



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 6353/1
File Number: DER2014/002741-1
Duration of Permit: 28 March 2015 to 28 March 2017

PERMIT HOLDER

Blue Glen Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 500 on Deposited Plan 55298, Kingsford

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.51 hectares of native vegetation within the area hatched yellow on attached Plan 6353/1.

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*

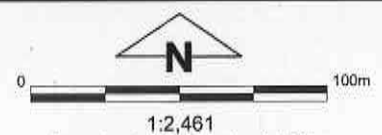
26 February 2015

Plan 6353/1




Legend

-  Roads
-  Imagery
-  Clearing Instruments Activities
-  Cadastre



(Approximate when reproduced at A4)
GDA 94 (Lat/Long)
Geocentric Datum of Australia 1994

 Date 26/1/15
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





Clearing Permit Decision Report

Government of Western Australia
Department of Environment Regulation

1. Application details

1.1. Permit application details

Permit application No.: 6353/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Blue Glen Pty Ltd

1.3. Property details

Property: LOT 500 ON PLAN 55298 (House No. 39 MAYWOOD KINGSFORD 6701)

Local Government Area: Shire of Carnarvon

Colloquial name:

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 26 February 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 308: Mosaic: Shrublands; Acacia sclerosperma sparse scrub / Succulent steppe; saltbush & bluebush (Shepherd et al, 2001).	The applicant proposes to clear 0.51 hectares of native vegetation for the purpose of horticulture.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994) To Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The condition and structure of the vegetation under application was determined via photos by the Department of Agriculture and Food Western Australia (2014a).

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 original application was to clear 1.3 hectares of native vegetation within Lot 500 on Deposited Plan 55298, Kingsford, for the purpose of horticulture. The applicant has amended the application and reduced the size of the clearing to 0.51 hectares in order to address the environmental impacts identified in the preliminary assessment.

The vegetation proposed to be cleared is considered to be in a degraded to good (Keighery, 1994) condition. The area under application consists of a eucalypt tree upper canopy over an understorey of mixed acacia shrub and perennial grass species (DAFWA, 2014).

Seven flora species of conservation significance have been recorded within a 20 kilometre radius. The closest being two Priority 2 (P2a and P2b) flora species mapped 4.3 kilometres south-west of the application area. Priority flora species P2a occurs on white or red sand on coastal sand dunes (Western Australian Herbarium, 1998-). Priority flora species P2b has a preference for clay soils on mud flats (Western Australian Herbarium, 1998-). Given the soil type of the application area consists of low alluvial terrace plains and sandy islets, it is unlikely these species will occur in the application area.

The closest priority ecological community (PEC) is located approximately 3.7 kilometres west of the application area and is described as 'Subtropical and temperate coastal marsh' (Priority 1). The vegetation under application is not likely to be a representative of this PEC given the different vegetation type present at the site.

The application area may provide suitable habitat for one fauna species, namely the Rainbow Bee-eater. However, the vegetation proposed for clearing is not likely to provide significant habitat given the small size of the application area and the highly mobile nature of this species.

No rare flora taxa or threatened ecological communities have been recorded in the local area (20 kilometre radius).

The local area surrounding the application area is highly vegetated with approximately 95 per cent of pre-European vegetation remaining.

Given the above, the proposed clearing is not likely to hold a high level of biological diversity and is not likely to be at variance to this Principle.

Methodology

References:

- DAFWA (2014)
- Keighery (1994)

GIS Databases:

- SAC Bio Datasets (Accessed January 2015)
- NLWRA, Vegetation Remaining
- Hydrography,linear
- Hydrography,hierachy
- DPaW Tenure

(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

Numerous fauna species listed as rare or likely to become extinct or protected under international agreement under the WC Act have been recorded within the local area (20 kilometre radius). The majority of these species recorded are migratory sea or wader bird species that inhabit littoral, estuarine and wetland habitats, which are not present within the application area. The application area may provide suitable habitat for one fauna species of conservation significance, namely the Rainbow Bee-eater (*Merops ornatus*), which is listed under the WC Act as 'protected under international agreement' (DPaW 2007-).

The Rainbow Bee-eater occurs in numerous habitats including open forests and woodlands, shrublands, in cleared or semi-cleared habitats such as areas of human habitation and farmland. It prefers open, cleared or lightly-timbered areas that are often, but not always in close proximity to permanent water (Department of the Environment, 2015). The area under application may provide suitable habitat for this species given the vegetation type and its close proximity to watercourses. However, the proposed clearing is unlikely to significantly impact upon the conservation status of this species given its highly mobile nature and the small size of the application area.

Given the above, the area under application is not likely to contain significant habitat for fauna.

The clearing as proposed is not likely to be at variance to this principle.

Methodology

References:

- DPaW (2007-)
- Department of the Environment (2015)

GIS Databases:

- SAC Bio Datasets (Accessed January 2015)

(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

No rare flora taxa have been recorded within 20 kilometres of the application area.

Therefore the area under application is not likely to contain rare flora.

The clearing as proposed is not likely to be at variance to this principle.

Methodology

GIS Databases:

- SAC Biodata sets (Accessed February 2015)

(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

No threatened ecological communities (TEC) have been recorded within 20 kilometres of the area under application.

Therefore the vegetation proposed to be cleared is not likely to comprise or be necessary for the maintenance of a TEC.

The proposed clearing is not likely to be at variance to this principle.

Methodology GIS Databases:
- SAC Bio Datasets (Accessed January 2015)

(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 vegetation under application has been identified as Beard vegetation association 308 of which there is 99 per cent of its pre-European extent remaining within the Carnarvon Interim Biogeographic Regionalisation of Australia (IBRA) Bioregion (Government of Western Australia, 2013).

The area under application is located within the Shire of Carnarvon, within which there is approximately 99 per cent pre-European extent remaining (Government of Western Australia, 2013).

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).

Aerial imagery indicates that the local area (20 kilometre radius) surrounding the area under application retains approximately 95 per cent vegetation cover.

Given the well represented vegetation locally and regionally, the area under application is not considered to be a significant remnant in an extensively cleared area.

Therefore, the proposed clearing is not at variance to this principle.

	Pre-European (ha)	Current Extent Remaining (ha)	Extent Remaining (%)	Extent in DPaW Managed Lands (%)
IBRA Bioregion*				
Carnarvon	8,382,890	8,360,803	99	11
Shire*				
Shire of Carnarvon	4,637,457	4,613,566	99	7
Beard Vegetation Association in Bioregion*				
308	446,977	443,484	99	1

*Government of Western Australia (2013)

Methodology References:
- Government of Western Australia (2013)
- Commonwealth of Australia (2001)

GIS Databases:
- Pre-European Vegetation

(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 may be at variance to this Principle

The original application was located within close proximity to two mapped hydrological features, namely a very narrow and well defined river channel known as 'Lewers Creek' which runs from east to west along the southern boundary of Lot 500, and a bywash channel located approximately 60 metres north of the application area. The water that fills this channel is the overland flow that occurs during major river floods across the island of land between the main Gascoyne River Channel and Lewers Creek (DAFWA, 2014b).

The amended application area still lies in close proximity to Lewers Creek, and therefore may contain riparian vegetation.

Therefore, the proposed clearing may be at variance to this principle.

Methodology References:
- DAFWA (2014b)

GIS Databases:
- Hydrography, hierarchy

(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 Department of Agriculture and Food Western Australia (DAFWA, 2014a) has advised that the area under application comprises of soils and a topography that is particularly at risk from soil erosion during major river flood events. The soils within the application area comprise predominately of Ri 7 land unit soils which consist of low alluvial terrace plains and sandy islets (DAFWA, 2014a).

Lot 500 has previously experienced soil erosion in the lower banks of the bywash channel during the Gascoyne River flood in 2000, whereby the whole property was covered by river floodwaters to depths that exceeded one metre (DAFWA 2014a). The erosion was exacerbated by past clearance of most native scrub in the area which facilitated a substantial increase in rates of overground water flow. Four relic erosion gullies were observed on the northern boundary whereby soils had re-entered the bywash channel located north of Lot 500 during a site inspection undertaken by DAFWA (2014a) in 2005.

The 0.51 hectare area currently under application was identified by DAFWA during a site inspection on 6 February 2015 as being relatively level and at a relatively high elevation level where future erosion risk can be considerably reduced (DAFWA, 2015).

The proposed clearing is not likely to be at variance to this principle.

Methodology References:
- DAFWA (2014a)
- DAFWA (2015)

GIS Databases:
- Soils, 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 closest conservation area to the proposed clearing is located approximately 2.2 kilometres west of the application area and is known as 'Chinamans Pool Nature Reserve' (Class A).

Given the distance to this conservation area and the horticultural land use practices that occur between the application area and the reserve, it is unlikely that the proposed clearing will impact upon the environmental values of the conservation area.

Therefore the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Databases:
- Parks and Wildlife, 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**

A very narrow and well defined river channel known as 'Lewers Creek' runs from east to west along the southern boundary of Lot 500. A bywash channel is located approximately 60 metres north of the application area. The water that fills this channel is the overland flow that occurs during major river floods across the island of land between the main Gascoyne River Channel and Lewers Creek (DAFWA, 2014b).

Although the soils under application are susceptible to erosion, the application area has been located in an area which is relatively level and at a relatively high elevation level where erosion risk is considerably reduced (DAFWA, 2015). Clearing in this area is unlikely to cause deterioration of surface water.

Groundwater salinity mapped within the application area is between 500 - 1000 milligrams per litre (marginal). Given the small size of the application area, it is not likely that the proposed clearing will lead to a perceptible rise in the water table and thus an increase in groundwater salinity levels.

Given the above, the clearing as proposed is not likely to be at variance to this principle.

Methodology References:
DAFWA (2014b)

GIS Databases:
- Hydrology, linear
- RIWI Surface Water Areas

(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**

Given the small size of the application area and its location on the property, the proposed clearing is not likely to increase the incidence or intensity of flooding.

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

Methodology GIS Datasets:
- Hydrography linear

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

Comments The original application was to clear 1.3 hectares of native vegetation within Lot 500 on Deposited Plan 55298, Kingsford, for the purpose of horticulture. The applicant has amended the application and reduced the size of the clearing to 0.51 hectares in order to address the environmental impacts identified in the preliminary assessment.

The area under application falls within the Carnarvon Irrigation District Area proclaimed under the Rights in Water and Irrigation Act 1914. A permit to take groundwater or surface water or to interfere with bed and banks for the proposed clearing may be required from the Department of Water.

The Department of Water (DoW, 2015) has advised the subject land is susceptible to major river flooding and a portion of the lot is a designated floodway. The applicant has amended and reduced the size of the application area to avoid areas of the subject land that may be at risk of erosion and flooding.

The Shire of Carnarvon (2014) has advised that the land is zoned by Local Planning Scheme No.10 as 'Intensive Horticulture' and that the proposed land use is consistent with the zoning. The Shire of Carnarvon (2014) has no objection to the proposed clearing.

No Aboriginal Sites of Significance have been mapped over the application area.

No submissions from the public have been received for the proposed clearing.

Methodology References:
-Shire of Carnarvon (2014)
- DoW (2015)

GIS Databases:
- Aboriginal Sites of Significance

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DAFWA (2014a) Advice for Clearing Permit CPS 6353/1 - Department of Agriculture and Food. Western Australia (DER Ref: A841743).
- DAFWA (2014b) Additional advice relating Clearing Permit CPS 6353/1 - Department of Agriculture and Food. Western Australia (DER Ref: A851744).
- DAFWA (2015) Revised clearing area and further advice relating to Clearing Permit CPS 6353/1 – Department of Agriculture and Food. Western Australia (DER Ref: A865896).
- DPaW (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed 17/02/2015
- Department of the Environment (2015) Merops ornatus in Species Profile and Threats Database, Department of the Environment, Canberra.
- DoW (2015) Advice for Clearing Permit CPS 6353/1 – Department of Water. Western Australia (DER Ref: A856931).
- 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.
- 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 Carnarvon (2014) Advice for Clearing Permit CPS 6353/1. Western Australia. (DER Ref: A839537).