



## 1. Application details

### 1.1. Permit application details

Permit application No.: 1237/1  
 Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Anna Plains Cattle Company Pty Ltd

### 1.3. Property details

Property: LOT 38 ON PLAN 220702 ( EIGHTY MILE BEACH 6725)  
 Local Government Area: Shire Of Broome  
 Colloquial name:

### 1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|--------------------|-----------|--------------------|---------------------|
| 6.3                |           | Mechanical Removal | Aquaculture         |

## 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 73: Grasslands, short bunch grass savanna, grass; salt water grassland (Sporobolus virginicus) (Hopkins et al, 2002). | The area under application is comprised of scattered low shrublands of Halosarcia spp. (samphire), Frankenia spp. (frankeniania) and occasional taller shrubs of Melaleuca lasiandra and patch grasses including Sporobolus virginicus (Payne, 2004). | Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994) | The description was determined by a desktop study using GIS databases, description of the Anna Land System by Payne (2004) and photographs of the vegetation in the area under application. |

## 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 vegetation of the area is comprised of a single, relatively uniform community, represented by Beard Vegetation Association 73 (Hopkins et al, 2001). Species likely to be present include Halosarcia spp. (Samphire), Frankenia spp (Frankenia), Melaleuca lasiandra and Sporobolus virginicus (Salt water grassland) (Payne, 2004). This community type is illustrated by site photos of the area under application. The area is prone to salinity.

It is unlikely that the area under application is higher in biodiversity values than the surrounding area. Salinity impacts have resulted in similar vegetation structure along the coastal area of Anna Plains Station.

Therefore, the proposal is not likely to be at variance to this principle.

**Methodology** Permit Application;  
 GIS Database:  
 - Pre-European Vegetation - DA 01/01

### (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 following species that are protected under the Wildlife Conservation Act 1950, are likely to be found within a 10 kilometre radius of the proposal site:  
 Australian Painted Snipe (Rostratula australis) (Schedule 1) - preferred habitat of fringes of swamps, dams, marshy areas with grass cover (Pizzey, 2003) (Limited possibility).

Mulgara (*Dasyercus cristicauda*) (Schedule 1) - preferred habitat of sand dunes (Strahan, 1995).  
Greater Bilby (*Macrotis lagotis*) - preferred habitat of mulga scrublands and hummock grasslands on sandplains or along drainage or salt lake systems ([www.calm.wa.gov.au](http://www.calm.wa.gov.au), 2007).  
Northern Marsupial Mole (*Notoryctes caurinus*) (Schedule 1) - preferred habitat of sand dunes, inter-dunal flats and sandy soils along river flats (Strahan, 1995) (Difficult to determine).  
Great Desert Skink (*Egernia kintorei*) (Schedule 1) - preferred habitat of spinifex grasslands on sandplains and interdunal areas ([www.environment.gov.au](http://www.environment.gov.au), 2007) (Unlikely).

The proposed clearing is not likely to impact upon these species of conservation significance, as the type of vegetation to be cleared is not the preferred habitat of the fauna.

The clearing of 6.3 hectares of vegetation is not likely to significantly impact the fauna of the area.

Therefore, the proposal is not likely to be at variance to this Principle.

**Methodology** Department of Environment and Heritage (2007);  
[www.calm.wa.gov.au](http://www.calm.wa.gov.au) (2007);  
[www.environment.gov.au](http://www.environment.gov.au) (2007);  
Pizzey (2003);  
Strahan (1995)

**(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**

A desktop survey found there were no Declared Rare or Priority Flora within the proposal area, nor within a 50 kilometre radius.

Therefore, the proposal is not likely to be at variance to this Principle.

**Methodology** 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**

A desktop survey found there were no Threatened Ecological Communities within the proposal area, nor within a 50 kilometre radius.

Therefore, the proposal is not likely to be at variance to this Principle.

**Methodology** GIS Database:  
- Threatened Ecological Communities - CALM 15/7/03

**(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 State Government is committed to the National Objectives and Targets for Biodiversity Conservation which includes a target that prevents clearance of ecological communities with a current extent below 30% of the pre-European settlement extent.

The area applied to clear is a component of Beard Vegetation Association 73 (Hopkins et al, 2001). None of this Association is located within any CALM or IUCN Class I-IV Reserves (Shepherd et al, 2001). There is 258,672 hectares of this Association remaining, approximately 99% of the pre-European extent (Shepherd et al, 2001), which indicates it is well represented in the natural environment. Therefore, this Association is of least concern for biodiversity conservation.

Clearing of 6.3 hectares is unlikely to significantly reduce the remaining extent of this vegetation Association, therefore the proposal is not likely to be at variance to this Principle.

**Methodology** Hopkins et al (2001);  
Shepherd et al (2001);  
  
GIS Database:  
- Pre-European Vegetation - DA 01/01;  
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00;  
- Interim Biogeographic Regionalisation of Australia (subregions) - EA 18/10/00.



**(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**

A desktop survey did not identify any watercourses or wetlands within or adjacent to the area under application, however the area known as Anna Plains is an ephemeral wetland, becoming inundated during high rainfall events. Eighty Mile Beach, which is listed as a Ramsar Wetland, is located less than 8 kilometres from the proposal area.

The proposal is not likely to impact on the wetlands due to the small scale of the clearing in comparison to the great expanse covered by Anna Plains and the dune system separating Eighty Mile Beach from the clearing.

Therefore, the proposal is not likely to be at variance to this Principle.

**Methodology** GIS Database:  
- Hydrography, linear - DOE 1/02/04;  
- Lakes 250K - GA;  
- Rivers 250K - GA;

**(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 under application is located within the Anna Land System as defined by Van Vreeswyk et al (2004). The soil types in this area comprise of calcareous loamy earths, which have low to moderate potential for wind and water erosion (Van Vreeswyk et al, 2004). The Department of Agriculture and Food advises the proposed clearing is not likely to cause land degradation, therefore the proposal is not likely to be at variance to this Principle.

**Methodology** Van Vreeswyk et al (2004);  
GIS Database:  
- Soils, Statewide - DA 11/99;  
- Groundwater Salinity, Statewide - 22/02/00;

**(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**

An area of the coastal strip on Anna Plains station is covered by a Section 16A Agreement under the Conservation and Land Management Act 1984. This agreement provides for the protection of the conservation values of this area. The proposal is not located within this area and is not likely to impact on it.

Therefore, this proposal is not likely to be at variance to this Principle.

**Methodology** GIS Database:  
- CALM Managed Lands and Waters - CALM 1/07/05

**(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 proposed area to be cleared is not in a Public Drinking Water Source Area. No lakes, rivers or wetlands are located within an 8km radius of the area under application. The area is prone to inundation during high rainfall events. Due to the large distances between the application area and the waterways, and the small size of the proposed clearing, it is unlikely that the proposal will impact on the surface water quality.

Groundwater is highly influenced by sea water intrusion within the Anna Plains area, and results in saline affected soils. The removal or inundation of this vegetation is not likely to increase groundwater movements.

Therefore, the proposal is not likely to be at variance to this Principle.

**Methodology** GIS Database:  
- Public Drinking Water source Areas (PDWSA's) -DOE 29/11/04;  
- Hydrography, linear (hierachy) - DOE 13/4/05;

**(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**

Flooding occurs seasonally over the December to March period, where the flood height and duration are lengthy and extreme. The dune system of Anna Plains creates a natural dam causing retention of rainwater and flood events. The clearing of 6.3 hectares of vegetation is not likely to increase the incidence or intensity of these naturally occurring flood events.

Therefore, the proposal is not likely to be at variance to this Principle.

**Methodology** GIS Database:  
- Rainfall, Mean Annual - BOM 30/09/01

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

**Comments**

This clearing permit forms part of a Pastoral Diversification Permit Application received by the Pastoral Lands Board (Department of Planning and Infrastructure) under Section 122 of the Land Administration Act 1997.

No objections were raised in relation to this application to clear.

There is one Native Title claim over the area under application, by the Nyangumarta peoples (WC98/65). The requirements of the future act provisions of the Native Title Act 1993 in granting this clearing permit have been complied with.

The proponent has advised that groundwater will be used for the aquaculture project. The proponent is advised to contact the Department of Water for a licence to take groundwater.

Aquaculture activities are listed as Prescribed Premises under Schedule 1 of the Environmental Protection Regulations 1987. The proponent is advised to contact the Industry Regulation Branch of the Department of Environment and Conservation to determine licensing requirements.

The proposed clearing occurs in an area that is covered by the following Registered Indigenous Heritage Site - North West Coastal Highway (ID 114483). It is the proponent's responsibility to comply with the Aboriginal Heritage Act 1972 and ensure that no Sites of Aboriginal Significance are damaged through the clearing process.

The area under application has been subject to two referrals to the Environmental Protection Authority. Neither of the referrals is specific to the proposal under assessment. One of the referrals is in relation to the Shire of Broome Town Planning Scheme 4 Amendment 29 (CRN 215194). This application is not at variance to this decision. The second referral is in relation to fire in the Kimberley (CRN 214594). This application is not at variance to this decision.

**Methodology** GIS Database:  
- Native Title Claims - DLI 7/11/05  
- Aboriginal Sites of Significance - DA  
- Environmental Impact Assessments - DOE 24/02/06

**4. Assessor's comments**

| Purpose     | Method             | Applied area (ha)/ trees | Comment   |
|-------------|--------------------|--------------------------|---|
| Aquaculture | Mechanical Removal | 6.3                      | Assessable criteria have been addressed and the proposal was found not likely to be at variance to all principles.<br>The Assessing Officer recommends that the permit should be refused as the following approvals have not been received:<br>* Water allocation licence from the Department of Water; and<br>* Prescribed Premises licence from the Department of Environment and Conservation. |

**5. References**

DAFWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. DEC TRIM ref DOC15768.  
Department of the Environment and Water Resources (2007) Protected Matters Search Tool, EPBC Act Protected Matters Report. <www.environment.gov.au> DEC TRIM Ref: DOC16352  
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.



Payne, A.L. (2004) Land Systems. In Technical Bulletin No 92 an inventory and condition survey of the Pilbara region, Western Australia. Department of Agriculture, Government of Western Australia.

Pizzey, G. (2003) A Field Guide to the Birds of Australia. Collins Publishers.

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.

Strahan, R. (1995) The Mammals of Australia. The National Photographic Index of Australia Wildlife. Reed Books.

Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A., and Hennig, P. (2004) Technical Bulletin No 92 an inventory and condition survey of the Pilbara region, Western Australia. Department of Agriculture, Government of Western Australia.

[www.calm.wa.gov.au](http://www.calm.wa.gov.au)  
[www.environment.gov.au](http://www.environment.gov.au)

## 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)                    |

