



## CLEARING PERMIT

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

### PERMIT DETAILS

Area Permit Number: 7859/1  
File Number: 2017/002022-1  
Duration of Permit: From 4 May 2018 to 4 May 2020

### PERMIT HOLDER

Pilbara Ports Authority

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 370 on Deposited Plan 35619, Wedgefield  
Lot 556 on Deposited Plan 60836, Wedgefield

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 55.7416 hectares of native vegetation within the area hatched yellow on attached Plan 7859/1.

### CONDITIONS

#### 1. Avoid, minimise and reduce the impacts and extent of clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- (a) avoid the clearing of native vegetation;
- (b) minimise the amount of native vegetation to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

#### 2. Dieback and 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* and *dieback*:

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

#### 3. Records must be kept

The Permit Holder must maintain the following records in relation to the clearing of native vegetation authorised under this Permit:

- (a) the location where the clearing occurred, 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;
- (b) the date that the area was cleared;
- (c) the size of the area cleared (in hectares);
- (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 1 of this Permit; and

- (e) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 2 of this Permit

**4. Reporting**

The Permit Holder must provide to the CEO the records required under condition 3 of this Permit, when requested by the CEO.

**DEFINITIONS**

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

**dieback** means the effect of *Phytophthora* species on native vegetation;

**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** means 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 Biodiversity, Conservation and Attractions Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



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Jane Clarkson  
MANAGER  
CLEARING REGULATION




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

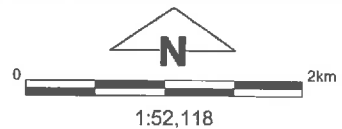
4 April 2018

# Plan 7859/1



## Legend

-  Imagery
-  Localities
-  Clearing Instruments Activities
-  Local Government Authority



*W. Clark* Date *4/4/18*  
**J Clarkson**  
Officer with delegated authority under Section 20 of the Environmental Protection Act 1986



## 1. Application details

### 1.1. Permit application details

Permit application No.: 7859/1  
Permit type: Area Permit

### 1.2. Applicant details

Applicant's name: Pilbara Ports Authority

### 1.3. Property details

Property: Lot 370 on Deposited Plan 35619, Wedgefield  
Lot 556 on Deposited Plan 60836, Wedgefield  
Local Government Authority: PORT HEDLAND, TOWN OF  
DWER Region: Pilbara  
DBCA District: N/A  
Localities: Boodarie

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
55.7416		Mechanical Removal	Road maintenance

### 1.5. Decision on application

Decision on Permit Application: Granted  
Decision Date: 5 April 2018  
Reasons for Decision: The clearing permit application was received on 9 November 2017 and has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986* (EP Act). It has been concluded that the proposed clearing is at variance to clearing principle (f), is not at variance to principle (h) and is not likely to be at variance to the remaining clearing principles.

The Delegated Officer noted that the proposed clearing may impact on riparian vegetation growing in association with nearby watercourses, however determined that the proposed clearing is unlikely to have any significant environmental impacts. The Delegated Officer also noted the extent of weeds within the application area and determined that the proposed clearing may increase the risk of weeds being introduced or spread into adjacent areas. Weed management measures will minimise impacts to adjacent areas.

## Site Information

**Clearing Description:** The application is to clear up to 55.7416 hectares of native vegetation within Lot 370 on Deposited Plan 35619 and Lot 556 on Deposited Plan 60836, Wedgefield, for the purpose of road maintenance.

**Vegetation Description:** The application area is mapped as three Beard vegetation associations:

- 647, described as hummock grasslands, dwarf-shrub steppe; *Acacia translucens* over soft spinifex;
- 127, described as bare areas, mud flats; and
- 43, described as Low forest; mangroves (Kimberley) or thicket; mangroves (Pilbara) (Shepherd et al, 2001).

A desktop assessment and past surveys of the Utah, Point Berth development area identified the terrestrial vegetation type within the project area as grassland on sandy islands scattered within the bare mudflats (Pilbara Ports Authority, 2017).

**Vegetation Condition:** Good; Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).  
To  
Completely Degraded; No longer intact, completely/almost completely without native species (Keighery, 1994).

The majority of the application has been subject to a high level of disturbance from previous clearing activities in the local area. These activities were for infrastructure such as roads, powerlines, drains, buildings and tracks. There was also a number of weed species within the application area. The application may be exempt from requiring a clearing permit in accordance with Regulation 5, Item 22, Existing transport corridors (Clearing for) however, the exact locations are hard to determine and applying for the 55.7416 hectares will ensure the applicant is compliant with EP Act.

**Soil and Landform Type:** The application area is mapped within two land subsystems:

- Littoral Land System, described as Bare coastal mudflats with mangroves on seaward fringes, samphire flats, sandy islands coastal dunes and beaches (mapped over approximately eight per cent of the application area); and
- Uaroo Land System, described as Broad sandy plains supporting shrubby hard and soft spinifex grasses (mapped over approximately seven per cent of the application area) (Schoknecht et al., 2004).

**Comment:**

The local area referred to in this assessment is defined as the area within a 20 kilometre radius of the application area. Aerial imagery indicates that the local area retains approximately 75 per cent native vegetation cover.

**Figure 1: Map of application area**



**Figure 2: Photographs of vegetation within the application area (Pilbara Ports Authority, 2017)**

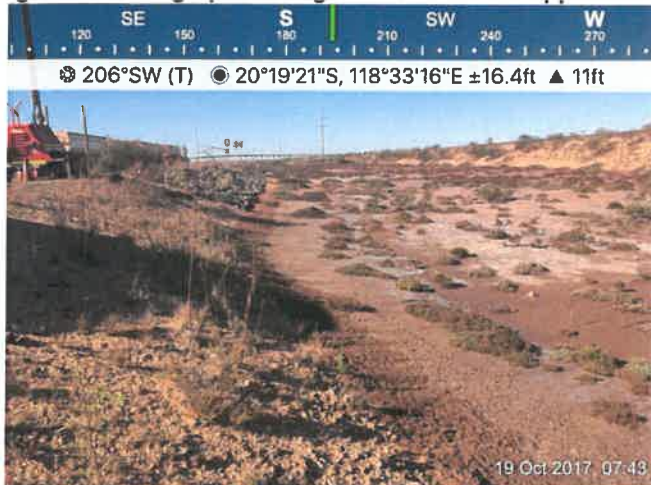


Photo 1: Taken at the northern section of the application area as indicated within Figure 1.



Photo 2: Taken at the central northern section of the application area as indicated within Figure 1.



Photo 3: Taken at the central southern section of the application area as indicated within Figure 1.



Photo 4: Taken at the southern section of the application area as indicated within Figure 1.

## 2. Assessment of application against clearing principles

### (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

#### Proposed clearing is not likely to be at variance to this Principle

The application is to clear up to 55.7416 hectares of native vegetation within a linear footprint of approximately 7.3 kilometres in length, adjacent to the established Utah Road.

As discussed in Section 2, the vegetation within the application area comprises grasslands on sandy islands scattered within the bare mudflats, the majority of which is in a degraded (Keighery, 1994) condition.

According to available databases, 12 fauna specially protected under the *Wildlife Conservation Act 1950*, three priority fauna, two other specially protected fauna and 40 bird species protected under international agreement, have been recorded within the local area. Fauna habitat and conservation significant fauna species are discussed under Principle (b).

According to available databases and advice received from the Department of Biodiversity, Conservation and Attractions (DBCA), nine priority flora have been recorded within the local area. Of these, Priority 1 flora species, *Tephrosia rosea* var. Port Hedland (A.S. George 1114), Priority 2 flora species *Gomphrena pusilla*, Priority 3 flora species *Gymnanthera cunninghamii*, *Eragrostis crateriformis*, *Gomphrena leptophylla* and Priority 4 flora species *Goodenia nuda*, *Bulbostylis burbidgeae* have been recorded from the same soil and vegetation types as found within the application area, as discussed below.

- *Tephrosia rosea* var. Port Hedland (A.S. George 1114) (Priority 1) is known from 39 Western Australian Herbarium records and five locations in the Pilbara region. Many of the records are associated with coastal dunes and road verges, suggesting the taxon may be a disturbance opportunist. Two of these locations are associated with old WA Herbarium records and it is unclear if they are still extant. (DBCA, 2018). The nearest record of this species has been mapped within the application area, with the record identified by a Western Australian Herbarium botanist who observed individuals of *T. rosea* var. Port Hedland

within the area proposed for clearing but was not able to provide an estimation of population size due to limited access (DBCA, 2018). The application will impact on the species however, there is only a small amount of potential habitat within the application area and habitat is unlikely to be sustainable in the longer term in the context of the broader clearing where the local area has been previously cleared for ports and other infrastructure (DBCA, 2018). Noting the above, it is unlikely the proposed clearing will impact on the conservation values of *T. rosea* var. Port Hedland (A.S. George 1114)

- *Gomphrena pusilla* (Priority 2) is known from 15 Western Australian Herbarium records and two disjunct locations, being Port Hedland in the Pilbara and Broome in the Kimberley. Of the four WA Herbarium records in the Port Hedland locality two records are old and another appears to be adjacent to an approved clearing permit. Suitable habitat within its recorded range in this locality appears to be heavily impacted by clearing for ports and other infrastructure. The northern portion of the application area would appear to bisect suitable habitat for *G. pusilla* (DBCA, 2018). However, noting the high level of disturbance from previous clearing activities and the construction of infrastructure such as roads, powerlines, drains, buildings and tracks, the application area has been highly modified and not likely to contain specimens of *G. pusilla*.

With regard to the Priority 3 and 4 listed taxa noted above, all have broad distributions (including some into the Northern Territory and Queensland) and, if these taxa were to occur, impacts from this clearing proposal are unlikely to be significant with respect to the broader conservation of these taxa (DBCA, 2018).

According to available databases, no priority ecological communities are mapped within the local area (20 kilometre radius).

Given the above, the application area is unlikely to comprise a high level of biological diversity. The proposed clearing is not likely to be at variance to this Principle.

Weed management measures will minimise impacts to adjacent areas.

**(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.**

**Proposed clearing is not likely to be at variance to this Principle**

A total of 191 bird, 67 fish, 42 mammal, 89 reptile, 12 amphibian and 135 invertebrate species have been recorded within 20 kilometres of the application area, including 12 fauna specially protected under the *Wildlife Conservation Act 1950*, three priority fauna, two other specially protected fauna and 40 bird species protected under international agreement (DBCA, 2007-).

Habitat value within the application area is decreased by the widespread clearing and development that has occurred to the north, west and south of the application area. While bare mud flats and grassland vegetation within the application area may provide foraging habitat for threatened or migratory bird species protected under international agreement, available habitat occurs outside the application area and the proposed clearing is not likely to comprise significant habitat for any fauna species.

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

**(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.**

**Proposed clearing is not likely to be at variance to this Principle**

According to available databases, no rare flora species have been recorded within the local area. Noting this, the condition of the vegetation within the application area and the extensive weed invasion, the application area is not likely to include, or be necessary for the continued existence of rare flora.

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

**(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.**

**Proposed clearing is not likely to be at variance to this Principle**

According to available databases, no threatened ecological communities are mapped within the local area (20 kilometre radius), therefore the application area is not likely to comprise the whole or part of, or be necessary for the maintenance of a threatened ecological community.

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

**(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.**

**Proposed clearing is not likely to be at variance to this Principle**

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).

As indicated in Table 1, the application area is represented by three Beard vegetation associations. The remaining extents of native vegetation within the bioregion, and mapped vegetation association within the bioregion and state are above the 30 per cent threshold (Government of Western Australia, 2018).

As discussed in Section 2, the local area retains approximately 75 per cent native vegetation cover. Noting this, the application does not occur in an extensively cleared landscape. The application area represents less than one per cent of this extent.

Noting the vegetation extents, the application area is unlikely to be significant as a remnant within an extensively cleared area. The proposed clearing is not likely to be at variance to this Principle.

**Table 1: Vegetation extents**

	Pre-European	Current Extent	Remaining	Current Extent in DCBA Managed Lands	
	(ha)	(ha)	(%)	(ha)	(%)
<b>IBRA Bioregion*</b>					
Pilbara	17 808 657	17 733 583	99.5	1 802 372	10
<b>Beard vegetation association</b>					
647	195 859	191 710	98	0	0
127	716 160	691 516	96.5	68 192	10
43	193 260	175 894	91	44 327	25
<b>Beard vegetation association in the Bioregion*</b>					
647	195 859	191 710	98	0	0
127	177 749	159 595	90	3 703	2.3
43	17 053	17 708	86	253	0.02

**(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.**

**Proposed clearing is at variance to this Principle**

According to available databases, several watercourses intersect with the application area. The majority of the watercourses are minor non-perennial drainage lines with the exception of one significant stream referred to as South West Creek. The creek intersect with the south central portion of the application area. Approximately 40 per cent of the application area also occurs within a saline coastal flat. The saline flats are adjacent to the coast and cover large areas.

The native vegetation within the application area is likely to be growing in association with a creek, several minor watercourses and a coastal saline flat. As indicated within the photos under Figure 2, the application area has been extensively impacted upon from previous works in the area, with a large amount of areas impacted upon from a variety of weed species. Noting this, the proposed clearing is unlikely to significantly impact on the creek, minor watercourses or the coastal saline flat from the removal of native vegetation growing in association with these areas.

Given the above, the proposed clearing is at variance to this Principle.

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

**Proposed is not likely to be at variance to this Principle**

As discussed in Section 1, the majority of the application area is located within the Littoral Land System with the remainder seven per cent within the Uaroo Land System (Schoknecht et al., 2004).

As discussed under Principle (f), a creek, several minor watercourses and coastal saline flat intersects with the application area.

According to available databases, the application area has relatively flat topography, an average rainfall of 700 millimetres per annum, with groundwater mapped at 3,000-7,000 total dissolved solids (milligrams per litre).

Given the extent of the disturbance of the application area, the condition of the vegetation within the application area, and the long linear shape of the application area, the proposed clearing is unlikely to cause appreciable land degradation in the forms of wind and water erosion or salinity.

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

**(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.**

**Proposed clearing is not at variance to this Principle**

According to available datasets, no conservation areas have been recorded within the local area. Noting this, the proposed clearing is not likely to impact on the environmental values of any conservation areas.

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



- (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.**

**Proposed clearing is not likely to be at variance to this Principle**

As discussed under Principle (f), a creek, several minor watercourses and coastal saline flat intersects the application area.

As discussed under Principle (g), groundwater salinity is mapped at 3,000-7,000 total dissolved solids (milligrams per litre).

The clearing of 55.7416 hectares of native vegetation partially within coastal saline flat may also increase sedimentation washed downstream and into the watercourses that intersect with the application area. However, given the presence of surrounding cleared areas, the natural level of sedimentation likely to occur within these watercourse and that the area will be maintained as a road, the proposed clearing is not likely to significantly impact surface water quality, groundwater quality

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

- (j) **Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.**

**Proposed clearing is not likely to be at variance to this Principle**

As discussed under Principle (f), approximately 40 per cent of the application area lies within coastal saline flat, such areas are subject to tidal movements and can be inundated with water. Additionally, the Pilbara region is subject to localised flooding from intense rains that may occur during the wet season.

Noting the above in conjunction with heavily impacted application by clearing for ports and other infrastructure already and the long linear shape of the application area, the proposed clearing is not likely to cause or exacerbate the incidence or intensity of flooding.

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

**Planning instruments and other relevant matters.**

The Department of Biodiversity Conservation and Attractions recommends that further survey works be undertaken outside of the application area for *Tephrosia rosea* var. Port Hedland (A.S. George 1114) (Priority 1) and *Gomphrena pusilla* (Priority 2) within suitable habitat within their current known range may help to further clarify the broader distribution of these species (DBCA, 2018).

The application was advertised on the Department of Water and Environmental Regulation's website on 22 December 2017 for a 21 day public submission period. No submissions were received during this period.

No registered Aboriginal Sites of Significance occur within the application area.

**3. References**

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of Biodiversity Conservation and Attractions (DBCA) (2007- ) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed November 2017
- Department of Biodiversity Conservation and Attractions (DBCA) (2018) Advice provided in relation to clearing permit application CPS 7859/1, received 27 February 2018 (DWER Ref: A1635829).
- Government of Western Australia (2018). 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of November 2017. WA Department of Parks and Wildlife, 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.
- Pilbara Ports Authority (2017) Supporting Information received in relation to Clearing Permit Application CPS 7859/1 Pilbara Ports Authority (DWER Ref:A 1566600)
- Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia – Overview of Methodology and outputs' Resource Management Technical Report No. 280. Department of Agriculture.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

GIS Databases:  
Aboriginal Sites of Significance  
DBCA Estate  
Groundwater salinity  
Hydrography, linear  
Remnant vegetation  
SAC bio datasets (accessed March 2017)  
Soils, Statewide  
Topographic contours