



1. Application details

1.1. Permit application details

Permit application No.: 178/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: John & Pauline Kirby

1.3. Property details

Property: LOT 599 ON PLAN 215482
Local Government Area: Shire of Wyndham-East Kimberley
Colloquial name: Weero Rd, 14km west of Kununurra

1.4. Application

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

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
Vegetation Association 59 - Grasslands, high grass savanna sparse tree; bauhinia and coolabah over Mitchell, blue and tall upland grasses.	The area to be cleared is open savanna woodland, with the upper-mid storey dominated by Eucalyptus confertiflora, Eucalyptus tectifera, Acacia farnesiana, and Adansonia gregorii with understorey species including Hyptis suaveolens, Heteropogon contortus, Themeda triandra, and Dicanthium fecundum.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	East of the existing horticultural plantation and bordering Weero Rd, weeds including Hyptis and Calotropis are common. The southern and western areas are in reasonably good condition with obvious recruitment of tree species and a good cover of perennial grasses and herbs. There are some occurrences of Parkinsonia in areas that have been inundated by water (Site visit, 15/10/2004).

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 area under application is bounded by a mango plantation, an access road with a neighbouring horticultural plantation, and a grazing lease to the south west.

The vegetation association of the site is common along this section of the lower Ord River flood plain. There is evidence of previous overgrazing (old erosion gullies, increase in Acacia farnesiana) and introduced weeds including Hyptis, Calotropis and Parkinsonia.

Methodology Site visit (15 October 2004), Start & Done (2002)

(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 area is likely to provide seasonal habitat for numerous bird species, however, it is unlikely that any of these species rely solely on the vegetation under application.

Reptiles and small mammals may also use the area, however, the impact of historical grazing pressure and inappropriate fire regimes on these species is unknown.

Methodology Done (2004)

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

Comments Proposal is not likely to be at variance to this Principle

An assessment of the flora located an unidentified species of Typhonium on the neighbouring portion of King Location 599 (Start & Done, 2002). As the Typhonium was found within the grey soil 'fingers' of the property, it is not likely that it would occur in Lot 20 which is red transitional levee and levee type soils (Sherrard, 1994).

Methodology Start & Done (2002), Sherrard (1994)

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a significant ecological community.

Comments Proposal is not likely to be at variance to this Principle

There are no known Threatened Ecological Communities on the site.

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 at variance to this Principle

The site is Beard Vegetation Association 59 - Grasslands, high grass savanna sparse tree; bauhinia and coolabah over Mitchell, blue and tall upland grasses. There is ~100% of the pre-European vegetation remaining, of which almost 10% is protected within conservation reserves.

Methodology GIS database: Pre-European Vegetation - DA 01/01, Shepherd et al (2001)

(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 at variance to this Principle

The vegetation to be cleared is not within a watercourse or wetland. The proposal includes the protection of the major drainage channel and retention of associated vegetation.

Methodology Aerial photograph, Permit application

(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 soils of the area are primarily levee type soils interspersed with red soils (Sherrard, 1994). These soil types are capable of supporting irrigated horticulture, and the use of a micro-sprinkler irrigation system will prevent run-off and reduce evaporation.

It is unlikely that land degradation will result from the proposed clearing.

Methodology LCO DAWA Advice

(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 area to be cleared is not linked to any conservation areas. The Ramsar wetland (Lakes Argyle and Kununurra) are upstream from the site.

Methodology GIS databases:
CALM Managed Lands and Water - CALM 01/08/04
RAMSAR, Wetlands - CALM 21/10/02

(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 clearing is unlikely to have a significant impact on ground or surface water quality. A micro-sprinkler irrigation system will ensure that run-off is practically non-existent.

Methodology

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

Comments Proposal is not likely to be at variance to this Principle

It is unlikely that flooding will be exacerbated as a result of the intended clearing. The seasonal drainage channel, which is to remain vegetated, will continue to direct any significant volumes of water towards natural creeklines.

Methodology LCO DAWA Advice

(k) Planning instrument or other matter.

Comments Proposal is not at variance with this principle.
The area is zoned Rural under the Kununurra and Environs TPS No. 7.

Methodology

4. Assessor's recommendations

The recommendations of the Department of Environment to the CEO of the Department should be made consistent with the outcomes of the assessment by each of the agencies. Any conditions on the approval should also be outlined. These may be developed in consultation with such other agencies as required.

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Horticulture	Mechanical Removal	40	Grant	

5. References

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