



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 6471/1
File Number: DER 2015/000292-1
Duration of Permit: From 30 May 2015 to 30 May 2017

PERMIT HOLDERS

Lindsay Ernest John White
Anthony David Bruce White

LAND ON WHICH CLEARING IS TO BE DONE

Lot 16 on Deposited Plan 46913, Kununurra

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 1.88 hectares of native vegetation within the area cross hatched yellow on attached Plan 6471/1.

CONDITIONS

Nil.

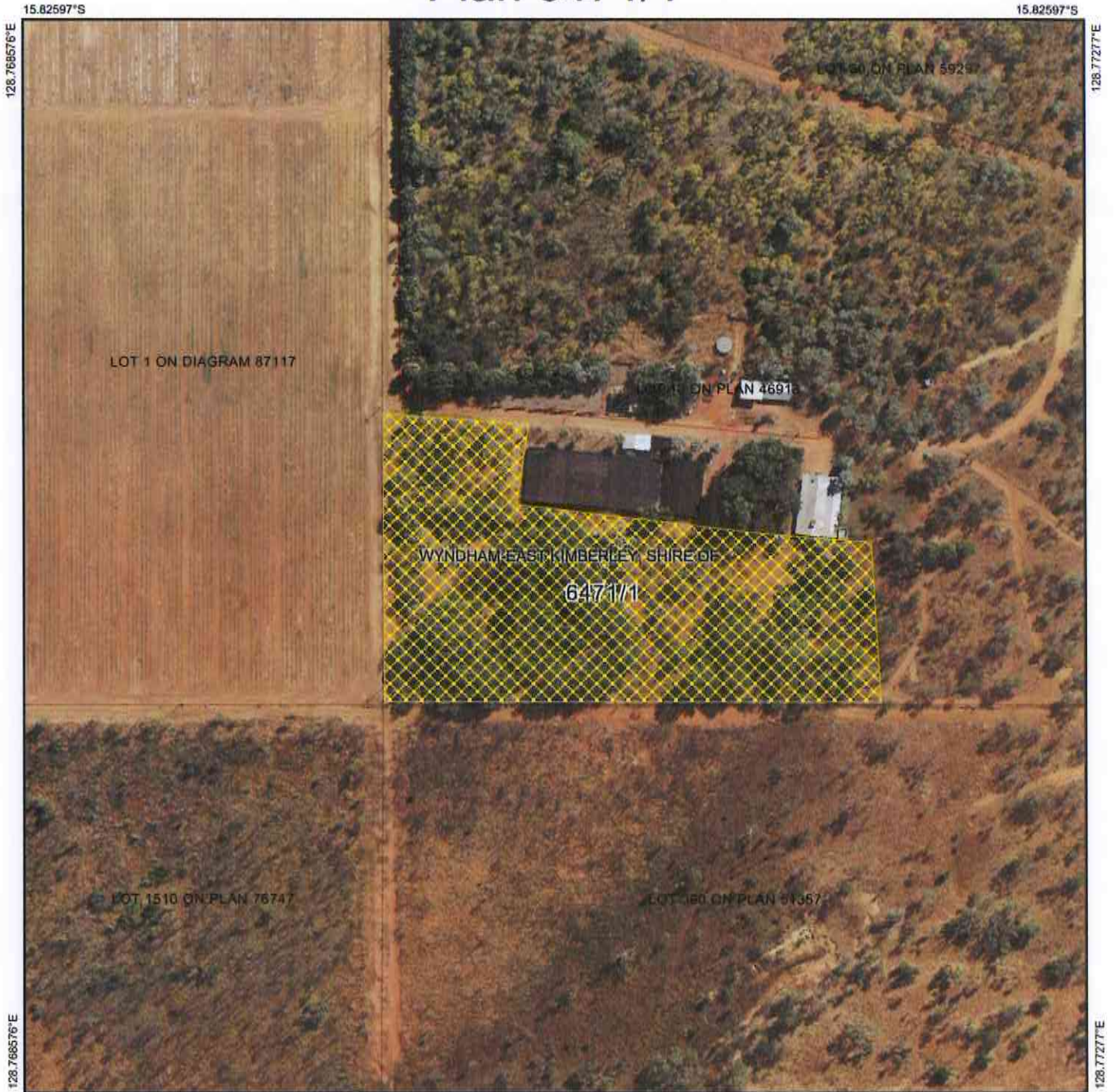
A handwritten signature in black ink, appearing to read "Jane Clarkson", written over a horizontal line.

Jane Clarkson
A/SENIOR MANAGER
CLEARING REGULATION

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

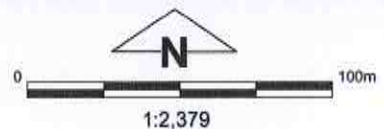
30 April 2015

Plan 6471/1



Legend

-  Cadastre
-  Roads
-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority
-  Clearing Instruments Conditions



(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

Jane Clarkson Date *30/4/15*
 Jane Clarkson

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



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 WESTERN AUSTRALIA
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1. Application details

1.1. Permit application details

Permit application No.: 6471/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Mr Lindsay Ernest John White
Mr Anthony David Bruce White

1.3. Property details

Property: LOT 16 ON PLAN 46913, KUNUNURRA
Local Government Authority: WYNDHAM-EAST KIMBERLEY, SHIRE OF
DER Region: North West
DPaW District: EAST KIMBERLEY

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.88		Mechanical Removal	Horticulture

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 30 April 2015

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
Mapped Beard Vegetation Association 909 is described as Grasslands, high grass savanna woodland with ghost gum and bloodwood (<i>Eucalyptus polycarpa</i>) over ribbon and tall upland grass (Shepherd et al, 2001).	The clearing of 1.88 hectares of native vegetation within Lot 16 on Deposited Plan 46913, Kununurra, is for the purpose of horticulture.	Degraded; Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).	The condition of the vegetation was determined via aerial imagery.

3. Assessment of application against clearing principles

Comments

This application proposes to clear 1.88 hectares of native vegetation within Lot 16 on Deposited Plan 46913, Kununurra, for the purpose of horticulture.

Several Priority flora species have been recorded in the local area (20 kilometre radius). The closest of these, include two Priority 1 species mapped approximately 3.6 kilometres north west and 4.8 kilometres south east of the application area. The first species is an erect or spreading annual herb, growing to 0.5 metres high that occurs on heavy soils and margins of seasonal wetlands or lagoons (Western Australian Herbarium, 1998-). This record was taken in 1982. The second species is an annual herb growing to 0.25 metres high that occurs on sandy loam (Western Australian Herbarium, 1998-). This record was taken on hard setting red soil within a floodplain in 2009.

The closest rare flora to the application area is an erect perennial herb that grows to 0.2 metres high. This species occurs on dark grey clay and black soil preferring sites that are waterlogged in summer and inundated after rain (Western Australian Herbarium, 1998-). This species has been mapped approximately 3.43 kilometres north west of the application area on damp grey clay within low open woodland of *Bauhinia cunninghamii* over mid-dense tussock grasses.

The application area has been mapped as deep red and yellow siliceous sands with associated sandy soils, therefore the application area is unlikely to provide habitat for the first priority species or the abovementioned rare flora. Given the small area of proposed clearing is in a degraded (Keighery, 1994) condition and contains few understorey species, it is also unlikely to contain the second priority 1.

There are no priority or threatened ecological communities mapped within the local area of the application.

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). The Shire of Wyndham – East Kimberley, Victorian Bonaparte Bioregion and mapped Beard Vegetation Association (909) all retain greater than 98 per cent of their pre-European vegetation extents (Government of Western Australia, 2013) therefore the application area is not considered to be within an extensively cleared landscape.

Several fauna species of conservation significance have been recorded within the local area (10 kilometre radius), including the curlew sandpiper (*Calidris ferruginea*), northern quoll (*Dasyurus hallucatus*), grey falcon (*Falco hypoleucos*), purple-crowned fairy-wren (*Malurus coronatus* subsp. *coronatus*) and orange leafnosed-bat (*Rhinonicteris aurantia*) (Parks and Wildlife, 2007-). Given the extensively vegetated landscape surrounding the application, degraded (Keighery, 1994) condition of the vegetation on site and small area of proposed clearing (1.88 hectares), it is not likely that the proposed clearing will impact on conservation significant fauna.

The closest watercourse or wetland to the application area is Emu Creek located 200 metres south of the. Emu Creek flows into Lake Kununurra, which is recognised as a Ramsar Site. Lake Kununurra is 500 metres south west of the application area. Given the relatively small size of the application area and degraded (Keighery, 1994) condition of the vegetation on site, it is not likely that the proposed clearing will impact on the abovementioned watercourses, through the removal of riparian vegetation or sedimentation.

The groundwater salinity on site is mapped as 500 to 1000 milligrams per litre (marginal). Given this low salinity level, it is considered that the proposed clearing will not lead to a perceptible rise in the watertable and thus an increase in groundwater salinity levels.

The soils on site have been mapped by Northcote et al (1960-68) as deep red and yellow sands with associated sandy soils. Although sandy soils are prone to wind erosion, it is not likely that the small degraded (Keighery, 1994) area of clearing will result in appreciable land degradation via wind, or water erosion.

The closest conservation area to the proposed clearing is Darram Conservation Park located 2.9 kilometres west of the application area. The local area surrounding the application is extensively vegetated and it is not expected that the removal of 1.88 hectares of native vegetation will impact on this conservation area, particularly given the distance between the two areas.

Given the above, the proposed clearing is not likely to be at variance to any of the clearing Principles.

Methodology

References:

- Commonwealth of Australia (2001)
- Government of Western Australia (2013)
- Keighery, B.J. (1994)
- Northcote (1960-1968)
- Parks and Wildlife (2007-)
- Western Australian Herbarium (1998-)

GIS Databases:

- SAC Bio Datasets (Accessed April 2015)
- Hydrography, linear
- Hydrography, hierarchy
- DPaW Tenure

Planning instruments and other relevant matters.

- Comments** This application proposes to clear 1.88 hectares of native vegetation within Lot 16 on Deposited Plan 46913, Kununurra, to allow for horticultural development of the property.
- The application area is zoned 'rural agriculture' under the town planning scheme.
- The application area is mapped within a mythological Aboriginal Site of Significance.
- There have been no submissions received from the public in response to the proposed clearing.
- The proposed clearing falls within the Canning-Kimberley Groundwater area, Ord River and Tributaries Surface Water Area and the Ord Irrigation District which are all proclaimed under the Rights in Water and Irrigation Act 1914. The Department of Water (DoW, 2015) has advised that in these areas licences are required to take surface or groundwater and construct or alter a well for new groundwater supply bores. It is advised that the landowners currently hold a groundwater licence to take 3000 kilolitres per annum for irrigation of up to one hectare of plant nursery on Lot 16. The proponent has advised that the current licence to take was intended for a nursery on site which is not in use, therefore no further water licence will be required.
- The DoW (2015) further advise that no biophysical Criteria Assessment has been done in the area to determine appropriate setbacks from watercourses, however encourages that best management practices should be undertaken in accordance with Water Quality Protection Notes 'Vegetation buffers to sensitive water resources' and 'Nurseries and garden centres'. This will help to ensure that there are minimal impacts to Emu Creek and Lake Kununurra as a result of the end land use.
- Methodology** References:
-DoW (2015)
- GIS Databases:
-SAC Bio Datasets (Accessed April 2015)
-Town Planning Scheme Zones
-Aboriginal Sites of Significance

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DoW (2015) Direct Interest (Rights in Water and Irrigation) Advice for Clearing Permit Application CPS 6471/1. Department of Water, Western Australia.
- Government of Western Australia (2013) 2013 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2013. 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.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press.
- Parks and Wildlife (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed April 2015.
- 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.
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <http://florabase.dpaw.wa.gov.au/> (Accessed April 2015).