Government of **Western Australia**
Department of **Mines and Petroleum**

# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

**Permit application No.:** 5920/1
**Permit type:** Purpose Permit

### 1.2. Proponent details

**Proponent's name:** **DBP Development Group Nominees Pty Ltd**

### 1.3. Property details

**Property:** Pipeline Licence No. 103
**Local Government Area:** Shire of Ashburton
**Colloquial name:** Wheatstone-Ashburton West Pipeline

### 1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|---|---|---|---|
| 358 | | Mechanical Removal | Pipeline Construction and Associated Activities |

### 1.5. Decision on application

**Decision on Permit Application:** Grant
**Decision Date:** 6 March 2014

## 2. Site Information

### 2.1. Existing environment and information

#### *2.1.1. Description of the native vegetation under application*

**Vegetation Description** Beard vegetation associations have been mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. Five Beard vegetation associations have been mapped within the application area (GIS Database):

127: Bare areas; mudflats;

589: Mosaic: Short bunch grassland – savanna / grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex;

608: Mosaic: Shrublands; *Acacia victoriae* & snakewood scrub patches / Short bunch grassland – savanna / grass plain (Pilbara);

676: Succulent steppe; samphire; and

1271: Bare areas; claypans.

A level 1 flora and vegetation survey of the pipeline project area was undertaken by Mattiske Consulting Pty Ltd (Mattiske) in April 2013. The survey area covered a wider corridor than the application area and also covered an area north of the application area that is not part of the current application. The flora and vegetation survey indentified a total of 30 different vegetation communities (Mattiske, 2013):

**Tidal Mudflats and Tidal Creeks**

T1: *Tecticornia* spp. low scattered shrubs;

T2: *Avicennia marina* mid open scrubland;

**Claypans and Clayey Plains**

C1: Bare Claypan;

C2: *Tecticornia* spp. low sparse chenopod shrubland with *Sporobolus mitchellii*, *Eriachne helmsii* low isolated tussock grasses;

C3: *Acacia tetragonophylla*, *Acacia synchronicia*, **Vachellia farnesiana* mid isolated shrubs over *Urochloa occidentalis* var. *occidentalis*, *Chrysopogon fallax*, *Sporobolus mitchellii*, **Cenchrus ciliaris* low open tussock grasses;

C4: *Tecticornia* spp. low shrubland;

**Coastal Sand Dunes**

CD1: *Acacia coriacea* subsp. *coriacea* tall shrubland over *Crotalaria cunninghamii*, *Trichodesma zeylanicum* var.

*grandiflorum* mid open shrubland over *Triodia epactia* mid open hummock grassland with **Cenchrus ciliaris* low open tussock grassland;

**Coastal Sand and Clayey Plains**

CP1: *Eucalyptus victrix* low open woodland over *Acacia tetragonophylla*, *Acacia sclerosperma* subsp. *sclerosperma*, *Scaevola spinescens* tall sparse shrubland over *Triodia epactia* mid open hummock grassland with *Sporobolus mitchellii*, *Chrysopogon fallax*, **Cenchrus ciliaris* low sparse tussock grassland;

CP2: *Eucalyptus victrix* low open woodland over *Abutilon oxycarpum*, *Ipomoea muelleri*, *Panicum decompositum* mid sparse forbland over *Enteropogon ramosus*, *Eriachne helmsii*, *Sporobolus mitchellii* low open tussock grassland;

CP3: *Acacia tetragonophylla* low scattered shrubs over *Triodia epactia* low hummock grassland with **Cenchrus ciliaris* low open tussock grassland;

CP4: **Prosopis pallida*, *Acacia tetragonophylla*, *Acacia synchronicia* tall scattered shrubs over *Triodia epactia* mid sparse hummock grassland with **Cenchrus ciliaris* low open tussock grassland;

CP5: *Sporobolus mitchellii*, *Eriachne* aff. *benthamii*, *Eriachne benthamii, Eulalia aurea* mid tussock grassland;

**Inland Sand Dunes**

ID1: *Grevillea stenobotrya* low sparse shrubland over *Acacia stellaticeps* mid open shrubland over *Triodia epactia* hummock grassland;

ID2: *Acacia stellaticeps*, *Acacia sclerosperma* subsp. *sclerosperma* mid sparse shrubland with *Bonamia erecta*, *Hibiscus brachychlaenus, Scaevola sericophylla* low sparse shrubland over *Triodia epactia* mid hummock grassland with **Cenchrus ciliaris*, *Eragrostis eriopoda* low sparse tussock grassland;

ID3: *Grevillea stenobotrya* tall open shrubland over *Crotalaria cunninghamii*, *Trichodesma zeylanicum* var. *grandiflorum* mid open shrubland over *Triodia epactia* mid open hummock grassland;

**Inland Sand and Clayey Plains**

IP1: *Eucalyptus victrix* low scattered trees over *Acacia synchronicia*, *Acacia xiphophylla*, *Acacia sclerosperma* subsp. *sclerosperma* tall open shrubland over *Triodia lanigera* mid hummock grassland with **Cenchrus ciliaris* low sparse tussock grassland;

IP2: *Eucalyptus victrix* low isolated trees over *Acacia synchronicia, Acacia tetragonophylla, Acacia xiphophylla* tall sparse shrubland with *Senna artemisioides* subsp. *oligophylla, Scaevola spinescens* low sparse shrubland over *Triodia epactia* mid hummock grassland with *Eriachne helmsii* , **Cenchrus ciliaris* low open tussock grassland;

IP3: *Eucalyptus victrix, Grevillea striata* low isolated trees over *Hakea chordophylla*, *Acacia sclerosperma* subsp. *sclerosperma, Acacia trachycarpa* tall open shrubland with *Acacia synchronicia, Acacia tetragonophylla* low sparse shrubland over *Triodia epactia* mid isolated hummock grasses with **Cenchrus ciliaris* low sparse tussock grassland;

IP4: *Acacia xiphophylla*, *Acacia synchronicia* low open shrubland over *Senna artemisioides* subsp. *oligophylla*, *Solanum lasiophyllum* low sparse shrubland over *Eragrostis xerophila*, **Cenchrus ciliaris* low sparse tussock grassland;

IP5: *Acacia synchronicia*, *Acacia tetragonophylla*, *Acacia sclerosperma* subsp. *sclerosperma* low sparse shrubland over *Chrysopogon fallax*, *Eriachne helmsii*, *Urochloa occidentalis* var. *occidentalis* low open tussock grassland;

IP6: *Acacia synchronicia*, *Acacia sclerosperma* subsp. *sclerosperma*, *Acacia xiphophylla* low sparse shrubland over *Eragrostis eriopoda*, *Eriachne aristidea*, **Cenchrus ciliaris* low open tussock grassland;

IP7: *Eucalyptus victrix* low open woodland over *Acacia tetragonophylla*, *Acacia synchronicia*, *Cullen leucanthum* mid sparse shrubland over *Eriachne helmsii, Eulalia aurea*, **Cenchrus ciliaris* low sparse tussock grassland;

IP8: *Eucalyptus victrix* low isolated trees over *Acacia tetragonophylla*, *Acacia synchronicia* tall isolated shrubs with *Acacia stellaticeps*, *Acacia coriacea* subsp. *coriacea*, *Senna artemisioides* subsp. *oligophylla* low sparse shrubland over *Triodia epactia* mid hummock grassland with *Eulalia aurea, Eragrostis eriopoda*, **Cenchrus ciliaris* low sparse tussock grassland;

**Inland Floodplains and Depressions:**

IF1: *Eucalyptus victrix* low open woodland over *Acacia synchronicia*, *Acacia tetragonophylla*, *Scaevola spinescens* tall sparse shrubland with *Rhynchosia minima*, *Senna artemisioides* subsp. *oligophylla*, *Eremophila longifolia* mid sparse shrubland over *Triodia epactia* low isolated hummock grasses with *Eriachne helmsii*, *Chrysopogon fallax*, *Urochloa occidentalis* var. *occidentalis* low sparse tussock grassland;

IF2: *Acacia xiphophylla*, *Acacia synchronicia* mid open shrubland over *Salsola australis*, *Rhagodia eremaea*, *Maireana* spp. mid sparse chenopod shrubland over *Eriachne benthamii*, *Sporobolus australasicus*, **Cenchrus ciliaris* low open tussock grassland;

IF3: *Acacia synchronicia*, *Acacia xiphophylla*, *Acacia trachycarpa* low sparse shrubland over *Salsola australis*, *Threlkeldia diffusa*, *Rhagodia eremaea* mid sparse chenopod shrubland with *Chrysopogon fallax*, *Enteropogon ramosus*, **Cenchrus ciliaris* low open tussock grassland;

IF4: *Eucalyptus victrix* low open woodland over *Acacia synchronicia*, *Acacia tetragonophylla*, *Scaevola spinescens*

tall sparse shrubland over *Sporobolus mitchellii*, *Eriachne helmsii*, *Eulalia aurea* low open tussock grassland;

IF5: *Eucalyptus victrix* low open woodland over *Acacia synchronicia*, *Acacia tetragonophylla*, *Senna artemisioides* subsp. *oligophylla* mid sparse shrubland over *Panicum decompositum*, *Rhynchosia minima*, *Neptunia dimorphantha* mid sparse forbland with *Eriachne helmsii*, *Eragrostis xerophila*, *Iseilema membranaceum* low open tussock grassland;

**River Zones and Drainage Channels**

R1: *Eucalyptus victrix*, **Parkinsonia aculeata* low woodland over *Acacia tetragonophylla*, *Acacia coriacea* subsp. *coriacea* tall open shrubland over *Eulalia aurea*, *Leptochloa digitata* low tussock grassland;

R2: *Eucalyptus victrix*, *Eucalyptus camaldulensis* low woodland over *Scaevola spinescens, Acacia coriacea* subsp. *coriacea*, *Melaleuca glomerata* mid sparse shrubland over *Ipomoea muelleri*, *Euphorbia boophthona*, **Portulaca oleracea* low sparse forbland with **Cenchrus ciliaris* low sparse tussock grassland.

**Clearing Description** Wheatstone-Ashburton West Pipeline.
DBP Development Group Nominees Pty Ltd (DBPDGN) proposes to clear up to 358 hectares within a boundary of approximately 1,084.8 hectares for the purposes of pipeline construction and associated activities. The project is located 13 kilometres south-west of Onslow and runs in a general south-easterly direction for approximately 110 kilometres.

**Vegetation Condition** Pristine: No obvious signs of disturbance (Keighery, 1994);

to

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

**Comment** The vegetation condition was derived from a report prepared by Mattiske (2013).

Above average rainfall was recorded in December 2012, January 2013 and February 2013. However, March 2013 recorded no rainfall and high temperatures which resulted in annual species and perennial grasses being in poor health at the time of the flora survey (Mattiske, 2013).

## 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 flora and vegetation survey undertaken by Mattiske (2013) identified 30 different vegetation communities. Given the application area spans a length of approximately 110 kilometres it would be expected that a high number of vegetation communities would be present. The majority of the vegetation was in pristine to excellent condition. The primary causes of disturbance within the application area were caused by clearing, vehicle and cattle movement and grazing activities (Mattiske, 2013). Coastal communities CP3 and CP4 are in a degraded condition due to the domination of Buffel Grass (*Cenchrus ciliaris*) in the area (Mattiske, 2013). None of the vegetation communities were identified as being a Threatened or Priority Ecological Community (Mattiske, 2013).

A total of 139 flora taxa from 80 genera and 28 families were recorded by the flora survey undertaken by Mattiske (2013). Approximately 97% of the flora species potentially present within the survey area were recorded (Mattiske, 2013). Whilst this percentage seems high for a survey area so large, this is due to the vegetation communities being comprised of similar dominant species. Compared to other surveys within the Pilbara, the average number of species found at each site indicates that the application area has a relatively low species diversity (Mattiske, 2013). The Priority 3 flora species *Eremophila forrestii* subsp. *viridis* and *Grevillia subterlineata* were both recorded at one location within the application area (Mattiske, 2013). One plant of *Grevillia subterlineata* was recorded which was a sterile specimen and therefore, was not able to be positively identified (Mattiske, 2013). There were three individuals of *Eremophila forrestii* subsp. *viridis* recorded within the application area. The vegetation communities these species were recorded from were well represented within the application area. The proposed clearing is not likely to have a significant impact on either of these species.

Based on known records and habitats present, seven frog, 99 reptile, 29 mammal and 132 bird species could be present within the application and surrounding area (Ninox, 2013). The high number of species potentially present is due to the application area passing through a wide range of habitats. However, as the proposed clearing is narrow and linear in nature it will only have a minor impact on each of the habitats. The proposed clearing is not likely to have an impact on faunal diversity in the local area.

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

**Methodology** Mattiske (2013)
Ninox (2013)

**(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**

A level 1 fauna survey was conducted by Ninox Wildlife Consulting (Ninox) in April 2013. The fauna survey covered a similar area to the flora survey which also includes areas that are outside the application area. The following 13 habitats were identified within the larger fauna survey area (Ninox, 2013):

1. Tidal mudflats/creeks and mangroves
2. Seasonally inundated inland wetlands
3. Chenopod shrublands
4. Acacia over spinifex and buffel on sand
5. Acacia over spinifex on clay
6. Acacia over grasses on clay
7. Grasslands on clay
8. Shrubs over spinifex on sand
9. Eucalypts and shrubs over grasses on clay
10. Eucalypts and shrubs over spinifex and buffel on clay
11. Eucalypts over shrubs and grasses on clay
12. Riparian zones on clay
13. Riparian zones on sandy clay

The majority of fauna habitats recorded are widespread in the local area, however, mangrove habitat was identified as having particular importance (Ninox, 2013). This habitat is significant as it is the only closed canopy forest in the area and supports a range of species not found elsewhere (Ninox, 2013). The areas of mangroves recorded during the vegetation survey are located outside the application area (Mattiske, 2013). There are areas of fauna habitat type 1 within the application area, however, they are predominately associated with tidal mud flats. Whilst they don't provide the shelter of the mangroves, the tidal mud flats are utilised by a number of shore, wading and migratory birds (Ninox, 2013). Available imagery shows that this habitat has been recently disturbed by a road for the Wheatstone Project that runs along the eastern boundary of the application area in this section. The proposed clearing for installing this pipeline is not expected to have a significant impact on the tidal mudflat and mangrove habitat in the local area.

A higher level of bird species were recorded in riverine habitat, in particular where the application area crosses the Ashburton River as there were still pools of fresh water present (Ninox, 2013). Whilst this habitat is important for local fauna, it has suffered significant degradation from cattle grazing and soil disturbance (Ninox, 2013). Habitat features such as termite mounds are important for a number of vertebrates and cracking clays are used for shelter in the dry months for a range of species including planigales and dunnarts (Ninox, 2013). These habitat features were not restricted to a specific habitat type.

The have been numerous fauna species of conservation significance recorded within or nearby to the application area, in particular bird species (Ninox, 2013). The application area also contains habitat with the potential to support a number of conservation significant species that have not been recorded. Whilst the proposed clearing will impact habitat for conservation significant fauna, the disturbance in each habitat is relatively minor as it will be in a narrow corridor over a large distance. The majority of the disturbance is temporary as only an access track along the pipeline length will be left as permanent disturbance (Strategen, 2013). Given the nature of the disturbance and the representation of the habitats outside the application area, the proposed clearing is not likely to significantly impact native fauna species.

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

**Methodology**

Mattiske (2013)
Ninox (2013)
Strategen (2013)

**(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**

According to available databases, there are no records of any Threatened Flora species within the application area (DPaW, 2014, GIS Database). The flora survey of the application area did not record any Threatened Flora species (Mattiske, 2013).

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

**Methodology**

DPaW (2014)
Mattiske (2013)
GIS Database:
- Threatened and Priority Flora

**(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**

According to available databases, there are no records of any Threatened Ecological Communities (TECs) within the application area (GIS Database). The vegetation survey of the application area did not identify any communities listed as a TEC (Mattiske, 2013).

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

**Methodology**

Mattiske (2013)
GIS Database:
- Threatened Ecological Sites Buffered

**(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 application area falls within the Carnarvon Interim Biogeographic Regionalisation of Australia (IBRA) bioregion in which approximately 99.7% of the pre-European vegetation remains (see table) (GIS Database, Government of Western Australia, 2013).

The vegetation of the application area has been broadly mapped as Beard vegetation associations 127, 589, 608, 676 and 1271 (GIS Database). These vegetation associations have not been extensively cleared as over 94% remains at both a State and bioregional level for all vegetation associations (see table) (Government of Western Australia, 2013). There has not been extensive clearing in the local region and the vegetation the application area passes through is not a remnant nor does it form part of any remnants within the local area (GIS Database).

| | Pre-European area (ha)* | Current extent (ha)* | Remaining %* | Conservation Status** | Pre-European % in DEC Managed Land |
|---|---|---|---|---|---|
| IBRA Bioregion – Carnarvon | 8,382,890 | 8,360,803 | ~99.7 | Least Concern | 11.61 |
| Beard veg assoc. – State | | | | | |
| 127 | 737,724 | 697,871 | ~94.6 | Least Concern | 8.77 |
| 589 | 807,698 | 802,713 | ~99.4 | Least Concern | 1.59 |
| 608 | 313,611 | 313,611 | ~100 | Least Concern | 0.65 |
| 676 | 2,063,413 | 1,963,894 | ~95.2 | Least Concern | 11.33 |
| 1271 | 86,683 | 86,555 | ~99.8 | Least Concern | 0.37 |
| Beard veg assoc. – Bioregion | | | | | |
| 127 | 102,780 | 101,489 | ~98.7 | Least Concern | 2.08 |
| 589 | 78,100 | 77,834 | ~99.7 | Least Concern | 0 |
| 608 | 312,836 | 312,836 | ~100 | Least Concern | 0.65 |
| 676 | 51,983 | 51,232 | ~98.6 | Least Concern | 28.79 |
| 1271 | 41,655 | 41,647 | ~99.9 | Least Concern | 0.28 |

* Government of Western Australia (2013)
** Department of Natural Resources and Environment (2002)

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

**Methodology**

Department of Natural Resources and Environment (2002)
Government of Western Australia (2013)
GIS Database:
- IBRA WA (Regions - Sub Regions)
- Koordarrie 50cm Orthomosaic
- Onlsow 1.4m Orthomosaic
- Pre-European Vegetation
- Tubridgi 1.4m Orthomosaic

**(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 at variance to this Principle**

The application area crosses several non-perennial watercourses (GIS Database). The most significant of these is the Ashburton River which it crosses in two locations, once at the northern end of the application area and again at the southern end (GIS Database). The vegetation community R1 was associated with the Ashburton River in the north and vegetation community R2 is found near the Ashburton River in the south of the application area (Mattiske, 2013). The R1 vegetation community is in a degraded condition due to the existing vehicle tracks and disturbance from cattle (Mattiske, 2013). The R2 community is in excellent condition and comprised a more intact mid and ground storey (Mattiske, 2013). Care should be taken to ensure that the proposed clearing activities do not alter the surface flow of the Ashburton River. A watercourse crossing procedure is being prepared for this project (Strategen, 2013). Potential impacts to the Ashburton River may be minimised by the implementation of a watercourse management condition.

The application area also crosses numerous seasonally inundated wetlands (Mattiske, 2013). The majority of these wetlands are associated with vegetation community C1: bare claypan. This vegetation community only contains isolated mixed tussock grasses (Mattiske, 2013). Given the low density of vegetation, the proposed clearing is not likely to impact on these wetland areas.

In the north of the application area the proposed clearing will impact vegetation community T1 which is associated with tidal mudflats. There was 56.64 hectares of this habitat mapped within the survey boundary (Mattiske, 2013). It is estimated that only 7.71 hectares of this community will be cleared by this project. Available imagery shows that this vegetation community has been recently disturbed within the application area by infrastructure associated with the Wheatstone project.

Given the project will clear vegetation growing in association with watercorurses and wetlands, the proposed clearing is at variance to this Principle. Although the proposed clearing will impact a number of environments associated with watercourses and wetlands, the narrow and linear nature of the disturbance is not likely to have a significant on these waterbodies.

**Methodology**

Mattiske (2013)
Strategen (2013)
GIS Database:
- Hydrography, linear

**(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 application area has been mapped as occurring on the Cheetara, Dune, Globe, Littoral, Minderoo, Nanyarra, Onlsow and Yankagee land systems (GIS Database). Coastal dune systems of the Onslow and Littoral lands systems have a high susceptibility to wind erosion if cleared (Payne et al., 1988). Some inland areas associated with watercourses may be moderately susceptible to erosion (Payne et al., 1988).

The application area is relatively flat, and given the narrow, linear nature of the proposed activities the clearing is not likely to result in any appreciable land degradation (GIS Database). The implementation of a staged clearing condition will ensure that cleared areas are not left open for long periods and therefore, minimise the risk of erosion in areas that may be more susceptible.

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

**Methodology**

Payne et al. (1988)
GIS Database:
- Rangeland Land System Mapping
- Topographic Contours, 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**

The application area does not lie within any conservation areas or Department of Parks and Wildlife managed lands (GIS Database). The Cane River Conservation Park and the former Mt Minnie and Nanutarra pastoral leases are all within 20 kilometres of the application area (GIS Database). However, the proposed clearing will not impact on any ecological links to these conservation areas.

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

**Methodology**

GIS Database:
- DEC Tenure

**(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 application is not located within Public Drinking Water Source Area (PDWSA) (GIS Database). There are no permanent watercourses within the application area, however, it crosses the Ashburton River in two locations (GIS Database). The proposed clearing is a narrow corridor and whilst it will cross a number of seasonally wet areas it is not likely to cause a deterioration of surface water quality.

The groundwater within the application area ranges from 1,000 to 14,000 milligrams per litre of total dissolved solids (GIS Database). Given the nature of the proposed clearing, it would not be expected that it would cause salinity levels within the application or surrounding area to alter.

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

**Methodology**

GIS Database:
- Groundwater Salinity, Satewide
- Hydrography, linear
- Public Drinking Water Source Areas (PDWSAs)

**(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 proposed clearing is for a 30 metre wide corridor over a length of 110 kilometres (Strategen, 2013). The application area is relatively flat across its whole distance (GIS Database). Given this, the proposed clearing is unlikely to cause excessive levels of water runoff that would exacerbate the incidence or intensity of flooding in the local area.

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

**Methodology**

Strategen (2013)
GIS Database:
- Topographic Contours, Statewide

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

**Comments**

There is one native title claim (WC1999/045) over the application area (GIS Database). This claim has been determined by the Federal Court of Australia (GIS Database). However, the tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the Act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

According to available databases, there are several registered Aboriginal sites of significance within the application area (GIS Database). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal sites of significance are damaged through the clearing process.

The project was referred to Environmental Protection Authority (EPA) on 28 October 2013. The determination of the EPA was 'Not Assessed – No Advice Given'. The project was also referred to the (Federal) Department of the Environment under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). The project was deemed not to be a controlled action under the EPBC Act.

It is the proponent's responsibility to liaise with the Department of Environment Regulation and the Department of Water to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The clearing permit application was advertised on 30 December 2013 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

**Methodology**

GIS Database:
- Aboriginal Sites of Significance
- Native Title Claims – Determined by the Federal Court

## 4. References


Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.

DPaW (2014) NatureMap: Mapping Western Australia's Biodiversity - Department of Parks and Wildlife. http://naturemap.dec.wa.gov.au/default.aspx (Accessed 16 January 2014).

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Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Mattiske (2013) Flora and Vegetation of the CS2 - Tubridgi - Wheatstone Gas Pipeline Project Area. Unpublished report prepared for DBP by Mattiske Consulting Pty Ltd, dated April 2013.

Ninox (2013) Level 1 Vertebrate Fauna Assessment of the Proposed Tubridgi to Wheatstone Gas Pipeline, Western Australia. Prepared for Mattiske Consulting Pty Ltd by Ninox Wildlife Consulting, dated April 2013.

Payne, A.L., Mitchell, A.A. and Holman, W.F. (1988) An Inventory and Condition Survey of Rangelands in the Ashburton River Catchment, Western Australia. Department of Agriculture, Western Australia.

Strategen (2013) Wheatstone Ashburton West Pipeline - Application for a Clearing Permit. Unpublished report prepared for DBP Development Group Nominees Pty Ltd by Strategen, dated November 2013.


## 5. Glossary

### Acronyms:

| | |
|---|---|
| **BoM** | Bureau of Meteorology, Australian Government |
| **CALM** | Department of Conservation and Land Management (now DEC), Western Australia |
| **DAFWA** | Department of Agriculture and Food, Western Australia |
| **DEC** | Department of Environment and Conservation, Western Australia |
| **DEH** | Department of Environment and Heritage (federal based in Canberra) previously Environment Australia |
| **DEP** | Department of Environment Protection (now DEC), Western Australia |
| **DIA** | Department of Indigenous Affairs |
| **DLI** | Department of Land Information, Western Australia |
| **DMP** | Department of Mines and Petroleum, Western Australia |
| **DoE** | Department of Environment (now DEC), Western Australia |
| **DoIR** | Department of Industry and Resources (now DMP), Western Australia |
| **DOLA** | Department of Land Administration, Western Australia |
| **DoW** | Department of Water |
| **EP Act** | Environmental Protection Act 1986, Western Australia |
| **EPBC Act** | Environment Protection and Biodiversity Conservation Act 1999 (Federal Act) |
| **GIS** | Geographical Information System |
| **ha** | Hectare (10,000 square metres) |
| **IBRA** | Interim Biogeographic Regionalisation for Australia |
| **IUCN** | International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union |
| **RIWI Act** | Rights in Water and Irrigation Act 1914, Western Australia |
| **s.17** | Section 17 of the Environment Protection Act 1986, Western Australia |
| **TEC** | Threatened Ecological Community |

### Definitions:

**{Atkins, K (2005).** ***Declared rare and priority flora list for Western Australia, 22 February 2005*****. Department of Conservation and Land Management, Como, Western Australia} :-**

| | |
|---|---|
| **P1** | **Priority One - Poorly Known taxa**: taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey. |
| **P2** | **Priority Two - Poorly Known taxa**: taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey. |
| **P3** | **Priority Three - Poorly Known taxa**: taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey. |
| **P4** | **Priority Four – Rare taxa**: taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years. |
| **R** | **Declared Rare Flora – Extant taxa** *(= Threatened Flora = Endangered + Vulnerable)*: taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in |

need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

**X** **Declared Rare Flora - Presumed Extinct taxa**: taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

**{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-**

**Schedule 1** **Schedule 1 – Fauna that is rare or likely to become extinct:** being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.

**Schedule 2** **Schedule 2 – Fauna that is presumed to be extinct:** being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.

**Schedule 3** **Schedule 3 – Birds protected under an international agreement:** being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.

**Schedule 4** **Schedule 4 – Other specially protected fauna:** being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

**{CALM (2005). *Priority Codes for Fauna*. Department of Conservation and Land Management, Como, Western Australia} :-**

**P1** **Priority One: Taxa with few, poorly known populations on threatened lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

**P2** **Priority Two: Taxa with few, poorly known populations on conservation lands**: Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

**P3** **Priority Three: Taxa with several, poorly known populations, some on conservation lands**: Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

**P4** **Priority Four: Taxa in need of monitoring**: Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.

**P5** **Priority Five: Taxa in need of monitoring**: Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

**Categories of threatened species (*Environment Protection and Biodiversity Conservation Act 1999)***

**EX** **Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.

**EX(W)** **Extinct in the wild:** A native species which:
(a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
(b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.

**CR** **Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.

**EN** **Endangered:** A native species which:
(a) is not critically endangered; and
(b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.

**VU** **Vulnerable:** A native species which:
(a) is not critically endangered or endangered; and
(b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.

**CD** **Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.