition in the form of small shrubs and grasses. The area is located within a largely developed area and is surrounded by main roads, infrastructure and the airport terminal and as such is disturbed via tracks and weed invasion.

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

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

Methodology Keighery (1994)
Shepherd et al., (2007)
GIS Database:
Interim Biogeographic Regionalisation of Australia (subregions) - EA 18/10/00.
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00.
- Pre-European Vegetation - DA 01/01.
- Port Hedland Townsite 20cm Orthomosaic - DLI 02.

(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 fauna habitats within the proposed area to be cleared are well represented elsewhere within the local and regional area, and no significant loss of habitat for fauna indigenous to WA 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 Sac Biodataset (Fauna) 240907

(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 closest record of a rare flora species (*Terminalia supranitifolia*) is located approximately 200km to the east of the application area on the Burrup Peninsula (SAC Biodataset 240907).

Due to the huge distance between any recorded rare flora and the location of the vegetation to be cleared, and the vastly different land types and vegetation associations present, the proposed clearing appears unlikely to have an impact on any known rare flora.

Methodology SAC Biodatasets (240907)
GIS Database:
- Declared Rare and Priority Flora List - CALM 01/07/05.

(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 a 50km radius of the proposed clearing area (GIS Database).

It is unlikely that the vegetation under application would support a threatened ecological community given that the area has been previously cleared and is partially degraded due to the close proximity to the airport, main roads and the existence of other tracks through the property.

Given the above, it is unlikely that the proposal is at variance to this principle.

Methodology SAC Biodataset 240907
GIS Database:
- Threatened Ecological Communities - CALM.

(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

Approximately 99.9% and 99.5% of the Pre-European vegetation remains in the IBRA Pilbara bioregion and Roebourne IBRA sub-region respectively, within which this proposal is located (GIS Database, Shepherd et al., 2007).

The vegetation applied to be cleared is part of Beard Vegetation association 647 which is described as follows; hummock grasslands, dwarf-shrub steppe; *Acacia translucens* over soft spinifex (Shepherd et al., 2007). There is approximately 100% of the Pre-European extent remaining of association 647 and therefore the 58 ha area proposed to be cleared is not considered to be a significant remnant of native vegetation within an extensively cleared area.

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

Methodology Shepherd et al. (2007).
GIS Database:
- Interim Biogeographic Regionalisation of Australia (subregions) - EA 18/10/00.
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00.
- Port Hedland Townsite 20cm Orthomosaic - DLI 02.

(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 application area consists of a samphire vegetation unit occurring in low-lying saline drainage areas of the application area (Western Botanical, 2008).

The topography of the site is very 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.

Methodology DOW (2007)
Western Botanical (2008)
GIS Database:
- Hydrography, linear (medium scale, 250k GA).
- Hydrography, linear - DOE 1/2/04.
- Hydrography, linear (hierarchy) - DOW.

(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 clearing application area lies within the Uaroo land system (sandy surfaced plains: not degraded or eroded) (GIS Database, Van Vreeswyk et al., 2004). The Uaroo land system is generally not susceptible to erosion or significant degradation (Van Vreeswyk et al., 2004).

Based on the above, the proposal is unlikely to be at variance to this Principle provided appropriate erosion control measures are implemented.

Methodology Van Vreeswyk et al. (2004)
GIS Database:
- Rangeland Land System Mapping - DA.

(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**

The nearest Directory of Important Wetlands (formerly Australian Nature Conservation Agency (ANCA)) wetland area is the Leslie (Port Hedland) Saltfields System, located approximately 10.5 kilometres north-east of the proposed clearing areas (GIS Database). The Saltfields System plays an important ecological role, as a major migration stop-over area for shorebirds in the East-Asia-Australasia Flyway (Department of the Environment and Water Resources, 2007). However, based on the distance between the proposed clearing and the wetlands, adverse impacts on the environmental values of the wetlands are unlikely.

There are no other DEC managed lands or waters within a 50km radius of the area applied to be cleared.

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

Methodology Department of the Environment and Water Resources (2007).

GIS Database:
- ANCA, Wetlands - CALM 08/01.
- CALM Managed Lands and Waters - CALM 1/07/05.
- CALM proposed 2015 pastoral lease exclusions.
- CALM Regional Parks - CALM 12/04/02.
- Proposed National Parks, FMP - CALM 19/03/03.
- Register of National Estate - EA 28/01/03.
- System 1 to 5 and 7 to 12 Areas - DEP 06/95.

(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 applied to be cleared does not occur within a Public Drinking Water Source Area under the Country Areas Water Supply Act 1947 (DoW 2007).

Clearing of 58 hectares of vegetation is unlikely to have a significant impact on groundwater in the proposed area given the average annual rainfall of the site is 315mm, with most rainfall occurring over the summer months (DoW 2007), and an evaporation rate of 400mm per annum. Furthermore, the existing vegetation is shallow rooted grass and shrub species and thus the proposed clearing is unlikely to have a significantly impact the level of the groundwater table.

Methodology DoW (2007)

GIS Database:

- Evaporation Isopleths - BOM 09/98
- Rainfall, Mean Annual - BOM 30/09/01

(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 limited amount of clearing proposed (58 hectares) in comparison with the extent of the Port Hedland coastal catchment area (which is approximately 744,300 hectares) is unlikely to result in an increase in peak flood height or flood peak duration.

Clearing of 58ha is unlikely to have a significant impact on quality or quantity of groundwater given the mean annual rainfall for the site is 315 millimetres with most rainfall occurring around the summer months, and an evaporation rate of 400 millimetres per annum (DoW 2007).

Further to this, 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 (DoW, 2007).

Given the above, it is unlikely that the proposed clearing will cause or exacerbate the incidence or intensity of flooding.

Methodology DoW 2007

GIS Database:

- Evaporation Isopleths - BOM 09/98
- Hydrographic Catchments - Catchments - DOW.
- Rainfall, Mean Annual - BOM 30/09/01.

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

Comments

The Town of Port Hedland has identified surplus airport land which may be able to accommodate some of the transient or temporary workforce required in the district.

The land is owned by the Town of Port Hedland and is currently zoned 'airport'. Amendments to the Town Planning Scheme to the proposed use of 'transient workforce accommodation' are currently being undertaken.

Methodology GIS Themes:

- ~ Register of Heritage Places - DPI 14/7/03;
- ~ Register of National Estate - EA 28/01/03;
- ~ Aboriginal Sites of Significance - DIA 28/02/03;

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 is not at variance to Principle (e) and not likely to be at variance to any of the clearing Principles.

5. References

Department of the Environment and Water Resources (2007) A Directory of Important Wetlands in Australia, Leslie (Port Hedland) Saltfields System } WA068, <http://www.environment.gov.au>

Department of Water (2007) Submission. Department of Environment and Conservation reference: TRIM Ref; DOC34840 Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1.

CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.
 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.
 Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A., and Henning, P. (2004) An inventory and condition survey of the Pilbara region, Western Australia, Technical Bulletin No.92, South Perth, Western Australia
 Western Botanical (2008). Port Haven Water Treatment Pipeline - Native Vegetation Clearing Permit Report, November 2008. Prepared for Hatch Engineering by Western Botanical.

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)