GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS
Area Permit Number: 2007/2
File Number: DEC4114
Duration of Permit: From 3 May 2008 to 3 May 2028

PERMIT HOLDER
Shire of Ravensthorpe

LAND ON WHICH CLEARING IS TO BE DONE
Lot 1363 on Deposited Plan 186050, Ravensthorpe

AUTHORISED ACTIVITY
Clearing of up to 7.32 hectares of native vegetation within the area shaded yellow on attached Plan 2007/2.

CONDITIONS

1. Period in which clearing is authorised
The Permit Holder shall not clear any native vegetation after 3 May 2023.

2. Dieback and 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* and *dieback*:
   (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
   (ii) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared;
   (iii) restrict the movement of machines and other vehicles to the limits of the areas to be cleared;
   (iv) where *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is to be removed from the area to be cleared, ensure it is transferred to areas of comparable *soil disease status*.

(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.

3. Revegetation
The Permit Holder shall:
(a) 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 6 months following completion of works, *revegetate* and *rehabilitate* the area(s) that are no longer required for the purpose for which they were cleared under this Permit by:
   (i) re-shaping the surface of the land so that it is consistent with the surrounding five metres of uncleared land; and
   (ii) ripping the ground on the contour to remove soil compaction; and
   (iii) laying the vegetative material and topsoil retained under condition 3(a) on the cleared area.

(c) within 18 months of laying the vegetative material and topsoil on the cleared area in accordance with condition 3(b) of this Permit:

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;
regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) 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 natural *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area;
soil disease status means soil types either infested, not infested, uninterpretable or not interpreted with a pathogen; and
weed/s means any plant -

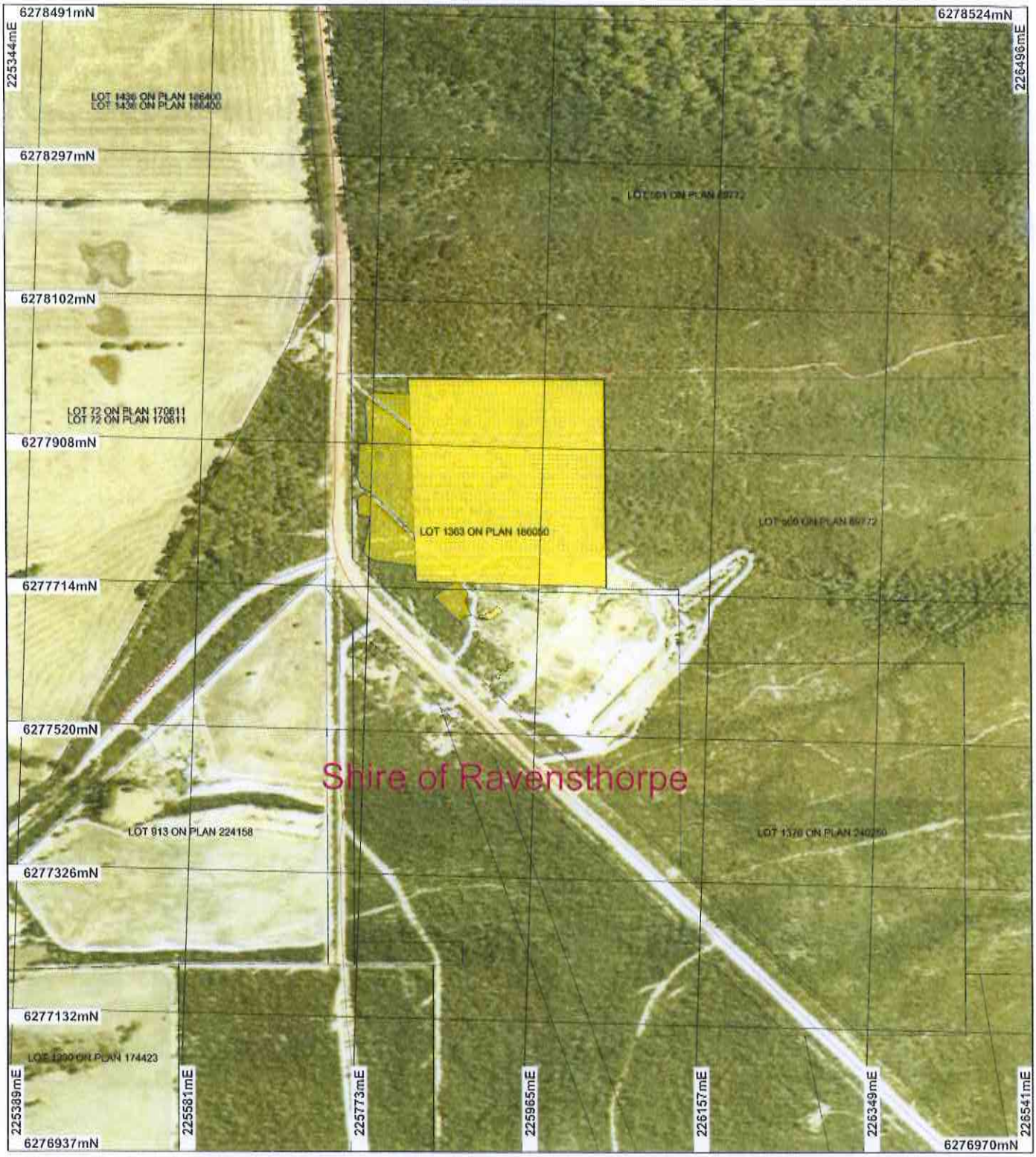
(a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
(b) published in a Department of Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
(c) not indigenous to the area concerned.

M Warnock
SENIOR MANAGER
CLEARING REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

28 August 2014

Plan 2007/2



LEGEND

Road Centrelines
Cadastre
Clearing Instruments

Areas Approved to Clear

Ravensthorpe 1.4m Orthomosaic - Landgate 2002

N

0 200 m

Scale 1:6824
(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.

M. Warnock

Date 28/8/14

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

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.

Government of Western Australia
Department of Environment Regulation

* Project Data: This data has not been quality assured. Please contact map author for details.

GOVERNMENT OF WESTERN AUSTRALIA

Clearing Permit Decision Report

Government of Western Australia
Department of Environment Regulation

1. Application details

1.1. Permit application details

Permit application No.: 2007/2
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Shire of Ravensthorpe

1.3. Property details

Property: LOT 1363 ON PLAN 186050 (House No. 283 MOIR RAVENSTHORPE 6346)
Local Government Area: Shire of Ravensthorpe
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
7.32		Mechanical Removal	Infrastructure Maintenance

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 28 August 2014

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Mapped Beard vegetation association 516 is described as shrublands; mallee scrub, black marlock (Shepherd et al. 2001).	The clearing of 7.32 hectares of native vegetation within Lot 1363 on Deposited Plan 186050, Ravensthorpe is for the purpose of expanding an existing waste disposal area.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The condition of the vegetation was established from aerial imagery.

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 amended application proposes to clear 7.32 hectares of native vegetation within Lot 1363 on Deposited Plan 186050, Ravensthorpe for the purpose of expanding an existing waste disposal area.

The area under application is located within the Esperance Sand Plains Bioregion, more specifically the Fitzgerald subregion (ESP1). This subregion has had approximately 50 per cent of its native vegetation cleared, largely for the purpose of agriculture. However, the vegetation association mapped within the application area (516) is well represented throughout the bioregion, subregion and shire.

There has been extensive clearing directly to the west of the area under application, however the proposed clearing is a part of a large remnant of vegetation that consists of similar vegetation in the same or better condition as the area under application. Therefore, the area under application is not likely to contain significant fauna habitat.

In addition, the proposed clearing is not likely to impact on priority or threatened ecological communities given the distance to the closest occurrence (over 7 kilometres away).

Numerous priority flora species occur within a 10 kilometre radius of the application area in similar soil and vegetation types including one priority four species, two priority two species, two priority three species and two priority one flora species. However, given that the majority of the clearing is adjacent to an existing rubbish tip and road reserve and is surrounded by a large remnant of vegetation that consists of similar vegetation in the same or better condition as the application area, it is not likely for the proposed clearing to significantly impact on priority flora.

The area under application is not likely to contain high biodiversity and the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Databases:
-- Ravensthorpe 1.4m Orthomosaic
- SAC Bio datasets (10 June 2013)
-Pre-European vegetation
-Soils, statewide

(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 eleven fauna species of conservation significance mapped as occurring within the local area (10 kilometre radius) of the proposed clearing.

Of these, the application area may provide habitat for the threatened Leipoa ocellata (Mallee fowl), Pseudomys occidentalis (western mouse), Macropus irma (Western-Brush Wallaby), Psophodes nigrogularis oberon (Western whipbird) and Lerista viduata (Ravensthorpe slider).

The majority of the application area is in a good (Keighery 1994) condition. The application area is on the edge of a highly vegetated area and the surrounding vegetation consists of similar habitat in similar or better condition. Therefore, the application area is unlikely to consist of significant fauna habitat.

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

Methodology References
-DEC (-2007)
GIS Databases
- Ravensthorpe 1.4m Orthomosaic

(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 is one rare flora species within the local area (10 kilometre radius).

This species is restricted to the Ravensthorpe Range which occurs 7 kilometres east of the application area (Brown et al. 1998). Therefore, it is not considered likely for the proposed clearing to impact this species.

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

Methodology References
-Brown et al. (1998)
GIS Databases
- SAC Bio datasets (10 June 2013)
- Soils, Statewide
- Pre-European Vegetation

(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 no Threatened Ecological Communities (TECs) mapped within the local area (10 kilometre radius), therefore the proposed clearing is not likely to be at variance to this principle.

Methodology GIS Databases
- Ravensthorpe 1.4m Orthomosaic
-SAC Bio datasets (10 June 2013)

(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 application area is mapped as Beard vegetation association 516 which is well represented in the Esperance Plains 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). Beard vegetation association 516 has 69 per cent of its pre-European extent remaining.

In addition, the proposed clearing is not within a highly cleared area as there is approximately 60 per cent vegetation remaining in the local area (10 kilometre radius).

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 DPaW Managed Lands (%)
IBRA Bioregion				
Esperance Plains	2,899,940	1,508,057	52	54
Shire*				
Shire of Ravensthorpe	982,195	605,707	62	32
Beard Vegetation Association in Bioregion 516				
	318,746	220,173	69	42

(Government of Western Australia, 2013)

Methodology

References
-Government of Western Australia (2013)
-Commonwealth of Australia (2001)
GIS Databases
- Ravensthorpe 1.4m Orthomosaic
-Pre-European Vegetation

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments

Proposal is not likely to be at variance to this Principle
There are two minor non perennial watercourses that occur 300 metres east of the application area.

Given the distance to the nearest watercourse, the application area is not likely to contain riparian vegetation.

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

Methodology

GIS Databases
-Hydrography, linear
-Topography, statewide

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

Comments

Proposal is not likely to be at variance to this Principle
The application area contains soils of hard alkaline yellow mottled and red mottled soils (Northcote et al. 1960-68).

The proposed clearing may cause soil erosion as the north western portion occurs on a slope, however the clearing is not likely to cause appreciable land degradation given that the clearing in this area is relatively small and no watercourses occur.

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

Methodology

References
-Northcote et al. (1960-68)
GIS Databases
- Soils, statewide
- Hydrography, linear
-Topography, statewide

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments

Proposal is not likely to be at variance to this Principle

There are three conservation areas within the local area (10 kilometre radius), including one Department of Parks and Wildlife managed reserve 3.8 kilometres south west of the application area, a land for wildlife site occurring two kilometres northeast and a conservation covenant occurring 2.3 kilometres east of the application area.

The proposed clearing is linked to these areas through contiguous vegetation, however the clearing is not likely to impact these conservation areas given the distance from them and that the clearing will not fragment any ecological linkages between them.

The clearing of the area under application is unlikely to impact on the environmental values of any conservation areas and therefore is not likely to be at variance to this principle.

Methodology

GIS Databases
-DEC Managed land
-DEC Land For Wildlife
-DEC Conservation Covanants
-Ravensthorpe 1.4m Orthomosaic

(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 groundwater salinity within the application area is 7000 - 14000 milligrams per litre of total dissolved solids. This level of groundwater salinity is considered to be moderate to high. Given the size of the proposed clearing and the amount of vegetation remaining in the local area the proposed clearing is not likely to increase the level of groundwater salinity.

The Department of Water (2013) has advised that the majority of the surface flow is in the opposite direction to the Ravensthorpe Water Reserve drinking water reserves and considers that any impacts to this water reserve are manageable.

No watercourses or wetlands occur within the application area, therefore the proposed clearing is not likely to impact upon surface water.

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

Methodology

References
-DoW (2013)
GIS Databases:
-Hydrography, linear
-Topography, linear
-PDWSAs

(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

Due to the size of the area under application and the remaining vegetation to the east and south of the application area, it is considered unlikely that the proposed clearing will result in the increased risk of flood peak height or duration.

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

Methodology

GIS Databases
- Ravensthorpe 1.4m Orthomosaic

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

Comments

This amendment proposes to clear an additional 1.32 hectares of native vegetation. The proponent also wishes to extend the duration of the permit to June 2023.

Works approval is required for the expansion of the existing landfill. Works approval has been applied for and is in the final stages of assessment.

The area under application is zoned public purpose (water supply) under the Ravensthorpe town planning scheme.

The Shire of Ravensthorpe holds a management order for the property under application for the purpose of rubbish disposal site.

The Shire of Ravensthorpe proposes to increase the existing landfill even further in the future as it is planned to use this site as the main rubbish tip site for the town of Ravensthorpe.

No submissions from the public were received.

Methodology

References
-DoW (2013)
GIS Databases
-Town Planning Scheme Zones

4. References

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

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

DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: http://naturemap.dec.wa.gov.au/.

DoW (2013) Department of Water advice on CPS 2007/2 - Shire of Ravensthorpe. DER Ref A678636.

Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, 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.

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., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.