GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 307 / 2
File Number: 20000
Duration of Permit: From 17 February 2010 to 17 February 2018

PERMIT HOLDER

Ross Neil Armstrong T/A Green Head Sands

LAND ON WHICH CLEARING IS TO BE DONE

Lot 12521 on Plan 195118, Warradarge (M70/907 and M70/690)

AUTHORISED ACTIVITY

Clearing of up to 4.8 hectares within the area cross-hatched yellow on attached Plan 307/2.

CONDITIONS

1. Type of clearing authorised

(a) The Permit Holder shall not clear native vegetation unless the purpose for which the clearing is authorised is enacted within 14 days of the clearing being undertaken.
(b) Clearing authorised under this Permit must be completed by 17 February 2015, being five years from the date from which this Permit becomes valid.

2. 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.

3. Dieback and 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* and *dieback*:
(a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
(b) shall not move soils in wet conditions;
(c) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
(d) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

4. Retain vegetative material and topsoil, revegetation and rehabilitation

(a) The Permit Holder shall retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil in an area that has already been cleared.

(b) Within 3 months of the area no longer being required for sand extraction the Permit Holder must *rehabilitate* the area cross-hatched yellow on attached Plan 307/2 by:
   (i) laying the vegetative material and topsoil retained under condition 4(a) on the cleared area.

(c) Within 18 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 4(b) of this Permit:
   (i) determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and
   (ii) where, in the opinion of an environmental specialist, the composition structure and density determined under condition 4(c)(i) of this Permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, *revegetate* the area by deliberately *planting* and/or *direct seeding* native vegetation that will result in a similar species composition, structure and density of native vegetation to pre-clearing vegetation types in that area and ensuring only *local provenance* seeds and propagating material are used.

5. Records to be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

(a) In relation to the clearing of native vegetation authorised under this Permit:
   (i) the species composition, structure and density of the cleared area;
   (ii) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
   (iii) the date that the area was cleared; and
   (iv) the size of the area cleared (in hectares).

(b) In relation to the *revegetation* and *rehabilitation* of areas pursuant to condition 4 of this Permit:
   (i) the location of any areas *revegetated* and *rehabilitated*, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
   (ii) a description of the *revegetation* and *rehabilitation* activities undertaken;
   (iii) the size of the area *revegetated* and *rehabilitated* (in hectares); and
   (iv) the species composition, structure and density of *revegetation* and *rehabilitation*.

6. Reporting

(a) The Permit Holder must provide to the CEO, on or before 30 June of each year, a written report of records required under condition 5 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.

(b) Prior to 17 November 2017, the Permit Holder must provide to the CEO a written report of records required under condition 5 of this Permit where these records have not already been provided under condition 6(a) of this Permit.

Definitions

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

dieback means the effect of *Phytophthora* species on native vegetation;

direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

environmental specialist means a person who is engaged by the Permit Holder for the purpose of providing environmental advice, who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;

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

local provenance means native vegetation seeds and propagating material from natural sources within 70 kilometres of the area cleared.

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;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

regenerate/ed/ion means *revegetation* that can be established from in situ seed banks contained either within the topsoil or seed-bearing *mulch*;

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;

revegetate/ed/ion means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area;

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

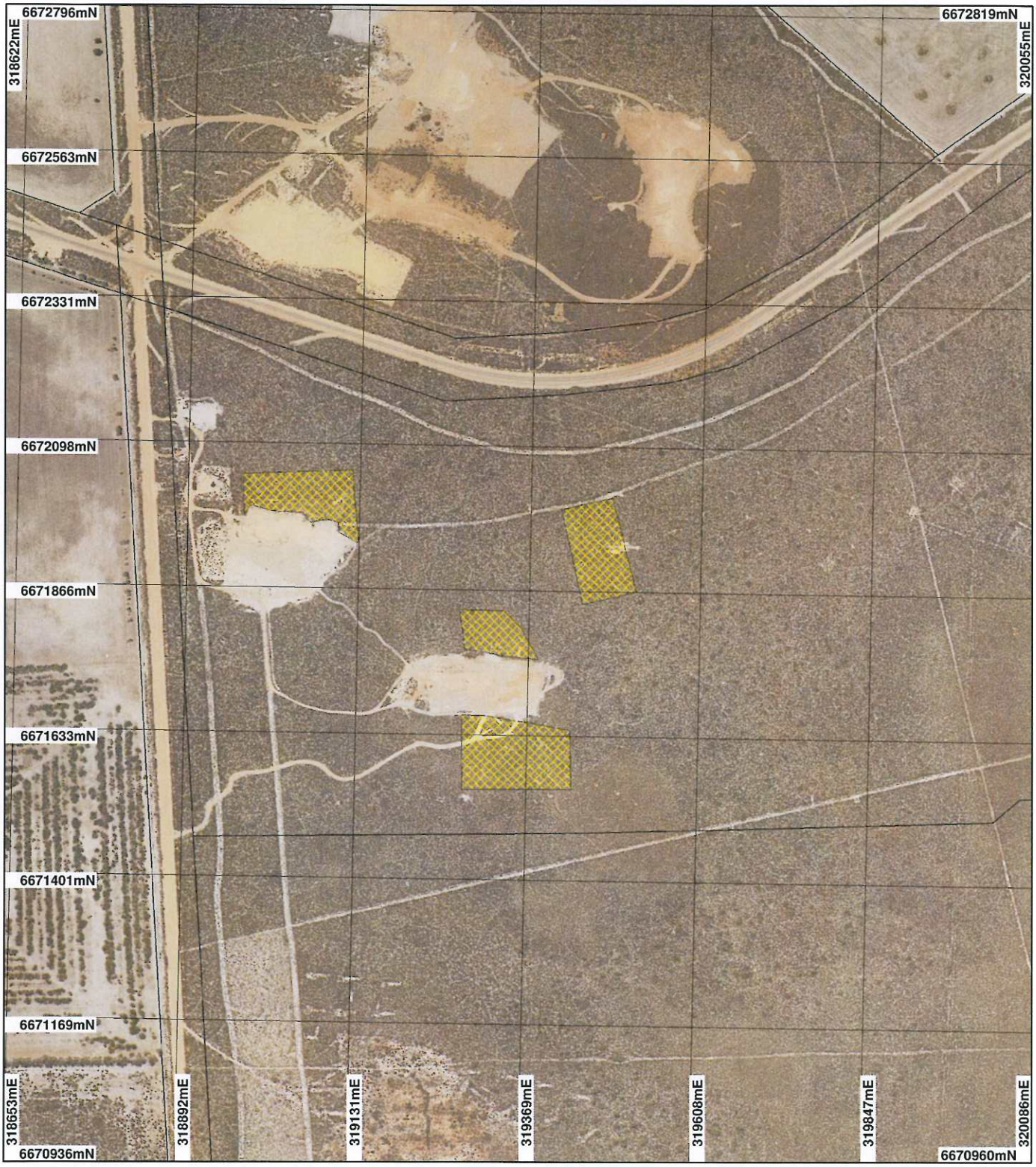
weed/s means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the *Agricultural and Related Resources Protection Act 1976*.

Gordon Wyre
DIRECTOR
NATURE CONSERVATION DIVISION

Officer delegated under Section 20
of the Environmental Protection Act 1986

25 March 2010

CPS 307/2 Plan



LEGEND

Clearing Instruments

- Areas Approved to Clear
- Cadastre

Hill River 50cm Orthomosaic - Landgate 2006

N

0 ~200 m

Scale 1:8286
(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.

..... Date 25/3/10
G. Wyre
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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Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 307/2
Permit type: Area Permit

1.2. Proponent details

Proponent's name: R.N Armstrong ta Green Head Sands

1.3. Property details

Property: M70/907
M70/690

Local Government Area:

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
4.8		Mechanical Removal	Extractive Industry

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 1031: Mosaic: Shrublands; hakea scrub-heath / Shrublands; dryandra heath (Hopkins et al. 2001, Shepherd et al. 2001). Mattiske Vegetation Complex: Keystone (Kb): Mosaic of tall open forest of Eucalyptus guilfoylei-Eucalyptus jacksonii-Eucalyptus diversicolor on slopes of major hills rising above coastal plain with Allocasuarina decussata-Banksia grandis-Agonis flexuosa on slopes in hyperhumid and perhumid zones and tall open forest of Eucalyptus brevistylis-Eucalyptus marginata subsp. marginata-Corymbia calophylla and the occasional Eucalyptus megacarpa near rock outcrops in hyperhumid and perhumid zones.	The 4.8 hectares under application is within Crown Reserve 42031 vested in the Shire of Coorow for the purpose of gravel. The area is also subject to 2 mining tenements held by the proponent. Crown Reserve 42031 adjoins the Lesueur National Park. The vegetation is described as a low heathland with species including; Acacia, Hakea, Dryandra, Conostylis, Ptilotus, Anigozanthos, Eucalyptus, Banksia, Xanthorrhoea, Adenanthos, Grevillea and Kennedia. The vegetation under application is in 'Excellent' to 'Pristine' (Keighery, 1994) condition (DEC 2009a, DEC 2010).	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The condition of the vegetation was determined from aerial photography (Hill River 50cm Orthomosaic Landgate06) and assessed during a site inspection by DEC Officers (DEC 2009a) and a second visit (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 may be at variance to this Principle

The proposal is for the clearing of up to 4.8 hectares of native vegetation for the purpose of sand and gravel extraction. The vegetation under application is mapped as Beard Vegetation Unit 1031, which is in excellent to pristine (Keighery, 1994) condition (DEC, 2009a), excluding those areas already disturbed by extraction related activities (DEC 2010).

The area under application is on the Register of National Estate (Mount Lesueur Area) for its natural significance. The applied area is north of and contiguous with, the Lesueur National Park with which it holds many ecological similarities (Lesueur National Park and Coomallo Nature Reserve Management Plan, 1995-2005) and is known as an area of high biodiversity.

The local area (within a 10 km radius) retains approximately 50% native vegetation, of which approximately 80% is within DEC managed lands.

There are 6 records of rare flora species and 60 records of priority flora species within a 10 km radius of the proposed clearing. Previous flora and vegetation surveys of the applied area identified two priority flora within the applied area, namely Daviesia epiphyllum and Darwinia sanguinea (Pilbara Flora 2008). Both of these species were delisted from the priority flora list on the 29 January 2009.

There is one Priority Ecological Community (PEC) within the local area (10 km radius) however the clearing as proposed is not expected to have any significant impact on this PEC (DEC, 2008).

The area under application is likely to contain flora and fauna diversity similar to that of the Lesueur National Park (south of applied area), which is known as an area of high biodiversity. Therefore, the proposed clearing may be at variance to this principle. Revegetation conditions will be placed on the permit to ameliorate impacts to the vegetation.

Methodology

References:
DEC (2008)
DEC (2009a)
DEC (2010)
Keighery (1994)
CALM (1995) Lesueur National Park and Coomallo Nature Reserve Management Plan (1995-2005)
Pilbara Flora (2008)

GIS databases:
Hill River Arrowsmith 1.4m Orthomosaic DLI 2002
DEC Tenure DEC 2009
SAC Biodatasets accessed Jan 2010
Pre European Vegetation DA 2001

(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

There are several records of threatened and priority fauna species within a 10 km radius of the proposed clearing, including the Phasmodes jeeba (P2), Hooded Plover (VU), Australian Bustard (P4), White browed Babbler (P4), Carnaby's black cockatoo (EN), Mallee fowl (VU) and Western Brush Wallaby (P4). The vegetation under application is characteristic of the Kwongan vegetation type and much of the surrounding vegetation is in similar condition to the applied area (DEC, 2009a and 2010).

This vegetation type provides foraging habitat for Carnaby's black cockatoo and is contiguous with the Lesueur National Park with which it holds many ecological similarities (Lesueur National Park and Coomallo Nature Reserve Management Plan, 1995-2005). The area under application is close to a significant Carnaby's black cockatoo breeding site (DEC 2010b) and the vegetation within the applied area could be considered significant feeding habitat based on this proximity. However, as the applied area is separated into four smaller parcels of less than 2 hectares each, these areas have greater potential for successful rehabilitation post-clearing and therefore it is likely that impacts to the vegetation can be reduced.

The vegetation is not considered critical foraging habitat for Carnaby's black cockatoo based on the remaining vegetation cover in the local area and as the applied area is more than 12 km from any known breeding population.

The local area retains approximately 50% native vegetation cover with approximately 80% of this vegetation within DEC managed lands. Therefore, the proposed clearing is not likely to be at variance to this principle.

Methodology

References:
CALM (1995) Lesueur National Park and Coomallo Nature Reserve Management Plan (1995-2005)
DEC (2009a)
DEC (2010)
DEC (2010b)

GIS databases:
- Hill River Arrowsmith 1.4m Orthomosaic DLI 2002
- DEC Tenure DEC 2009

- SAC Biodatasets accessed Jan 2010
- Pre European Vegetation DA 2001

(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

There are records of 9 different declared rare flora taxa within a 10 km radius of the proposed clearing, including Acacia forrestiana, Calectasia cyanea, Eucalyptus lateritica, E. suberea, Grevillea batrachioides, Thelymitra stellata, Eleocharis keigheryi, Hemiandra gardneri, and Paracaleana dixonii.

Of these rare flora species one (Eleocharis keigheryi) is not likely to occur within the application area. The application area may contain habitat which may be suitable for the remaining rare flora species, however none were identified in a flora survey of the applied area (Pilbara Flora 2008).

Given the results of a flora survey of the applied area (Pilbara Flora 2008) it is unlikely that there is rare flora occurring within the application area. Additionally, advice received from the Midwest Region states that they do not believe there are likely to be DRF present in the proposed clearing areas on the basis of searches conducted to date (DEC 2010c). Given the locally widespread vegetation unit which is locally well reserved, the comparatively small area of proposed clearing is unlikely to have an impact on the conservation status of any plant taxa.

Considering the above information, the proposed clearing the clearing is not likely to be at variance to this principle.

Methodology

References:
DEC (2010c)
Pilbara Flora (2008)

GIS databases:
- Hill River Arrowsmith 1.4m Orthomosaic DLI 2002
- Declared Rare and Priority Flora List DEC 2009
- Mattiske Vegetation CALM 1998
- SAC Biodatasets - accessed Jan 2010
- Soils, Statewide DA 1999
- Pre European Vegetation - DA 2001

(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

There is one Priority Ecological Community (PEC) within the local area (10 km radius) however the vegetation observed (DEC 2010) and surveyed (Pilbara Flora 2008) within the applied area is not representative of this community and the clearing as proposed is not expected to have any significant impact on this PEC (DEC 2008).

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

Methodology

References:
DEC (2008)
DEC (2010)
Pilbara Flora 2008

GIS databases:
- SAC Biodatasets accessed Jan 2010
- Pre European Vegetation DA 2001

(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 vegetation under application is mapped as Beard Vegetation Unit 1031 in 'excellent' to 'pristine' (Keighery, 1994) condition (DEC 2009a). This vegetation unit is described as mosaic: shrublands; hakea scrub-heath / shrublands; dryandra heath (Hopkins et al. 2001, Shepherd et al. 2001) which is currently mapped as having approximately 35% of the pre-European vegetation remaining within the Geraldton Sandplains Bioregion.

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; EPA 2000). The

vegetation types under application retain more than this 30% threshold level (see table below).

The area under application falls within the Intensive Landuse Zone as described under EPA Position Paper No. 2 Agriculture Region (EPA 2000). The application area is mapped as part of the Register of National Estate, Mount Lesueur Area, for its natural significance and is located close to the Lesueur National Park with which it is likely to hold similar ecological values (Lesueur National Park and Coomallo Nature Reserve Management Plan, 1995-2005).

Given the local area (10 km radius) retains approximately 50% native vegetation cover with approximately 80% of this vegetation within DEC managed lands, the area under application is not considered significant as a remnant.

Considering the extent of vegetation retained within the local area, most of which in a similar condition as the applied area, the clearing as proposed is not likely to be at variance to this principle.

References:
Commonwealth of Australia (2001)
DEC (2009a)
EPA (2000)
Keighery (1994)
CALM (1995) Lesueur National Park and Coomallo Nature Reserve Management Plan (1995-2005)
Hopkins et al (2001)

Methodology

GIS databases:
- Hill River Arrowsmith 1.4m Orthomosaic - DLI 2002
- Interim Biogeographic Regionalisation of Australia - EA 2000
- Local Government Authorities - DLI 2004
- Mattiske Vegetation - CALM 1998
- Pre European Vegetation - DA 2001
- SAC Biodatasets - accessed Jan 2010

(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 watercourse is approximately 2.8 km north east of the application area and there are no wetlands in the local area (10 km radius).

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

Methodology

GIS databases:
- ANCA wetlands Environment Australia 1999
- DEC tenure DEC 2009
- EPP Lakes Policy Area DEP 1997
- Environmentally Sensitive Areas (ESA) - DEC 2009
- Hydrography linear DOW 2006
- Ramsar wetlands DEC 2003

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

Comments

Proposal may be at variance to this Principle

The applied area is mapped and described as being chiefly sandy acidic yellow mottled soils, containing much ironstone gravel in the A horizons (Northcote et al. 2001).

The applied area lies in the lower part of the surrounding landscape and is bordered by gently inclined sandy rise with the chief soils on site being deep yellow sand with some areas of pale sand over deep yellow sand (Commissioner of Soil and Land Conservation 2006).

The Commissioner of Soil and Land Conservation advice (2006) assessed the clearing to have little effect on increasing salinity, water erosion, water logging or flooding but did find that the presence of loose sandy soils is a risk of wind erosion.

The clearing as proposed may be at variance to this principle as clearing is likely to result in wind erosion of loose sands within the applied area.

It is noted that the purpose of this project is to extract sand and gravel and the applicant intends to manage wind erosion through staged clearing management (Pilbara Flora 2008). Staged clearing and revegetation conditions will be placed on the permit to reduce the potential for wind erosion and the impacts on adjacent

vegetation.

Methodology

References:
Northcote et al. (2001)
Commissioner of Soil and Land Conservation (2006)
Pilbara Flora (2008)

GIS databases:
- Acid Sulfate Soil Risk Map, Swan coastal Plain - DEC 2006
- Hill River Arrowsmith 1.4m Orthomosaic DLI 2002
- Annual Evaporation Contours (Isopleths) - WRC 1998
- Average Annual Rainfall Isohyets - WRC 1998
- Hydrographic catchments, catchments - DoW 2007
- Hydrographic catchments, subcatchments - DoW 2007

(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 area under application is on the Register of National Estate (Mount Lesueur Area) for its natural values. The applied area is adjacent to an 'A' Class Reserve (42032) (Lesueur National Park and Coomallo Nature Reserve Management Plan, 1995-2005) and is within the EPA Position Paper No. 2 Agriculture Region. The vegetation under application is contiguous with vegetation within the Lesueur National Park with which it holds many ecological similarities.

The border of the Lesueur National Park is 50 metres south of the southern boundary of the applied area. Given the distance between these two areas the clearing may increase edge effects such as weed invasion, increased drying of surface soils and potential for the introduction of dieback will impact on the environmental values of the National Park. Therefore, the proposed clearing may be at variance to this principle.

Additionally, weed and dieback management conditions along with staged clearing and a rehabilitation conditions will be placed on the permit to reduce and mitigate impacts to the national park.

Methodology

References:
CALM (1995) Lesueur National Park and Coomallo Nature Reserve Management Plan (1995-2005)

GIS databases:
- Hill River Arrowsmith 1.4m Orthomosaic DLI 2002
- CALM Managed Lands and Waters CALM 2005
- Register of National Estate Environment Australia, Australian and world heritage division 2008
- System 1 to 5 and 7 to 12 areas DEC 2006

(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 watercourse is approximately 2.8 km north east of the application area and there are no wetlands in the local area (10 km radius).

The soils of the area are not associated with any salinity risk, and no land in the vicinity of the proposal is affected by shallow groundwater or salinity (Commissioner of Soil and Land Conservation 2006).

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

Methodology

References:
Commissioner of Soil and Land Conservation (2006)

GIS databases:
- Hill River Arrowsmith 1.4m Orthomosaic DLI 2002
- Evapouration Isopleths - WRC 1998
- Groundwater Salinity Statewide DoW 2006
- Hydrographic catchments, catchments - DoW 2007
- Hydrographic catchments, subcatchments - DoW 2007
- Hydrography, linear - DOW 2006
- Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 2005

(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 area under application has an average rainfall of 600 mm and an average evapotransporation rate of 600 mm annually and consists of soils with high infiltration rates (Commissioner of Soil and Land Conservation 2006).

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

Methodology

References:
Commissioner of Soil and Land Conservation (2006)

GIS databases:
- Hill River Arrowsmith 1.4m Orthomosaic DLI 2002
- Evapouration Isopleths WRC 1998
- Groundwater Salinity Statewide DoW 2006
- Hydrographic catchments, catchments DoW 2007
- Hydrographic catchments, subcatchments DoW 2007
- Hydrography, linear DOW 2006
- Mean Annual Rainfall Isohytes (1975 - 2003) DEC 2005

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

Comments

EPA referral:
The initial application (CPS 307/1) to clear 10 hectares for the purpose of sand extraction was referred to the EPA under the Onshore Mineral Exploration and Development Memorandum of Understanding reporting requirements under Part IV of the Environmental Protection Act (1986) 29 May 2003 (CRN 189275). The level of assessment was set at Not Assessed - Public Advice Given and Managed under Part V (Clearing) on the 29 December 2008 (DOC74689). The EPA recommended that a fauna survey be undertaken for the 10 ha area but due to the modification of the applied clearing area to include four smaller clearing areas , DEC is of the belief that potential impacts to fauna and fauna habitat will be limited.

CPS 307/1 was reduced to 5 hectares (and was subsequently reduced by the applicant to 2.9 ha to concentrate on areas with high gravel content (DOC 82785) and a clearing permit from 2.9 ha was granted.

The applicant then lodged an amendment form to increase to the area to 7.3 ha to meet current sand and gravel extraction requirements (CPS 307/2). CPS 307/2 was again amended and re-advertised to 8.5 ha (DOC116771), which was an over estimation of the applied clearing area. CPS 307/2 has since been amended further to allow for a 50 metre buffer between clearing and the nearby National Park (DOC121092) and is calculated to be 4.8 ha.

The applicant holds a current Mining Tenement over the applied areas (DOC 83820) and has approval from the Shire of Coorow (DOC 83835) to undertake a gravel extraction operation from the applied area. The tenure of the applied are is a Crown Reserve (42031) for gravel extraction purposes (DOC 83821).

It is noted that the applied clearing areas are visible from both the Coorow-Green Head and Cockleshell Gully Roads both of which are important tourist routes associated with Lesueur National Park and Stockyard Gully Reserve. Effective rehabilitation of the applied areas was highlighted as being of importance to reduce impacts to visual amenity (DOC 116087).

Methodology

DEC (2010)
EPA (2009)

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing may be at variance to principle (a), (h) and (g) and is not likely to be at variance to the remaining clearing principles.

5. References

ANCA (1996) A Directory of Important Wetlands in Australia. Second Edition. Australian Nature Conservation Agency, Canberra

Brown A., Thomson-Dans C. and Marchant N. (1998). Western Australia's Threatened Flora, Department of Conservation and Land Management, Western Australia.

Burbidge, A. (2004) Threatened Animals of Western Australia, Department of Conservation and Land Management, Perth,

Western Australia.
Commissioner of Soil and Land Conservation Advice (2006) Land Degradation Assessment Report and summary advice, Department of Food and Agriculture Western Australia, Office of the Commissioner of Soil and Land Conservation, advice to Assessing Officer, Department of Environment and Conservation TRIM DOC IN25667).
Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
DEC (2007) DEC Fauna Habitat Notes.xls. February 2007. Department of Environment and Conservation, Western Australia.
DEC (2008) Threatened Ecological Communities Branch advice to assessing officer, Department of Environment and Conservation. Advice to Assessing Officer DEC (TRIM DOC54596).
DEC (2009) CPS 307/1 Site Visit Report from 1 April 2009, Department of Environment and Conservation, Department of Environment and Conservation (TRIM DOC82191)
DEC (2009b) Regional Advice to assessing officer, Midwest Region, Department of Environment and Conservation (TRIM DOC116087).
DEC (2009c) Final Regional Advice to assessing officer, Midwest Region, Department of Environment and Conservation (TRIM DOC DOC84681).
DEC (2010) Site visit report CPS 307/2. Department of Environment and Conservation (TRIM DOC116815).
DEC (2010b) Species and Communities Branch advice regarding Carnaby's Black Cockatoo habitat. Department of Environment and Conservation (TRIM DOC116084).
DEC (2010d) Final advice in regards to Carnaby's black cockatoo habitat. Species and Communities Branch, Department of Environment and Conservation, WA (TRIM DOC 119208).
Department of Conservation and Land Management (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions.
EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority, Western Australia.
EPA (2001) Environmental Protection of Wetlands. Preliminary Position Statement No.4. Perth, Western Australia.
EPA (2002) Terrestrial Biological Surveys as an element of biodiversity protection. Position Statement No. 3. March 2002. Environmental Protection Authority, Western Australia.
EPA (2004) Guidance for the Assessment of Environmental Factors - Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia. Guidance Statement No 51. Environmental Protection Authority, Western Australia.
EPA (2004) Guidance for the Assessment of Environmental Factors: Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia. Guidance Statement No 56. Environmental Protection Authority, Western Australia.
EPA (2009) Public Advice for Cockleshell Gully Road Sand Pit M70/690 and M70/907. Environmental Protection Authority, Perth, WA (TRIM DOC78296).
Government of Western Australia (1997) Wetlands Conservation Policy for Western Australia, Department of Conservation and Land Management and the Water and Rivers Commission, Perth WA.
Hnatiuk and Hopkins (2006). An ecological analysis of kwongan vegetation south of Eneabba, Western Australia. Austral Ecology. Volume 6 Issue 4, Pages 423 - 438. Published Online: 28 Jul 2006
JANIS Forests Criteria (1997) Nationally agreed criteria for the establishment of a comprehensive, Adequate and Representative reserve System for Forests in Australia. A report by the Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-committee. Regional Forests Agreement process. Commonwealth of Australia, Canberra.
Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment 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.
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6. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
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)
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)