

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 3965/1

File Number: 2010/007224-1

Duration of Permit: From 11 December 2010 to 11 December 2012

PERMIT HOLDER

VR Nominees Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 1345 on Deposited Plan 156169, Waroona

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 19.18 hectares of native vegetation within the area hatched yellow on attached Plan 3965/1.

CONDITIONS

1. Clearing not authorised

This Permit does not authorise the Permit Holder to clear Marri (Corymbia calophylla) and Jarrah (Eucalyptus marginata) habitat tree(s).

2. 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 only move soils in dry 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.

DEFINITIONS

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

dieback means the effect of Phytophthora species on native vegetation;

dry conditions means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

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

habitat tree(s) means trees that have a diameter, at average adult human chest height, of greater than 70cm, healthy but with dead limbs and broken crowns that are likely to contain hollows and roosts suitable for native fauna, or where these are not present then healthy but with the potential to contain hollows and roosts:

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; 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 Agriculture and Related Resources Protection Act 1976.

Matthew Warnock

A/MANAGER

NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20 of the Environmental Protection Act 1986

11 November 2010

Plan 3965/1





Department of Environment and Conservation

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Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.:

3965/1

Area Permit

Permit type:

1.2. Proponent details

Proponent's name:

VR Nominees Pty Ltd

1.3. Property details

Property:

LOT 1345 ON PLAN 156169 (WAROONA 6215)

Local Government Area:

Colloquial name:

Shire fo Waroona

Colloquial flame.

1.4. Application

Clearing Area (ha) 19.18

No. Trees

Method of Clearing

For the purpose of:

Mechanical Removal

Grazing & Pasture

1.5. Decision on application

Decision on Permit Application:

n: Grant

Decision Date:

11 November 2010

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

Beard Vegetation Association: 3: Medium forest of jarrah-marri (Shepherd, 2009)

Mattiske Vegetation Complex:

Dwellingup (D1): Open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla on lateritic uplands in mainly humid and subhumid zones. (Mattiske and Havel, 1998)

Heddle Vegetation Complex:

Helena Complex in Medium to High Rainfall: Mosaic of open forest of Corymbia calophylla-Eucalyptus patens-Eucalyptus marginata subsp. marginata with some Eucalyptus rudis on the deeper soils ranging to closed heath and lithic complex on shallow soils associated with granite on steep slopes of valleys in humid and subhumid zones.

(Heddle et al, 1980)

Clearing Description

The vegetation under application consists of 19.18 hectares (ha) of native vegetation in degraded to completely degraded (Keighery, 1994) condition.

The application area is part of a large paddock in which cattle are currently grazed.

The southern half of the application area has been largely parkland cleared, with some very open areas consisting solely of pasture grassed, some isolated marri (Corymbia calophylla) trees and small stands of jarrahs (Eucalyptus marginata) with no native understorey species. This half of the application area is in completely degraded (Keighery, 1994) condition.

The northern half of the application area is more heavily forested, with an over storey of mature jarrah and marri. Mid storey is sparse, with Allocasuarina sp (sheok), Banksia grandis (bull banksia) and Persoonia longifolia (snottygobble) scattered throughout the degraded (Keighery, 1994) vegetation near the top of the rise. There is little to no native understorey remaining in this area, except for a small number of Burchardia congesta (milkmaids), Macrozamia riedlei, Xanthorrhoea gracilis (slender balga) and Xanthorrhoea preissii (balga). Vegetation in the northern half of the application area is considered to be in degraded (Keighery, 1994) condition

Some deaths of small trunk diameter jarrah were noted during site inspection (DEC, 2010). There may be dieback present in the application area (DAFWA, 2010; DEC, 2010)

The applicant intends to level the ground and remove the large rocks for ease of management (DEC, 2010).

The applicant advised that he is prepared to retain the larger Jarrah and Marri trees as habitat for cockatoos.

Vegetation Condition

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994)

Comment

Vegetation condition was determined through aerial imagery and a site visit conducted in September 2010 (DEC, 2010).

То

Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994)

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 proposal is to clear up to 19.18 hectares (ha) of native vegetation within Lot 1345 on Deposited Plan 156169, Waroona for the purpose of pasture and grazing.

The local area (10km radius) retains approximately 50% native vegetation cover, with the Dwellingup State Forest encompassing approximately 80% of the vegetation in the local area. The Dwellingup State Forest extends to within 385m of the application area and the vegetation type under application (Beard 3) appears to be well represented in the Dwellingup State Forest.

The vegetation under application is described as Jarrah-Marri over storey with little to no native mid and understorey species due to historic clearing and continued grazing for many years (DEC, 2010). The vegetation under application is in degraded to completely degraded (Keighery, 1994) condition, reducing floristic diversity and fauna habitat value.

Due to the condition of the vegetation under application and the presence of vegetation in close proximity that is likely to retain a higher level of biological diversity than the vegetation under application, the applied area is not likely to contain a high level of biodiversity in the local context, however it may provide significant habitat for threatened black cockatoo species. The applicant has advised he is prepared to retain the larger Marri and Jarrah trees for cockatoo habitat.

Access to the application area is via an unsealed track that passes through neighbouring properties and is adjacent to significant tracts of high quality vegetation and movement of machinery poses a high risk of introducing or spreading weeds and dieback to both the application and surrounding areas. Weed and dieback management conditions can minimise the risk of introducing or spread weeds and pathogens into the application area and surrounding environment.

Considering the above, the vegetation under application is not likely to comprise a high level of biological diversity and therefore the proposed clearing is not likely to be at variance to this Principle.

Methodology

References:

DEC, 2010 Keighery, 1994

GIS Databases:

- DEC Managed Lands & Waters DEC 28/10/09
- Evapotranspiration, Area Actual BOM 30/09/01
- Groundwater Salinity, statewide DoW 13/07/06
- Hydrogeographic Catchments, Catchments DoW 01/06/07
- Hydrogeology, statewide DoW 13/07/06
- Hydrography, linear DoW 13/7/06
- Rainfall, Mean Annual BOM 30/09/01
- Pinjarra 50cm Orthomosaic Landgate 2006
- Pre-European vegetation DA 01/01
- SAC Biodatasets 29/09/10
- Soils, Statewide 30/11/99

(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 may be at variance to this Principle

Five Forest Red-tailed black cockatoos (Calyptorhynchus banksii naso) (Vulnerable, Wildlife Conservation Act 1950; Vulnerable, Environment Protection and Biodiversity Conservation Act 1999) were observed on the branches of large dead jarrah trees within the application area and a large hollow was noted in the branch of a mature jarrah tree (DEC, 2010).

The vegetation under application is considered to be significant feeding, roosting and breeding habitat for the Forest Red-tailed black cockatoo and breeding habitat for Baudin's black cockatoo (Calyptorhynchus baudinii) (Endangered, Wildlife Conservation Act 1950; Vulnerable, Environment Protection and Biodiversity Conservation Act 1999). Its significance to the Carnaby's black cockatoo (Calyptorhynchus latirostris) (Endangered, Wildlife Conservation Act 1950; Endangered, Environment Protection and Biodiversity Conservation Act 1999) is unknown.

There are eight threatened and priority fauna species recorded within the local area (10km radius). Due to the largely cleared, degraded to completely degraded (Keighery, 1994) condition and lack of native understorey, and proximity to higher quality vegetation in neighbouring properties and in the nearby Dwellingup State Forest, it is unlikely to be significant as habitat for most of these species. However, the proposed clearing may have

detrimental impact on the quality of suitable habitat nearby, as the incremental removal of vegetation to open up paddocks will result in the continuity of habitat in the surrounding area being degraded.

The applicant is prepared to retain the large Marri and Jarrah trees for cockatoo habitat, however the viability of the retained vegetation to persist in the area is likely to be reduced due to the proposed clearing and subsequent land use. It is presumed that the large trees will persist for some time, but ultimately regeneration will depend on the appropriate management of the site.

Given the above, the proposed clearing may be at variance with this Principle.

Methodology

References:

DEC, 2010 Keighery, 1994

GIS Databases:

- Pinjarra 50cm Orthomosaic Landgate 2006
- Pre-European vegetation DA 01/01
- SAC Biodatasets 29/09/10
- Soils, Statewide 30/11/99

(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 four declared rare flora species in the local area (10km radius). These records are mapped within different soil and vegetation types to those of the area under application.

The declared flora species Tetraria australiensis has been recorded 5.4km southwest of the application area and occupies grey sand over clay (DEWHA, 2008). It favours winter-wet, swampy depressions, drainage lines or rises surrounding swamps (DEWHA, 2008).

The declared flora species Synaphea stenoloba is mapped 5.4km southwest of the application area. It prefers loamy soils in low lying areas that are occasionally inundated (Western Australian Herbarium, 1998-; DEWHA, 2009). Associated vegetation is generally swampy heath (DEWHA, 2009).

The declared flora species Drakea micrantha is mapped as occurring 9.1km southwest of the application area. This taxon occurs in infertile grey sands (Western Australian Herbarium, 1998-).

The declared flora species Eleocharis keigheryi has been recorded is recorded 9.2km northwest of the area under application. This taxon grows in small clumps in a substrate of clay or sandy loam and is emergent in freshwater creeks and claypans (Western Australian Herbarium, 1998-).

The application area does not support suitable habitat for these declared rare species and therefore the proposed clearing is not likely to be at variance with this Principle.

Methodology

References:

DEC, 2010 DEWHA, 2008 DEWHA, 2009 Keighery, 1994

Western Australian Herbarium, 1998-

GIS Databases:

- Pinjarra 50cm Orthomosaic Landgate 2006
- Pre-European vegetation DA 01/01
- SAC Biodatasets 29/09/10
- Soils, Statewide 30/11/99

(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 are numerous records of Threatened Ecological Communities (TEC) located within the local area;

SCP3a - Eucalyptus calophylla - Kingia australis woodlands on heavy soils, Swan Coastal plain (Critically Endangered);

SCP3c - Eucalyptus calophylla - Xanthorrhoea preissii woodlands and shrublands, Swan Coastal plain (Critically Endangered):

SCP10a - Shrublands on dry clay flats (Endangered);

SCP08 - Herb rich shrublands in clay pans (Vulnerable);

SCP09 - Dense shrublands on clay flats (Vulnerable); and

SCP20b - Banksia attenuata and/or Eucalytpus marginate woodlands on the eastern side of the Swan Coastal Plain (Endangered).

The vegetation under application is described as Jarrah-Marri over storey with few scattered Allocasuarina sp (sheok), Banksia grandis (bull banksia) and Persoonia longifolia (snottygobble) and little to no native mid and understorey species due to historic clearing and continued grazing (DEC, 2010). The vegetation under application is in degraded to completely degraded (Keighery, 1994) condition and is not considered to be representative of a TEC.

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

Methodology

References:

DEC, 2010 Keighery, 1994

GIS Databases:

- Pinjarra 50cm Orthomosaic Landgate 2006
- Pre-European vegetation DA 01/01
- SAC Biodatasets 29/09/10
- Soils, Statewide 30/11/99

(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 Association 3, which has approximately 69% of the pre-European extent remaining in the Jarrah Forest IBRA region (Shepherd, 2009). 79% of the current extent is held in secure land tenure (Shepherd, 2009). The Dwellingup State Forest encompasses approximately 80% of the native vegetation in the local area and extends to within 385m of the application area. The vegetation association under application appears to be well represented in the Dwellingup State Forest.

The vegetation under application is not considered to be significant as a remnant of native vegetation in a highly cleared landscape and as such the proposed clearing is not likely to be at variance with this Principle.

Methodology

References:

Shepherd, 2009

GIS Databases:

- Pinjarra 50cm Orthomosaic Landgate 2006
- Pre-European vegetation DA 01/01
- SAC Biodatasets 29/09/10

(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 surface water expression area is a major perennial watercourse located approximately 700m north of the applied area.

A site visit did not identify are riparian vegetation within the applied area (DEC, 2010).

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

Methodology

References:

DEC, 2010

GIS Databases:

- ANCA, Wetlands 26/03/99
- Hydrogeology, statewide DoW 13/07/06
- Hydrography, linear DoW 13/7/06
- Pinjarra 50cm Orthomosaic Landgate 2006
- RAMSAR, Wetlands 15/10/09

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

Comments Proposal is not at variance to this Principle

The site of the proposed clearing generally occupies the upper slope positions in the landscape (DAFWA, 2010). The slope of the application area is generally to the southwest (DAFWA, 2010). The soil type is loamy gravels and duplex sandy gravels with loamy earths.

The proposed clearing is not likely to cause appreciable land degradation, with risk of salinity, waterlogging, eutrophication, wind and water erosion low (DAFWA, 2010).

The proposed clearing is not at variance with this Principle.

Methodology

References: DAFWA, 2010

GIS Databases:

- Acid Sulfate Soils Risk Map DEC 06/09/06
- Evapotranspiration, Area Actual BOM 30/09/01
- Groundwater Salinity, statewide DoW 13/07/06
- Hydrogeology, statewide DoW 13/07/06
- Rainfall, Mean Annual BOM 30/09/01
- Soils, Statewide 30/11/99

(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 applied area is located approximately 385m west of the Dwellingup State Forest and neighboured by large tracts of high quality vegetation.

Soil disturbance and removal of native vegetation increases the risk of weeds and pathogens, such as dieback (Phytophthora cinnamomi), being introduced or spread. Management of dieback is of particular importance, as the Dwellingup State Forest is in close proximity to the property, which is within a high (1100mm) rainfall area and may have dieback present on site (DEC, 2010; DAFWA, 2010). Weed and dieback management conditions minimise the risk of introduction or spread of pathogens and invasive species into the surrounding vegetation and nearby conservation area.

Access to the application area is via an unsealed track that passes through neighbouring properties and is adjacent to significant tracts of high quality vegetation and movement of machinery poses a high risk of introducing or spreading weeds and dieback to both the application and surrounding areas.

Considering the above, the proposed clearing is not likely to have an impact on the environmental values of the Dwellingup State Forest and is not likely to be at variance with this Principle.

Methodology

References: DAFWA, 2010 DEC, 2010

GIS Databases:

- DEC Managed Lands & Waters DEC 28/10/09
- Pre-European vegetation DA 01/01
- Soils, Statewide 30/11/99

(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 area under application is parkland cleared and impacted from continuing heavy grazing (DEC, 2010). The vegetation is considered to be in degraded to completely degraded (Keighery, 1994) condition and consists predominantly of mature Corymbia callophylla (Marri) and Eucalyptus marginata (Jarrah) with understorey dominated by exotic pasture and other weed species (DEC, 2010).

The closest surface water expression area is the Samson Brook, which is a major perennial watercourse located approximately 700m north of the applied area.

The application area is 140m east of the Samson Brook Catchment Public Drinking Water Source Area.

The removal of deep rooted perennial vegetation may incrementally impact on the quality and quantity of

surface and ground water. However, as the application area and the vegetation to the Samson Brook, in the north, is largely cleared and parkland thinned, the proposed clearing is considered unlikely to cause appreciable degradation of the Samson Brook. Similarly, the vegetation to the east of the application area appears to be of high quality and condition with low disturbance, and the general slope of the area to the southwest, it is considered additional clearing of the degraded to completely degraded (Keighery, 1994) is unlikely to impact on the water quality of the Samson Brook Catchment.

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

Methodology

References:

DEC, 2010 Keighery, 1994

GIS Databases:

- Country Area Water Supply Act (Part IIA) Clearing Control Catchments DoW 29/06/06
- Hydrogeographic Catchments, Catchments DoW 01/06/07
- Hydrogeology, statewide DoW 13/07/06
- Public Drinking Water Source Areas (PDWSAs) DoW 07/02/06
- Rainfall, Mean Annual BOM 30/09/01
- RIWI Act, Areas DoW 05/04/02
- RIWI Act, Groundwater Areas DoW 13/07/06
- RIWI Act, Irrigation Districts DoW 13/07/06
- Soils, Statewide 30/11/99
- Topographic Contours, Statewide DOLA 12/09/02

(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 at variance to this Principle

The site of the proposed clearing generally occupies the upper slope positions in the landscape (DAFWA, 2010). The slope of the application area is generally to the southwest (DAFWA, 2010). The soil type is loamy gravels and duplex sandy gravels with loamy earths.

The proposed clearing is not expected to contribute to flooding due to soil types present and the purpose of the clearing being in order to support parkland pasture areas (DAFWA, 2010).

The proposed clearing is not at variance to this Principle.

Methodology

References:

DAFWA (2010)

GIS Databases:

- Evapotranspiration, Area Actual BOM 30/09/01
- Hydrogeology, statewide DoW 13/07/06
- Pre-European vegetation DA 01/01
- Rainfall, Mean Annual BOM 30/09/01
- Soils, Statewide 30/11/99
- Topographic Contours, Statewide DOLA 12/09/02

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

Comments

The applicant has advised he is prepared to retain the larger Marri and Jarrah trees for cockatoo habitat.

The Shire of Waroona has no objection to the proposed clearing, subject to meeting the considerations under the General Agriculture Sub-precinct in the Scarp and Darling Range Precinct of the Local Planning Strategy 2009 (Shire of Waroona, 2010). One of the considerations for development in the General Agriculture Sub-precinct is whether an area is an ecologically viable area of priority vegetation, which is to be considered for protection (Shire of Waroona, 2010). This has been addressed in the assessment against the clearing Principles.

There are no known Aboriginal Sites of Significance within the area under application.

Methodology

References:

Shire of Waroona (2010)

GIS Databases:

- Aboriginal Sites of Significance DIA 02/10
- Cadastre Landgate 12/09

- Country Area Water Supply Act (Part IIA) Clearing Control Catchments DoW 29/06/06
- Public Drinking Water Source Areas (PDWSAs) 07/02/06
- Town Planning Scheme Zones MFP 31/08/98

4. References

- DAFWA (2010) Land Degradation Assessment Report. Department of Agriculture and Food, Western Australia. DEC Ref: A343826
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- DEWHA (2008) Threatened Species Scientific Committee Commonwealth Conservation Advice on Tetraria australiensis (Southern Tetraria). Department of the Environment, Water, Heritage and the Arts. Available from http://www.environment.gov.au/biodiversity/threatened/species/pubs/10137-conservation-advice.pdf. Accessed 29/09/10
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- Shepherd, D.P. (2009) 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.
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5. Glossary

Term	Meaning
CIIII	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

DoIR Department of Industry and Resources

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)