GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS
Area Permit Number: 3787/1
File Number: 2010/003970-1
Duration of Permit: From 15 August 2010 to 15 August 2012

PERMIT HOLDER
Iykeratherra Jacob Chacko
Balmoral International Investments Ltd

LAND ON WHICH CLEARING IS TO BE DONE
Lot 817 on Plan 18305, Harbour Road, CHADWICK 6450

AUTHORISED ACTIVITY
The Permit Holder shall not clear more than 1.32 hectares of native vegetation within the area cross-hatched yellow on attached Plan 3787/1.

CONDITIONS

1. 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.

2. Wind Erosion Management

The Permit Holder shall not clear native vegetation unless the expansion of the existing caravan park begins within two weeks of the clearing being undertaken.

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;

term means the duration of this Permit, including as amended or renewed;

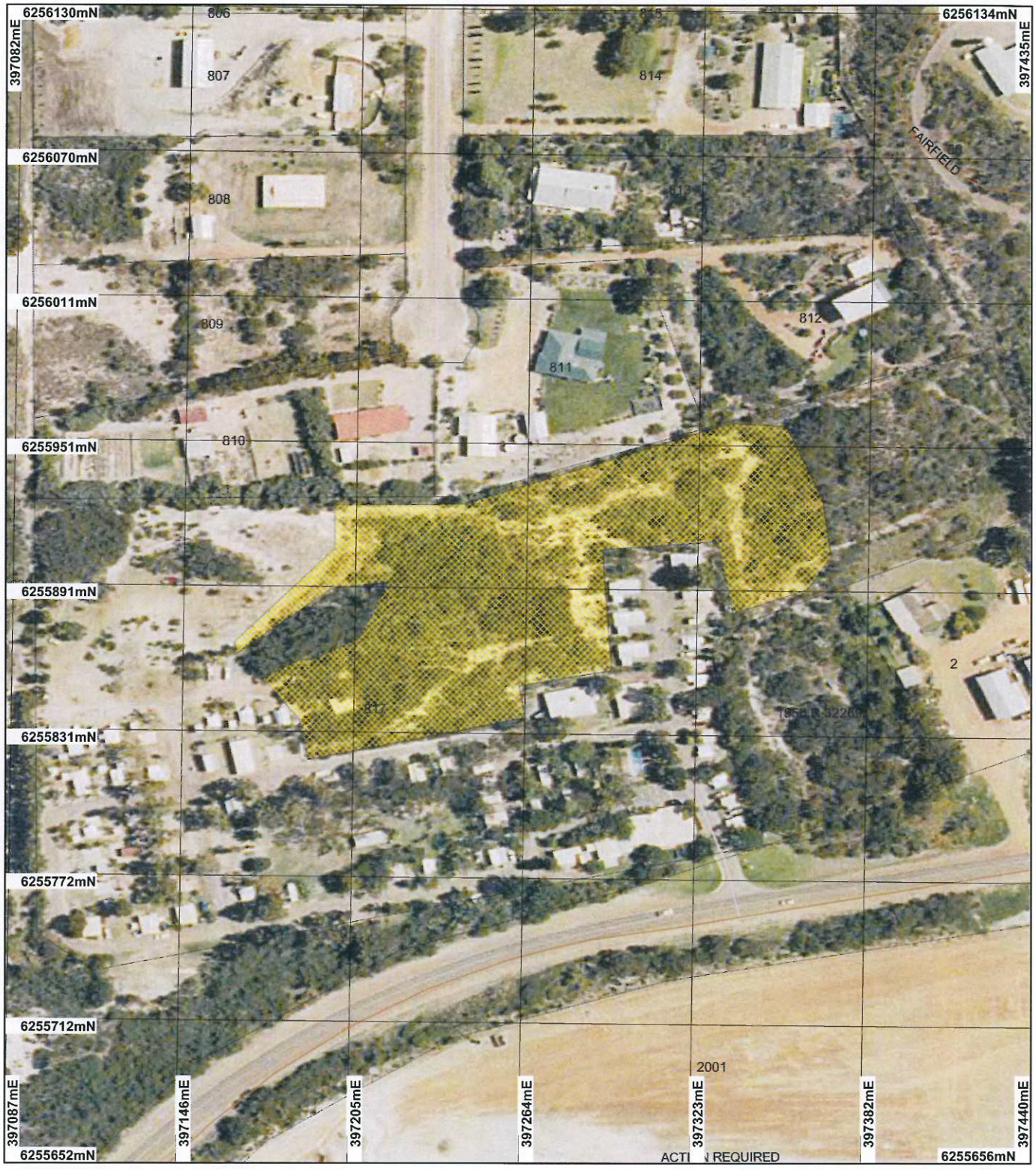
weed/s means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agriculture and Related Resources Protection Act 1976*.

Matthew Warnock
ACTING MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20
of the Environmental Protection Act 1986

15 July 2010

Plan 3787/1



LEGEND

- Cadastre for labelling
- Road Centrelines
  - FW
  - HY
  - LRO (cont)
  - LRS
  - MR
  - N
  - TR
- Clearing Instruments
  - Areas Approved to Clear

Esperance Causeway 50cm Orthomosaic - Landgate 2007

N

0 ~62 m

Scale 1:2097
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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

amendment 15/7/10
..... Date .....

M Warnock

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 acknowleged by the agency acronym in the legend.

Department of Environment and Conservation

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** Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.*

Department of
Environment and Conservation
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Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 3787/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Iykeratherra Jacob Chacko Balmoral International Investments Ltd**

1.3. Property details

Property: LOT 817 ON PLAN 18305 (House No. 193 HARBOUR CHADWICK 6450)
LOT 817 ON PLAN 18305 (House No. 193 HARBOUR CHADWICK 6450)
Local Government Area:
Colloquial name:

1.4. Application

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

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: 3 - Medium forest - Jarrah (Eucalyptus marginata) and Marri (Eucalyptus calophylla) (Shepherd et al. 2007)	The proposal is to clear 1.32 ha for the purpose of expanding an existing caravan park. The vegetation under application is consistent with Beard vegetation association 42 and consists of mallee and acacia scrub in a good (Keighery, 1994) condition.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Condition of vegetation was established through aerial photography and a site visit undertaken by a DEC officer on 17 June 2010 (DEC 2010).

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 at variance to this Principle

The vegetation under application is consistent with Beard vegetation association 42 and consists of mallee and acacia scrub in a good (Keighery 1994) condition.

The vegetation under application is comprised of a vegetation complex that is well represented and the Shire and Bioregion are also reasonably well vegetated. However, the local area (10km radius) has ~25% of vegetation remaining.

The area under application dis not known to contain rare or priority flora or significant habitat for conservation significant fauna and it is not believed to contain a high level of biological diversity (DEC 2010).

The proposed clearing is unlikely to be at variance to this Principle.

Methodology

References
- DEC (2010)
-Keighery (1994)

(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

Five conservation significant fauna species have been recorded in the local area (10 km radius) including the Western Brush Wallaby (Macropus irma), Recherche Cape Barren Goose (Cereopsis novae-hollandiae grisea), Southern Death Adder (Acanthophis antarcticus), Hooded Plover (Charadrius rubricollis) and Carnaby's Black Cockatoo (Calyptorhynchus latirostis). The area under application consists of mallee and acacia scrub on a coastal dune in good (Keighery 1994) condition.

The area under application is a part of an east - west linkage south of the Lake Warden Wetland Suite that is adjacent to the town of Esperance to the south. Due to the proximity to the town of Esperance the function of this corridor is limited.

However, the area under application surrounds a vegetated gully which is considered to contain habitat for fauna in the local area (DEC 2010). The proposed clearing may impact on this habitat through encroachment of weeds and edge effects and therefore a weed condition will be placed on the permit to mitigate this impact. Therefore, the proposed clearing is not likely to be at variance to this Principle.

Methodology

References
-Keighery (1994)
-DEC (2010)
GIS Databases
-SAC Bio Datasets (11/6/2010)
- Esperance Causeway 50cm Orthomosaic - Landgate 2007

(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 species have been recorded in the local (~ 10 km radius) area or were observed during a site inspection of the application area in June 2010 (DEC 2010).

Therefore, it is not considered likely for the proposed clearing to be at variance to this Principle.

Methodology

References
-DEC (2010)
GIS Databases
-SAC Bio Datasets (11/06/2010)

(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) are recorded within a 50 km radius of the application area. Therefore, it is not considered likely for the proposed clearing to be at variance to this Principle.

Methodology

GIS Databases
-SAC Bio Datasets (11/06/2010)

(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 likely to be at variance to this Principle

The property in question has approximately 2.2 ha (39%) of native vegetation remaining on the property. After the proposed clearing there will be 0.6ha (10%) of vegetation remaining. There is ~25% of native vegetation remaining in the local area (10km radius).

The vegetation under application is described as Beard vegetation association 42 of which there is 57.31% of pre-European extent remaining (Shepherd 2007).

The Beard vegetation associations of the vegetation under application retains more than 30% of pre-European vegetation extent remaining below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001).

The vegetation under application is comprised of a vegetation complex that is well represented and the Shire and Bioregion are also reasonably well vegetated. Given this, the area proposed to be cleared is not considered a significant remnant of native vegetation in an area that has been extensively cleared.

	Pre-European (ha)	Current extent (ha)	Remaining (%)
IBRA Bioregions*			
Esperance Plains	2899948.9	1500348.1	51.7
Shire*			
Esperance	4459701.49	3218951.48	72.18
Beard Vegetation Complex*			
42	135426.48	124158.77	57.31

* (Shepherd et al. 2007)

Methodology

References
-Shepherd et al. (2007)
-Commonwealth of Australia (2001)
GIS Databases
-Pre-European Vegetation
-NLWRA, Current Extent of Native Vegetation
-Interim Biogeographic Regionalisation of Australia

(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 likely to be at variance to this Principle

The closest wetlands to the application area is an unnamed lake ~300 m north of the application area and the Lake Warden System, a ANCA and RAMSA wetland occurring ~ 700 m north of the application area.

Given the distance to the nearest wetland and that the vegetation under application consists of upland species (DEC 2010), the proposed clearing is not likely to be at variance to this Principle.

Methodology

GIS Databases
-Hydrography, Linear
-ANCA, Wetlands
-RAMSAR, Wetlands

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

Comments

Proposal is at variance to this Principle

The soil type mapped for the property is A15 which is described as coastal dunes and their intervening swales with saline flats, swamps, and lakes; some lunettes; some estuarine areas: chief soils seem to be calcareous sands on the recent dunes fronting the coast, and siliceous sands on the older dunes and lunettes. There are various undescribed soils around the saline flats and swamps, around estuarine areas, and on aeolianite (Northcote et al. 1960-68)

As the vegetation proposed to be cleared occurs on sands there is a high risk of wind erosion following clearing. This risk is evident due to erosion already occurring within the site (DEC 2010).

Therefore, the proposed clearing has a high risk of wind erosion following clearing. A condition will be placed on the permit to minimise the effects of wind erosion after clearing. It is also noted that the proponent has advised the intended land use is to expand the current caravan park and undertake replanting of trees, This will also limit the effects of wind erosion.

Methodology

References
-DEC (2010)
-Northcote et al. (1960-68)
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 may be at variance to this Principle

The conservation area, Lake Warden Nature Reserve occurs ~ 700m north of the application area and is recognised internationally via the Ramsar convention and nationally via the ANCA Directory of Important Wetlands in Australia. Threats to this system include broad scale vegetation clearing, changed hydrology including salinity, pollution and urban encroachment (DEC 2002).

The proposed clearing may impact on this conservation area through contributing to the incremental encroachment of urbanisation and contribute to these threatening processes affecting the Lake Warden wetlands suites. Therefore, the proposed clearing may be at variance to this Principle, however the impacts are likely to be negligible due to the relatively small area proposed to be cleared.

Methodology References
-DEC (2002)
References
-DEC 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

The closest wetlands to the application area is an unnamed lake ~300 m north of the application area and the Lake Warden System, a ANCA and RAMSA wetland occurring ~ 700 m north of the application area.

Given the small area proposed to be cleared (1.32ha) and the distance to nearby wetlands, it is not considered likely for the proposed clearing to cause deterioration of surface or groundwater quality.

Methodology GIS Databases
-Hydrography, Linear
-ANCA, Wetlands
-RAMSAR, Wetlands

(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

The closest wetlands to the application area is an unamed lake ~300 m north of the application area and the Lake Warden System, a ANCA and RAMSA wetland occurring ~ 700 m north of the application area.

Chief soils within the application area are calcareous sands and siliceous sands (Northcote et al 1960-68).

Given the small area proposed to be cleared (1.32ha), the distance to nearby wetlands and the sandy nature of the soils within the application area, it is not considered likely for the proposed clearing to cause or exacerbate the incidence or intensity of flooding.

Methodology References
-Northcote et al. 1960-68)
GIS Databases
-Soils, Statewide
-Hydrography, Linear
-ANCA, Wetlands
-RAMSAR, Wetlands

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

Comments

The proposal is to clear 1.32 ha on top of a sand hill that is collapsing in the centre of the Acclaim Pine Grove Holiday Park. The proponent proposes to level the area and use as caravan sites. The proponent plans to revegetate within the cleared area once it is levelled to provide some shade to new caravan sites.

The proponent requires a Development approval from the Shire of Esperance.

The property is currently zoned for Tourist Development.

Methodology GIS Databases
- Town Planning Scheme Zones

4. References

DEC (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Esperance 2 (ESP2 - Recherche subregion), Department of Environment and Conservation.

DEC (2010) Site Inspection Report and Regional Advice for Clearing Permit Application CPS 3727/1 Lot 817 Harbour Rd, Chadwick. Site inspection undertaken 17/06/2010. Department of Environment and Conservation, Western Australia (DEC ref A311216).

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: Melbourne.

Shepherd, D.P. (2007) 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.

5. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management (now DEC)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment (now DEC)
DoW	Department of Water
DMP	Department of Mines and Petroleum (ex DoIR)
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)