GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 7611/1
Permit Holder:	Forrest and Forrest Pty Ltd
Duration of Permit:	26 August 2017 to 26 August 2022

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 horticulture.

2. **Land on which clearing is to be done**
   Lot 152 on Deposited Plan 220265, Talandji
   Un-named road reserves (PINs: 11730550, 11730551, 11730558 and 11733573), Talandji

3. **Area of Clearing**
   The Permit Holder must not clear more than 126.8 hectares of native vegetation within the area hatched yellow on attached Plan 7611/1.

4. **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.

PART II – MANAGEMENT CONDITIONS

5. **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.

6. **Weed control**
   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*:
   (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
   (b) ensure that no *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
   (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

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

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

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;

weed/s mean any plant -

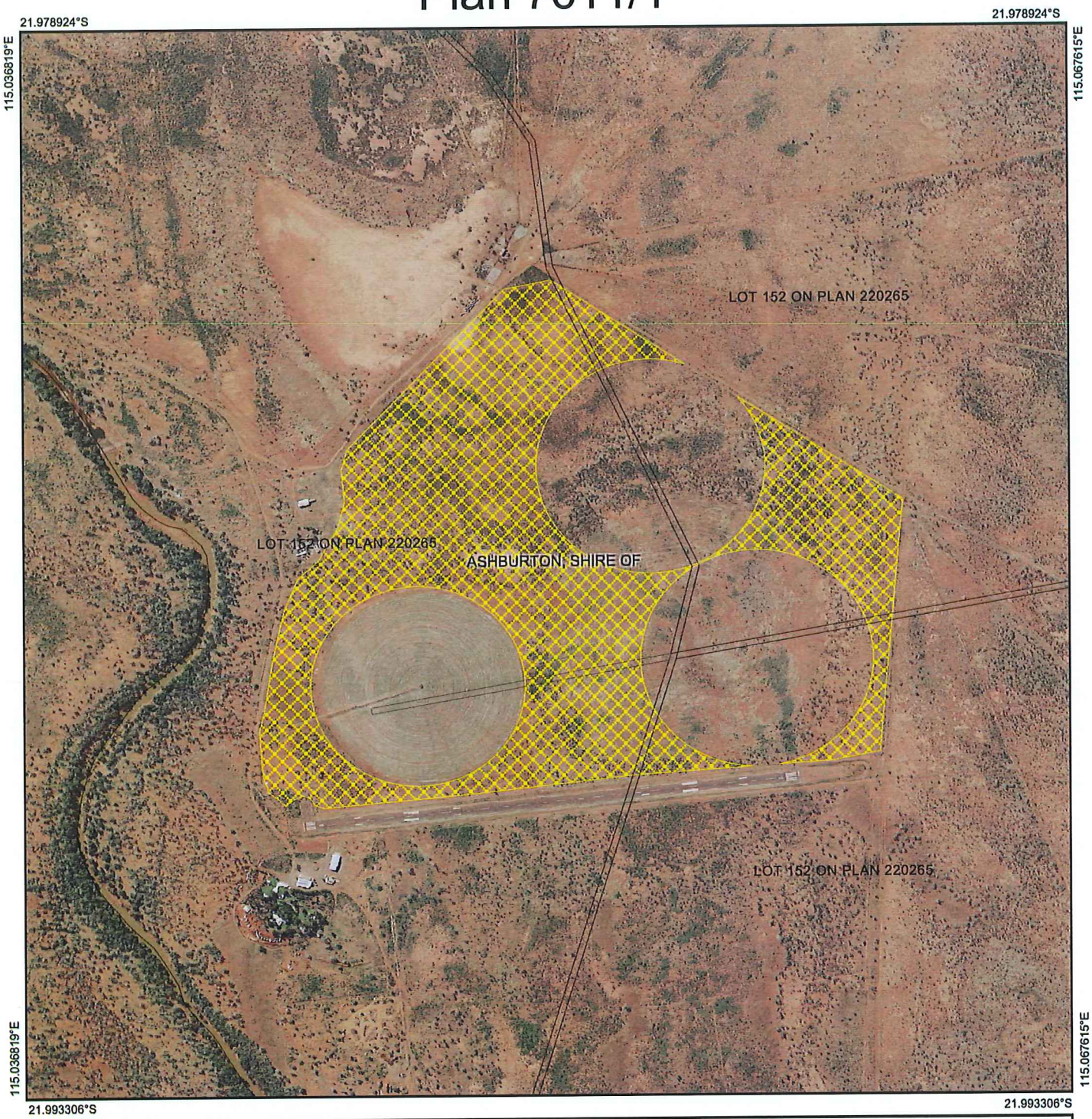
(a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
(b) published in a Department of Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
(c) not indigenous to the area concerned; and
(d) that is a species permitted for planting under a Pastoral Diversification Permit issued by the Department of Regional Development and Lands.

James Widenbar
MANAGER
CLEARING REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

27 July 2017

Plan 7611/1



Legend

- Imagery
- Clearing Instruments Activities
- Local Government Authority

N

0 500m

1:16,852

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

..... Date 27/7/17

JAMES WIDENBAR

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

GOVERNMENT OF WESTERN AUSTRALIA

Government of Western Australia
Department of Environment Regulation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7611/1
Permit type: Purpose Permit

1.2. Applicant details

Applicant's name: Forrest & Forrest Pty Ltd

1.3. Property details

Property: LOT 152 ON PLAN 220265, TALANDJI
ROAD RESERVE - 11730550, TALANDJI
ROAD RESERVE - 11733573, TALANDJI
ROAD RESERVE - 11730551, TALANDJI
ROAD RESERVE - 11730558, TALANDJI
Colloquial name: Minderoo Pastoral Station
Local Government Authority: Ashburton, Shire of
DER Region: North West
Localities: Talandji

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 27 July 2017
Reasons for Decision: The clearing permit application received on 24 May 2017 has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the *Environmental Protection Act 1986*. It has been concluded that the proposed clearing is at variance to principle (f) and is not likely to be at variance to any of the remaining clearing principles.

The application area is adjacent to areas of remnant vegetation and the disturbance caused by the proposed clearing will increase the risk of weeds spreading into these areas. Weed management practices will help mitigate this risk.

The Delegated Officer determined that the clearing is unlikely to have any significant environmental impacts.

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 association 589 is described as Mosaic: Short bunch grassland - savanna / grass plain (Pilbara) / Hummock grasslands, grass steppe; soft spinifex (Shepherd et al, 2001)	The application proposes to clear 126.8 hectares of native vegetation within Lot 152 on Deposited Plan 220265 and un-named road reserves (PINs: 11730550, 11730551, 11730558 and 11733573), Talandji, for the purpose of horticulture.	Degraded; Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).	The vegetation within the application area is dominated by *Acacia synchronicia* (narrow leaf form) and *Acacia tetragonophylla* shrubland over tussock grasses including *Cenchrus ciliaris* (buffel) with scattered *Euclayptus coolabah* (Commissioner of Soil and Land Conservation, 2017).

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

Proposed clearing is not likely to be at variance to this Principle

The application proposes to clear 126.8 hectares of native vegetation within Lot 152 on Deposited Plan 220265 and un-named road reserves (PINs: 11730550, 11730551, 11730558 and 11733573), Talandji, for the purpose of horticulture.

The application area surrounds three existing horticultural pivots which are each approximately 40 hectares in size. The majority of the application area appears to have been previously disturbed by horticultural practices and is in a degraded (Keighery, 1994) condition.

The application area has been mapped as Nanyarra Land System which is described as 'Alluvial plains supporting tall shrublands and low woodlands with prominent tussock grasses'.

Five flora species, listed as priority species by the Department of Biodiversity, Conservation and Attractions (DBCA), have been recorded within the local area (40 kilometre radius).

The application area may contain suitable habitat for three of the priority flora species. The first species is known to occur in red sand on flats/plains in tall shrubland and hummock grassland. Whilst there are some similarities between the known habitat of this species and that mapped in the application area, being plains with shrubland and grassland, the application area is located on alluvial plains which this species has not been recorded on previously and so it is considered that there is a low likelihood of this species being present in the application area (Parks and Wildlife, 2017).

The second species has been recorded in red sand dunes with hummock grassland, shrubland and low open woodland. Soil mapping of the application area includes red sand dunes, however given the degraded (Keighery, 1994) condition of the application condition it is unlikely to support this species (Parks and Wildlife, 2017).

The third species is currently under review, and advice from the WA Herbarium is that there are likely to be three forms of this species – Port Hedland, Onslow and Carnarvon. The form closest to the application area would be the Onslow form (Parks and Wildlife, 2017). This species has been recorded on sand plains and dunes in grassland and shrubland, and the Port Hedland form has records adjacent to the Turner River. There is the potential that this species may occur in the application area given the location is within the range of the species, the mapped habitat includes alluvial plains with shrubland and grassland. As there are few records of the Onslow form of the species, any occurrence would be significant. However the species is unlikely to be restricted to that location, and if present in the area, is likely to occur outside the application area (Parks and Wildlife, 2017).

As discussed in Principle (b) four fauna species, listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* (WC Act) have been recorded within the local area, being northern quoll (*Dasyurus hallucatus*), grey falcon (*Falco hypoleucos*), Pilbara olive python (*Liasis olivaceus* subsp. *barroni*) and curlew sandpiper (*Calidris ferruginea*) (Parks and Wildlife, 2007-). Fauna may opportunistically use the area for foraging but it would not be considered important or significant habitat for any of the abovementioned species (DBCA, 2017).

No priority ecological communities have been recorded within the application area.

Given the above, the proposed clearing is not likely to be variance to this Principle.

Methodology

References:
DBCA (2017)
Keighery (1994)
Parks and Wildlife (2007-)
Parks and Wildlife (2017)

GIS Datasets:
Sac Bio Datasets – accessed June 2017

(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

Proposed clearing is not likely to be at variance to this Principle

Four fauna species, listed as rare or likely to become extinct under the WC Act have been recorded within the local area, being northern quoll (*Dasyurus hallucatus*), grey falcon (*Falco hypoleucos*), Pilbara olive python (*Liasis olivaceus* subsp. *barroni*) and curlew sandpiper (*Calidris ferruginea*) (Parks and Wildlife, 2007-).

The application area has been mapped as Nanyarra Land System which is described as 'Alluvial plains supporting tall shrublands and low woodlands with prominent tussock grasses'.

The northern quoll occupies a variety of habitats across its current range including rocky areas, eucalypt forest and woodlands, dry rainforests and vine thickets, sandy lowlands and beaches, shrublands, grasslands and

deserts (Commonwealth of Australia, 2011). Habitat usually includes some form of rocky area or structurally diverse woodland or forest used for shelter with surrounding vegetated habitats used for foraging and dispersal. Shelter habitat is important for breeding and refuge from fire and/or predation (Commonwealth of Australia, 2011).

Little is understood about the characteristics of foraging or dispersal habitat for the northern quoll. However, on current knowledge, foraging or dispersal habitat is recognised to be any land comprising predominately native vegetation in the immediate area (within two kilometres) of denning / shelter habitat, quoll records or land comprising predominately native vegetation that is connected to denning / shelter habitat within the species range. (Commonwealth of Australia, 2011). Habitats critical to survival for the northern quoll are areas that provide shelter for breeding, refuge from fire and/or predation and/or potential poisoning from cane toads (Commonwealth of Australia, 2011).

The application area falls within the range of the northern quoll and there are three recent records (2011-2014) within 40 kilometres of the application area (DBCA, 2017).

Northern quoll are known to inhabit a wide range of habitat types across their distribution, but rocky areas are considered important habitat for the species' long term survival. In the Pilbara, they are often found in rocky areas associated with permanent water.

The application area is also within the distribution of the Pilbara olive python (*Liasis olivaceus barroni*) and there are three recent (2009 and 2012) records for the species within the vicinity (40 kilometre radius). The species is usually found in close proximity to water and rocky outcrops (DBCA, 2017).

The Grey falcon inhabits woodland, shrubland and grassland in the arid and semi-arid zones, especially wooded watercourses (NSW Scientific Committee, 2009). It also hunts in treeless areas and frequents tussock grassland and open woodland.

The curlew sandpiper mainly occurs on intertidal mudflats in sheltered coastal areas, therefore the application area does not contain suitable habitat for this species.

The northern quoll, Pilbara olive python and grey falcon may opportunistically use the application area for foraging but it would not considered important or significant habitat. Due to the existing disturbances, presence of infrastructure (i.e. homestead, buildings, cattle yards, airstrip), and existing horticulture area, it is unlikely that there would be regular visitation or use by either species (DBCA, 2017).

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

Methodology References:
Commonwealth of Australia (2011)
DBCA (2017)
NSW Scientific Committee (2009)
Parks and Wildlife (2007-)

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

Comments **Proposed clearing is not likely to be at variance to this Principle**
No rare flora has been recorded within the local area (40 kilometre radius). Therefore the application area is not likely to contain rare flora.

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

Methodology GIS Datasets:
Sac Bio Datasets – accessed June 2017

(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 **Proposed clearing is not likely to be at variance to this Principle**
No threatened ecological communities (TEC) have been recorded within the local area (40 kilometre radius). Therefore the application area is not likely to comprise of, or be necessary for the maintenance of a TEC.

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

Methodology GIS Datasets:
Sac Bio Datasets – accessed June 2017

(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

Proposed clearing is not likely to be at variance to this Principle

The application area is located within the Carnarvon Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 99.7 per cent of its pre-European vegetation extent remaining (Government of Western Australia, 2016).

The vegetation under application is mapped as Beard vegetation association 589 of which there is approximately 99.7 per cent of its pre-European extent remaining within the Carnarvon bioregion (Government of Western Australia, 2016).

The area under application is located within the Shire of Ashburton, within which there is approximately 99.74 per cent pre-European extent remaining (Government of Western Australia, 2016).

The local area retains approximately 99 per cent native vegetation.

The national objectives and targets for biodiversity conservation in Australia have a target to prevent clearance of ecological communities with an extent below 30 percent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001).

The application area is not likely to contain high biodiversity or significant habitat for indigenous fauna, therefore it is not likely to be a significant remnant.

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

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DBCA Managed Lands (%)
IBRA Bioregion*				
Carnarvon	8,382,890	8,360,801	99.7	12
Shire*				
Shire of Ashburton	10,087,789	10,061,094	99.74	17
Beard Vegetation Association in Bioregion*				
589	78,101	77,835	99.7	0

Methodology

References:
Commonwealth of Australia (2001)
Government of Western Australia (2016)

GIS Databases
Pre-European vegetation
NLWRA, Current Extent of Native 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

Proposed clearing is at variance to this Principle

No watercourses have been mapped within the application area. The closest watercourse to the application area is Ashburton River which is located approximately 250 metres west of the application area.

A non-perennial lake has been mapped over approximately 2.3 hectares of the northern edge of the application area. The majority of this wetland area (approximately 32 hectares) is separated from the application area by a road, sheds and other infrastructure.

Given the above, the proposed clearing is at variance to this Principle.

The proposed clearing is not likely to significantly impact on this wetland as only a small proportion of the lake intersects the application area and as a road has already been created between the application area and the larger portion of the lake.

Methodology

GIS Databases

Hydrography, linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments

Proposed clearing is not likely to be at variance to this Principle

The application area is located on the alluvial flood plain land unit adjacent to the river on the Nanyarra land system. The Nanyarra Land System is described as 'Alluvial plains supporting tall shrublands and low woodlands with prominent tussock grasses'.

The soils of the alluvial plain land unit are described as being reddish brown loams or clay, typically more than one metre in depth. The *Acacia synchronicia*, *Acacia tetragonophylla* and *Cenchrus ciliaris* (buffel) dominating the site are typically associated with loamy soils. These soils are regarded as being suitable for irrigation development and are likely to be very productive under careful irrigation and fertiliser management (Commissioner of Soil and Land Conservation, 2017).
The application area is reasonably level. The risk of wind and water erosion associated with the proposed clearing and ongoing irrigated agriculture management is likely to be very low (Commissioner of Soil and Land Conservation, 2017).

The risk of increased nutrient export to the nearby river system (Ashburton River) is assessed to be low as the soils will strongly fix phosphorus and the efficiency of uptake of applied nitrogen by the irrigated crop will be very high (Commissioner of Soil and Land Conservation, 2017).

The risk of increased salinity as a result of either clearing or subsequent irrigation land use is also very low (Commissioner of Soil and Land Conservation, 2017).

Given the above, the proposed clearing is not likely to cause appreciable land degradation and is therefore not likely to be at variance to this Principle.

Methodology

References:
Commissioner of Soil and Land Conservation (2017)

GIS Databases
Sac Bio Datasets – accessed June 2017

(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

Proposed clearing is not likely to be at variance to this Principle

An area of unallocated Crown land (former Mt Minnie Pastoral Station) which is proposed to be included into conservation estate is located approximately 750 metres east of the application area.

Given the distance to this proposed conservation area and the highly vegetated local area the proposed clearing is not likely to impact on the environmental values of this area.

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

Proposed clearing is not likely to be at variance to this Principle

No watercourses have been mapped within the application area. The closest watercourse to the application area is Ashburton River which is located approximately 250 metres west of the application area. The Commissioner of Soil and Land Conservation has advised that the application area is reasonably level and that the risk of water erosion and eutrophication is low (Commission of Soil and Land Conservation, 2017). Therefore the proposed clearing is not likely to cause deterioration of surface water.

Groundwater salinity within the application area is mapped as 7,000-14,000 total dissolved solids, milligrams per litre. This level of groundwater salinity is considered to be saline to highly saline. The Commissioner of Soil and Land Conservation has advised that the risk of increased salinity as a result of either clearing or subsequent irrigation land use is also very low (Commission of Soil and Land Conservation, 2017).

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

Methodology

References:
Commissioner of Soil and Land Conservation (2017)

GIS Databases
Hydrography, linear
Groundwater Salinity

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

Comments

Proposed clearing is not likely to be at variance to this Principle

The application area is relatively flat and is not prone to water erosion, therefore it is unlikely that the proposed clearing will increase the incidence of intensity of on or offsite flooding.

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

Methodology

GIS Databases
Hydrography, linear
Topographic contours, statewide

Planning instruments and other relevant matters.

Comments

This application is one of four applications from Forrest and Forrest Pty Ltd for Minderoo Pastoral Station. A summary of the other three applications is provided below:

CPS 7577/1 - 90 hectares (within a footprint area of 537 hectares) of native vegetation for the purpose of access tracks and weir construction.
CPS 7598/1 – 640 hectares of native vegetation for the purpose of extracting granite for the construction of pastoral weirs.
CPS 7626/1 – 0.8822 hectares of native vegetation for extracting granite to repair an existing weir.

The application area occurs within the Pilbara groundwater and surface water area, which are proclaimed areas under the *Rights in Water and Irrigation Act 1914*. The then Department of Water (DoW) advised that it had issued a groundwater licence and bed and banks permit in association with this project (DoW, 2017). The bed and banks permit was for the purpose of constructing the ten additional weirs and the groundwater licence is to abstract up to 13.2 GL per annum from the alluvial aquifer along the Ashburton River (DoW, 2017).

On 26 May 2017, a then Department of Environmental Regulation Delegated Officer wrote to the Thalanyji Native Title Claimant and Buurabalayji Thanlanyji Aboriginal Corporation, providing notice as required by section 24GB s9 of the *Native Title Act 1993*, and providing an opportunity to comment on the applications. On 17 July 2017 a response was received from the Buurabalayji Thanlanyji Aboriginal Corporation (BTAC) advising that they object to the proposed clearing because the applicant has not engaged the BTAC or the Thalanyji People to negotiate an agreement or discuss the issue of compensation (BTAC, 2017). It was also advised that the application area needs to be the subject of a heritage survey. In regards to environmental matters it was advised that the increase in vegetation clearing will change the flora and fauna attributes of the area and that the Thalanyji People would require an independent study to be undertaken to review the environmental impact (BTAC, 2017).

The application was advertised online on 21 June 2017 for a 21 day submission period. A publication summary was advertised in *The West Australian* on Monday 26 June 2017. No submissions were received in relation to this application.

Approximately half of the application area is mapped as an Aboriginal Site of Significance (Ashburton River). The applicant will be notified of its responsibilities in accordance with the *Aboriginal Heritage Act 1972*.

Methodology

References:
BTAC (2017)
DoW (2017)

GIS Databases:
Aboriginal Sites of Significance
RIWI, Groundwater Areas

4. References

Buurabalayji Thanlanyji Aboriginal Corporation (BTAC) (2017) Native Title submission response. Received on 17 July 2017 (DWER Ref: A1476876).

Commissioner of Soil and Land Conservation (2017) Land Degradation Advice for Clearing Permit Application CPS 7611/1. Department of Primary Industries and Regional Development (DWER Ref: A1484394).

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.

Commonwealth of Australia (2011) *Environment Protection and Biodiversity Conservation Act 1999* referral guidelines for the endangered northern quoll, *Dasyurus hallucatus*, EPBC Act Policy Statement 3.25, Commonwealth of Australia, Canberra.

Department of Biodiversity, Conservation and Attractions (DBCA) (2017) Species and Communities Branch fauna advice for Clearing Permit Application CPS 7598/1 (DER Ref: A1466686).

Department of Parks and Wildlife (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: http://naturemap.dpaw.wa.gov.au/. Accessed May 2017.

Department of Parks and Wildlife (Parks and Wildlife) (2017) Species and Communities Branch flora advice for Clearing Permit Application CPS 7611/1 (DER Ref: A1463776).

Department of Water (DoW) (2017) *Rights in Water and Irrigation Act 1914* advice for Clearing Permit Application CPS 7577/1 (DER Ref: A1444473).

Government of Western Australia (2016). 2016 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2016. 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.

NSW Scientific Committee (2009) Grey Falcon Falco hypoleucos. Review of current information in NSW. July 2009. Unpublished report arising from the Review of the Schedules of the Threatened Species Conservation Act 1995. NSW Scientific Committee, Hurstville.

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.