



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 3432/2
Permit Holder:	Western Australian Land Authority T/A LandCorp
Duration of Permit:	30 January 2010 – 30 January 2020

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of extraction of construction materials for the expansion of the Ord River Irrigation Area.

2. Land on which clearing is to be done

Lot 353 on Deposited Plan 211675, Kununurra (6743)

Lot 355 on Deposited Plan 211675, Kununurra (6743)

3. Area of Clearing

The Permit Holder must not clear more than 192.66 hectares of native vegetation within the area shaded yellow on attached Plan 3432/2.

4. Period in which clearing is authorised

The Permit Holder shall not clear any native vegetation after 30 January 2015.

5. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

6. Type of clearing authorised

This Permit authorises the Permit Holder to clear native vegetation for activities to the extent that the Permit Holder has the power to clear native vegetation for those activities under the *Land Administration Act 1997* or any other written law.

7. Type of clearing authorised – Staged Clearing

The Permit Holder shall not clear native vegetation unless actively extracting the construction materials within 1 month of the clearing being undertaken.

8. Compliance with Assessment Sequence and Management Procedures

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

9. Avoid, minimise etc 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.

10. Weed control

- (a) 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*:
 - (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (ii) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - (iii) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (b) At least once in each 12 month period for the term of this Permit, the Permit Holder must remove or kill any *weeds* growing within areas cleared under this Permit.

11. Retain vegetative material and topsoil, ripping, revegetation and rehabilitation

The Permit Holder shall:

- (a) retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil in an area that has already been cleared.
- (b) within 2 months following completion of extraction operations, *revegetate* and *rehabilitate* the area(s) that are no longer required for the purpose for which they were cleared under this Permit by:
 - (i) re-shaping the surface of the land so that it is consistent with the surrounding 5 metres of uncleared land; and
 - (ii) ripping the ground on the contour to remove soil compaction; and
 - (iii) ripping the pit floor and contour batters within the extraction site; and
 - (iv) laying the vegetative material and topsoil retained under condition 11(a) on the cleared areas that are no longer required for the purpose for which they were cleared under this Permit.
- (c) within 12 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 11(b) of this Permit:
 - (i) engage an *environmental specialist* to determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and
 - (ii) where, in the opinion of an *environmental specialist*, the composition structure and density determined under condition 11(c)(i) of this Permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, *revegetate* the area by deliberately *planting* and/or *direct seeding* native vegetation that will result in a similar species composition, structure and density of native vegetation to pre-clearing vegetation types in that area and ensuring only *local provenance* seeds and propagating material are used.
- (d) where additional *planting* or *direct seeding* of native vegetation is undertaken in accordance with condition 11(c)(ii) of this permit, the Permit Holder shall repeat condition 11(c)(i) and 11(c)(ii) within 24 months of undertaking the additional *planting* or *direct seeding* of native vegetation.
- (e) where a determination by an *environmental specialist* that the composition, structure and density within areas *revegetated* and *rehabilitated* will result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, as determined in

condition 11(c)(i) and (ii) of this permit, that determination shall be submitted for the CEO's consideration. If the CEO does not agree with the determination made under condition 11(c)(ii), the CEO may require the Permit Holder to undertake additional *planting* and *direct seeding* in accordance with the requirements under condition 11(c)(ii).

PART III - RECORD KEEPING AND REPORTING

12. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
 - (i) the species composition, structure and density of the cleared area;
 - (ii) 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;
 - (iii) the date that the area was cleared; and
 - (iv) the size of the area cleared (in hectares).
- (b) In relation to the revegetation and rehabilitation of areas pursuant to condition 11 of this Permit:
 - (i) the location of any areas *revegetated* and *rehabilitated*, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
 - (ii) a description of the *revegetation* and *rehabilitation* activities undertaken;
 - (iii) the size of the area *revegetated* and *rehabilitated* (in hectares); and
 - (iv) the species composition, structure and density of *revegetation* and *rehabilitation*.

13. Reporting

- (a) The Permit Holder must provide to the CEO, on or before 30 June of each year, a written report of records required under condition 12 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 30 October 2019, the Permit Holder must provide to the CEO a written report of records required under condition 12 of this Permit where these records have not already been provided under condition 13(a) of this Permit.

DEFINITIONS

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

direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

environmental specialist means a person who is engaged by the Permit Holder for the purpose of providing environmental advice, who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;

fill means material used to increase the ground level, or fill a hollow;

local provenance means native vegetation seeds and propagating material from natural sources within 50 kilometres of the area cleared;

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;

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;

optimal time means the period October to December for undertaking *direct seeding*;

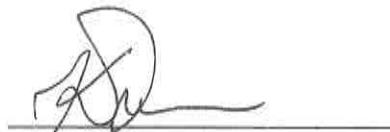
planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing *mulch*;

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;

revegetate/ed/ion means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as natural *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area; and

weed/s means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.

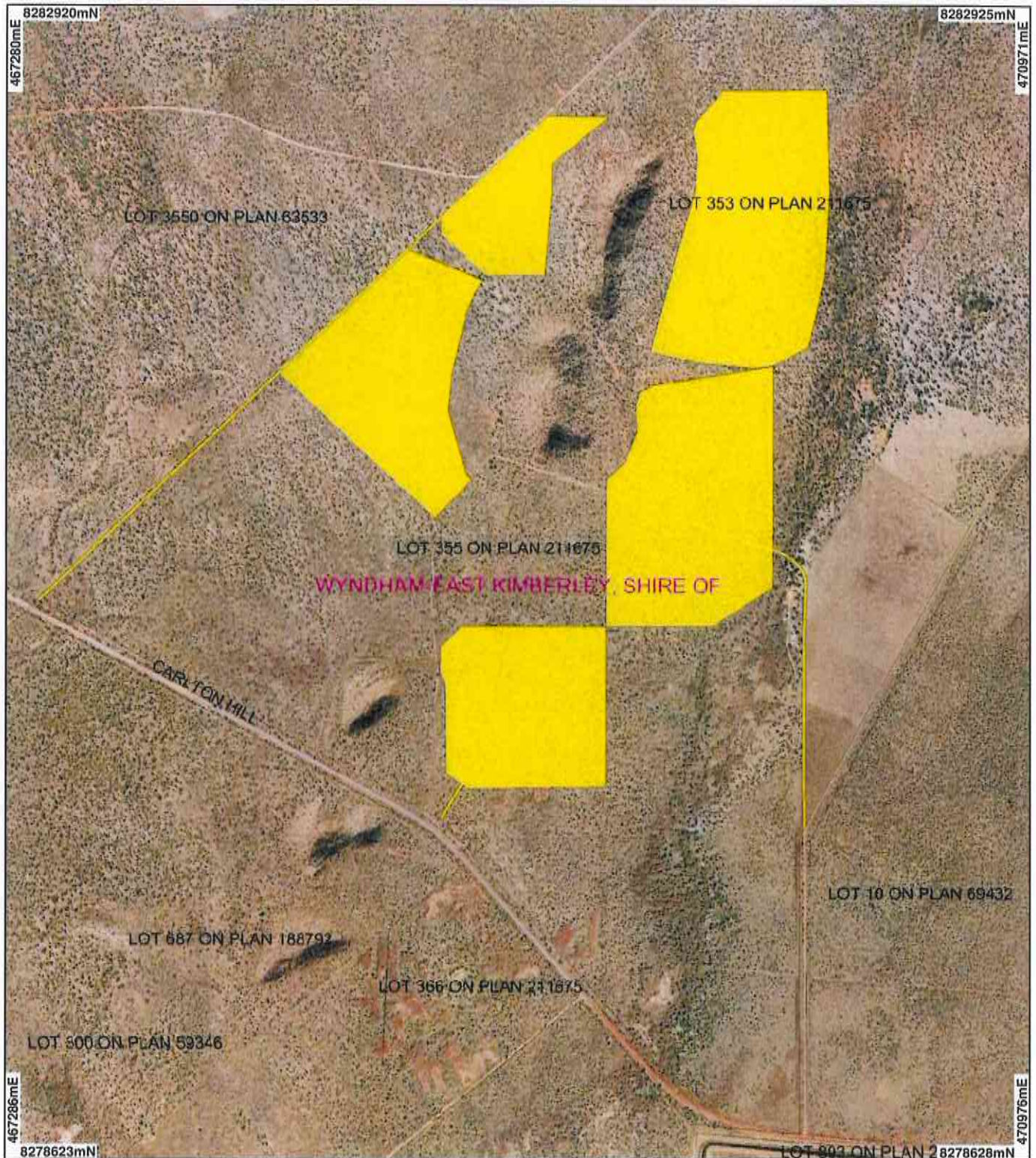


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

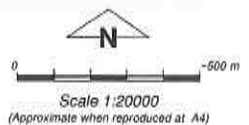
20 March 2012

Plan 3432/2



LEGEND

- | | |
|--------------------------------|--|
| Road Centrelines | Local Government Authorities |
| Cadastral Clearing Instruments | Kununurra 50cm Orthomosaic - Landgate 2005 |
| Areas Approved to Clear | |



Geocentric Datum Australia 1994

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

Date 22/3/12

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.



Department of Environment and Conservation

Our environment, our future
WA Crown Copyright 2002



1. Application details

1.1. Permit application details

Permit application No.: 3432/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Western Australian Land Authority T/A LandCorp

1.3. Property details

Property: LOT 353 ON PLAN 211675 (KUNUNURRA 6743)
LOT 355 ON PLAN 211675 (KUNUNURRA 6743)
Local Government Area: Shire of Wyndham-East Kimberley
Colloquial name: Mineral Investigation Area 8 - Ord River Irrigation Area Expansion

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
192.66		Mechanical Removal	Extractive Industry

1.5. Decision on application

Decision on Permit Application: GRANT
Decision Date: 20 March 2012

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 Associations	The proponent has applied to clear up to 192.66 hectares of native vegetation across five clearing areas for the purpose of extracting construction material for construction works associated with the expansion of the Ord River Irrigation Area.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994)	The vegetation condition was determined from vegetation survey report undertaken in May- June 2009 (Pilbara Flora, 2009) and aerial imagery.
916: Grasslands, high grass savanna woodland; grey box, Eucalyptus confertifolia & E. foelscheana over spinifex, white & tall upland grass on sandy plain on limestone. The western approximately 2/3 of the application area is mapped as this association.	Three vegetation types identified by Pilbara Flora (2009) occur within the area under application. The majority of the clearing areas are described as Mosaic woodlands over mixed grasslands (W1). Approximately 4 hectares of the northeast application area is reported to support <i>Corymbia grandifolia</i> subsp <i>lamprocardia</i> , <i>Corymbia greeniana</i> and <i>Erythrophleum chlorostachys</i> woodland on alluvial plains (W4) and less than 0.5 hectare is representative of <i>Eucalyptus tectifica</i> and <i>Excoecaria parvifolia</i> woodland on black soil plains (W8).		
909: Grasslands, high grass savanna woodland; bloodwood, stringybark & woollybutt over upland tall grass & curly spinifex on sandplain. (Shepherd, 2009)	There are low levels of disturbance due to minor weed presence, low levels of grazing and cleared vehicular tracks in some areas (Pilbara Flora, 2009). The vegetation under application is considered to be in excellent (Keighery, 1994) condition. The proponent has advised that the majority of the clearing within the two south-eastern application areas (approximately 70 hectares) has been conducted under the existing permit. The north-western application area has not been cleared under the existing permit and the proponent advised it is unlikely to be cleared.		

3. Assessment of application against clearing principles

Comments

The proponent has applied to increase the amount of the clearing under permit CPS 3432/1 by an additional 90.66 hectares, across two extra areas, to make a total of 192.66 hectares in five areas.

A review of environmental information reveals that in addition to the Priority 3 flora species *Brachychiton tuberculatus*, which Pilbara Flora (2009) recorded within the southernmost application area, and *Fimbristylis laxiglumis* (Priority 2) mapped approximately 2.2 kilometres to the northeast, single plants of the Priority 1 flora species *Goodenia brachypoda* were also recorded in close proximity to the application areas at 6 locations during a survey conducted in September 2009 (Pilbara Flora, 2009). The closest records are approximately 60 metres from the south-western and 90 metres from the north-western application area (Pilbara Flora, 2009).

G. brachypoda occurs on red sandy loam soils and flowers in September (Western Australian Herbarium, 1997-). There are 11 mapped records of *G. brachypoda* within a 50 kilometre radius of the application area, with the closest being approximately 10.5 kilometres west of the area under application. Some of these records are on the same mapped vegetation and soil types as the application areas. The proponent has advised that the occurrences of *G. brachypoda* are within the sandy red soils that appear reasonably wet in the wet season and that there is a visible demarcation between the gravelly and sandy soils, and that the areas proposed to be cleared are gravelly (LandCorp, 2012). Five of Pilbara Flora's (2009) records of *G. brachypoda* were from survey quadrats and the soils described in these quadrats include red/brown slightly loamy, red sand, black/grey silty sand and orange sand. Of the thirty quadrats established during the 2009 survey, seven of them were located within four of the applied clearing areas, with one clearing area not containing a survey quadrat. From the surveyed quadrats, the soils within the application areas include orange/grey sand, red sand, light orange sand, brown/black loam, orange/grey sand and grey silt (Pilbara Flora, 2009). The information available from the limited number of survey plots within the application areas indicates that the soils within the application areas are consistent with those which were found to support *G. brachypoda*.

Data regarding *G. brachypoda* population size is limited and the total number of plants is unknown, however there are several collections in the Kununurra area and its total range of 500 kilometres extends into the Northern Territory, where it does not have a conservation status. Considering the vegetation and soil types of the application areas and the excellent (Keighery, 1994) condition of the vegetation, it is likely that further plants may exist within the application area and also within the surrounding similar vegetation. Given the known occurrences are outside of the application areas and the species will still be represented within the area, the proposed clearing is considered not likely to impact upon the conservation status of *G. brachypoda*. Weed control measures and rehabilitation of temporarily cleared areas will minimise impacts to the population.

The areas under application surround an abrupt sandstone outcrop that is considered to have very high conservation value (Strategen, 2009). This outcrop area is very likely to be habitat for short range endemic invertebrate taxa and provide habitat for a complex and diverse suite of herpetofauna that are poorly represented in the local area due to the lack of similar habitat (Strategen, 2009). Strategen (2009) considered that if the base of the outcrop is not disturbed, then the conservation of these habitats would be maintained. At the closest point, the outcrop is located approximately 130 metres from the vegetation under application and the base of the incline extends to approximately 70 metres from the clearing area. The application areas are considered to include vegetation that acts as peripheral habitat or interzone habitat for fauna occupying the rocky outcrops.

The additional clearing of 90.66 hectares on the western and north-eastern side of the outcrops may impact the outcrop habitat as it represents a significant increase in the scale of the clearing of the peripheral habitat. The buffer zone to the outcrop area will be further compromised by the additional clearing, as the clearing footprint will extend along the eastern and western sides of the outcrop area. Additionally, the degree of linkage between the outcrop and the surrounding remaining vegetation, including other outcrops, will be reduced to a corridor between the clearing areas which is approximately 400 metres wide in the south and 280 metres wide in the north. Although vegetation necessary for the maintenance of a significant habitat for indigenous fauna will be impacted by the proposed clearing, rehabilitation of temporarily cleared areas and weed control measures will minimise these impacts.

Considering the above, the proposed clearing of 192.66 hectares may be at variance to principles (a) and (b). The assessment against the remaining clearing principles can be found in the Clearing Permit Decision Report CPS 3432/1.

Methodology

References:

- LandCorp (2012)
- Pilbara Flora (2009)
- Strategen (2009)
- Western Australian Herbarium (1997-)
- GIS Databases:
 - Kununurra 50cm Orthomosaic - Landgate 2005
 - Pre-European vegetation - DA 01/01
 - SAC Biodatasets - 01/12
 - Soils, Statewide - DA 11/99

- SAC Biodatasets - 01/12
- Soils, Statewide - DA 11/99
- Topographic Contours - DOLA 09/02

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

Comments

The proponent has applied to increase the clearing area to allow an additional 90.66 hectares of clearing across two additional clearing areas for the extraction of suitable material to be used in the upgrade and construction of road infrastructure associated with the expansion of the Ord River Irrigation Area. The proponent advised that the majority of the clearing within the two south-eastern application areas (approximately 70 hectares) has been conducted under the existing permit (LandCorp, 2012). The north-western application area has not been cleared under the existing permit and the proponent advised it is unlikely to be cleared.

During assessment, the proponent reduced the amount of clearing under application from 212 hectares to 192.66, removing the clearing area on Lot 3550 on Deposited Plan 63533, Kununurra, as they do not have authority to access the land.

The Department of Regional Development and Lands (DRDL) has agreed in principle to grant a licence over portions of Lot 353 and Lot 355 on Deposited Plan 211675, Kununurra, for the purpose of gravel extraction, under sections 91 and 48 of the Land administration Act 1997 (DRDL, 2012). The DRDL supports this clearing permit application over these properties (DRDL, 2012).

The Shire of Wyndham-East Kimberley (2012) has no objection to the proposed clearing subject to compliance with any relevant legislation, however requires advice from LandCorp in relation to proposed haul routes to ensure pavement integrity is not compromised on roads managed by the Shire, and agreement that LandCorp will repair, rectify and make good any defects, imperfections or other faults as may be required at their cost. The proponent has been advised to contact the Shire regarding these requirements. The Shire has previously advised that no extractive industry licence is required as the applicant is a government agency and the resource is being used for public works (Shire of Wyndham-East Kimberley, 2009).

The application areas are within the Canning-Kimberley Ground Water Area, Ord River Surface Water Area and Ord River Irrigation District Area, all of which are proclaimed under the Rights in Water and Irrigation Act 1914. The Department of Water (DoW, 2012) has advised that any commercial use of ground or surface water, or interference with the bed or banks of a watercourse within this proclaimed area requires approval from DoW. The proponent has been advised to contact the DoW for further advice.

The 'Ord Final Agreement', which includes the applied area, was signed in October 2005 in Kununurra by a number of key stakeholders including the Department of Environment, other State Government agencies and the Miriwung Gajerrong Traditional Owners. Direct interest letters were sent to the Miriwung Gajerrong Traditional Owners. No response has been received.

There are two mapped Aboriginal Sites of Significance within the application area. The proponent has been advised to contact the Department of Indigenous Affairs for information regarding their obligations under the Aboriginal Heritage Act 1972.

Methodology

References:
DoW, 2012
DRDL, 2011
LandCorp, 2012
Shire of Wyndham- East Kimberley, 2009
Shire of Wyndham- East Kimberley, 2012
GIS Databases:
- Aboriginal Sites of Significance - DIA 02/10
- RIWI Act, Areas - DoW 03/08

4. References

DoW (2012) RIWI Act advice for Clearing Permit Application CPS 3432/2. Received 19/01/2012. Department of Water, Western Australia. DEC Ref: A467552

DRDL (2011) Support for clearing permit application for Lot 353 on Deposited Plan 211675, October 2011. Department of Regional Development and Lands, Western Australia. DEC Ref: A457757

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

LandCorp (2012) Clearing permit application CPS 3432/2 - Additional information. Received 07/02/2012. DEC Ref: A472670

- Pilbara Flora (2009) Flora and Vegetation Survey of Main Roads Western Australia Potential Borrow Material Investigation Areas at Kununurra. Prepared for Strategen Environmental Consultants Pty Ltd on behalf of Main Roads Western Australia by Pilbara Flora. DEC Ref: A457757
- Shepherd, D.P. (2009) 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.
- Shire of Wyndham-East Kimberley (2009) Direct Interest Submission for CPS 3432/1. TRIM ref DOC112651
- Shire of Wyndham-East Kimberley (2012) Direct Interest Submission for CPS 3432/2. Received 08/02/2012. DEC Ref: A474258
- Strategen (2009) Ord River Irrigation Area - Weaber Plain Development Project Material Investigation Areas Fauna Report. Draft Prepared for LandCorp by Strategen. DEC Ref: A457757
- Strategen (2011) Ord River Irrigation Area - Weaber Plain Development Project - Clearing Permit Report Lots 5 and 7, Area 8. December 2011. DEC Ref: A457757
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed 06/02/2012)

5. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment
DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DEC)