

### **CLEARING PERMIT**

Granted under section 51E of the Environmental Protection Act 1986

### PERMIT DETAILS

Area Permit Number: 3542/2

File Number:

DEC14214

Duration of Permit: From 7 March 2010 to 7 March 2012

### PERMIT HOLDER

**Ernest Thomas Graham** 

Rosina Graham

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 1 on Plan 8822

### **AUTHORISED ACTIVITY**

The Permit Holder shall not clear more than 2 hectares of native vegetation within the area shaded yellow on attached Plan 3542/2.

### **CONDITIONS**

Nil

Kelly Faulkner **MANAGER** 

NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20 of the Environmental Protection Act 1986

31 March 2010

### Plan 3542/2







### **Clearing Permit Decision Report**

### 1. Application details

1.1. Permit application details

Permit application No.:

3542/2

Permit type:

Area Permit

1.2. Proponent details

Proponent's name:

**Earnest Thomas and Rosina Graham** 

1.3. Property details

Property:

LOT 1 ON PLAN 8822 ( MOBRUP 6395)

**Local Government Area:** 

Colloquial name:

1.4. Application

Clearing Area (ha)

No. Trees

Method of Clearing Mechanical Removal For the purpose of:

Drainage

### 2. Site Information

### 2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

### **Vegetation Description**

The vegetation is described as:

- Beard vegetation association 4 - Medium woodland; marri and wandoo;
- Beard vegetation association 27 - Low woodland; paperbark (Melaleuca spp.)

### **Clearing Description**

The permit was amended to remove revegetation and stock exclusion conditions from the permit.

Revegetation conditions have been placed on the Country Areas Water Supply Licence issued by the Department of Water.

The application is to install, with a grader, a 'w' surface drain (3 feet deep and 20m wide) with the spoils forming the centre of the drain (DEC, 2009). The proposal is an attempt at saving stands of vegetation from waterlogging and to protect wetlands from brackish water (DEC, 2009). The vegetation within the applied area is classified as completely degraded (Keighery, 1994)

### Vegetation Condition

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

### Comment

The condition of the vegetation within the application area was assessed through a site visit (DEC, 2009) and aerial photography.

### 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 permit was amended to remove revegetation and stock exclusion conditions from the permit. Revegetation conditions have been placed on the Country Areas Water Supply Licence issued by the Department of Water.

The application is to install, with a grader, a "w" surface drain (3 feet deep and 20m wide) with the spoils forming the centre of the drain (DEC, 2009). The proposal is an attempt at saving stands of vegetation from waterlogging and to protect wetlands from brackish water (DEC, 2009). The vegetation within the applied area is considered to be in a completely degraded (Keighery, 1994) condition (DEC, 2009).

The application area becomes annually waterlogged, with many bare areas visible. Shrubs and regrowth reach to only 1 metre in height are proposed to be cleared and no trees will be removed as a part of this proposal (DEC, 2009).

Mapped soil for the application area consists mainly of leached sands, which may have peaty surfaces. Four priority flora species have been recorded within a 10km radius, within the same vegetation type but differing soil complex as the application area. However, the soil complex has similar attributes.

- \* Schoenus capillifolius (P2) 6.5km NW Claypans
- \* Schoenus sp. Jindong (P1) 6.5km NW Red loamy soils
- \* Stylidium lepidum (P3) 7.1km NW Gravelly sands or loam, clay
- \* Melaleuca ordinifolia (P2) 6.1km NE Sandy loam or clay

The priority ecological community (PEC), Yate dominated claypans, is located 5.6km north of the application area within the same vegetation type but prefer a very clay soil.

The Talyelwelup wetlands are located adjacent to the application area. The purpose of installing a surface drain on the property is to reduce the impacts of waterlogging and salinity on the wetlands, predominately surrounding the largest lake Lake Tayle (DoE, 2005).

Given the completely degraded (Keighery, 1994) condition of the vegetation within the application area, and that surrounding vegetation (including riparian) is in a better condition, it is unlikely that the vegetation represents an area of outstanding biodiversity.

### Methodology

DoE (2005)

DEC (2009) Keighery (1994)

GIS Layers:

Sac Biodatasets (PEC - accessed 11 Feb 2009)

Sac Biodatasets (Flora - accessed 11 Feb 2009)

### (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

The vegetation within the application is considered to be in a completely degraded (Keighery, 1994) condition (DEC, 2009). It consists of low lying shrubs, bare areas and seedlings of Melaleuca species (DEC, 2009). The vegetation here has already been severely disturbed and does not present suitable habitat for ground dwelling mammals or arboreal species. No trees will be removed during clearing and therefore potential habitats for priority species recorded nearby such as the Forest Red-tailed Black Cockatoo (Calyptorhynchus banksii naso-Vu), Brush-tailed Phascogale (Phascogale tapoatafa ssp.- Vu) and Muir's Corella (Cacatua pastinator pastinator - EN) will not be impacted by clearing.

The surrounding vegetation is in the same to better condition as the applied area, with a large section of remnant vegetation located to the west.

Given the completely degraded (Keighery, 1994) condition of the vegetation it is unlikely that the application area provides a significant habitat for fauna communities.

### Methodology

DEC (2009)

Keighery (1994)

Sac Bio datasets (accessed 3 February 2009)

### 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

One record of rare flora is within 8.4km of the application area. Gastrolobium lehmannii is found within the same vegetation complex but different soil type. This species tends to be located on low hilltops of a breakaway. The topography of the application area is low and consists of a sandy, peaty soil.

Given the vegetation within the application area is classified as being in a completely degraded (Keighery, 1994) condition, and contains differing soil to recorded rare species, it is unlikely that the proposal is at variance to this principle.

### Methodology

Keighery (1994)

GIS Layer:

Sac Biodatasets (Flora - accessed 3 February 2009)

# (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 records of threatened ecological communities within the immediate proximity of the area under application.

Methodology GIS I

GIS Laver:

Sac Biodatasets (TEC - accessed 3 February 2009)

### (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

,	Pre-European (ha)	Current extent (ha)	Remaining (%)	% In reserves DEC Managed Land
IBRA Bioregions Jarrah Forest <sup>^</sup>	4 671 007	2 601 026	55.68	N/A
Shire* Kojonup	293 091	43 004	14.67	N/A
Mattiske Complex GD4	9,039	5,339	59.1	N/A

<sup>\* (</sup>Shepherd et al. 2007)

(Mattiske, 1998)

The application area falls within the Jarrah Forest IBRA bioregion which has approximately 55.68% pre-European vegetation remaining.

There is approximately 40% native vegetation remaining within the local area (10km radius).

Due to the completely degraded condition of the vegetation the area under application is not considered to be a significant remnant of native vegetation, therefore the proposed clearing is not likely to be at variance to this clearing principle.

### Methodology

Mattiske (1998)

Shepherd (2007)

GIS Layers:

- Interim Biogeographic Regionalisation of Australia EA 18/10/00
- Local Government Authorities DLI 8/07/04
- Pre European Vegetation DA 01/01

# (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 proposal is to install a shallow surface water drain (3 feet by 20m wide) to reduce water logging in the surrounding vegetation and reduce the number of dying trees. Drainage from the property flow in a northwest direction towards the Tone River system (Commissioner of Soil, 2009) and the installation of a drainage line will compliment existing drainage on the adjoining property.

The application is adjacent to the Talyelwelup wetlands which are a string of non-perennial swamps located within the property. The wetlands appear to be in a very good condition with a high level of vegetation and habitat value (DEC, 2009). Water birds were observed on the wetlands and frogs heard (DEC, 2009). The clearing will not impede on the healthy vegetation buffers surrounding each wetland.

The purpose of the application is to divert pooling water into a sacrificial saline water course, Mobrup Creek. In doing this, no deep rooted vegetation will be removed during drain construction (DEC, 2009), and groundwater dependant communities are not likely to be adversely affected by this clearing.

Given the above it is unlikely that the proposal is at variance to this principle.

### Methodology

Commissioner of Soil (2009)

DEC (2009) GIS Laver:

- Hydrography linear - DOW 13/7/06

<sup>^</sup> Area within Intensive Land Use Zone

## (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

It is considered that the vegetation surrounding the Talyelwelup wetlands is under threat from the combined processes of salinity and waterlogging (DoE, 2005). These processes may be alleviated by constructing a surface drain (Commissioner of Soil, 2009) to move the pooling water into a sacrificial saline watercourse offsite, the Mobrup Creek. The effect of salinity, or salinity itself is present in some of the application area, and the construction of a drainage channel has a low risk of causing further salinity (Commissioner of Soil, 2009).

It is considered that no significant change is expected when clearing for a drainage line in relation to water and wind erosion. The risk of erosion causing land degradation is low (Commissioner of Soil, 2009).

The vegetation under application is protected under a conservation covenant. The installation of a surface drain is likely to control salinity and waterlogging on the property (Commissioner of Soil, 2009). The Commissioner of Soil and Land Conservation does not object to the construction of the drain because of the above and will annotate the conservation covenant to this effect on granting of a clearing permit (Commissioner of Soil, 2009).

An exemption order was published in the Government Gazette on 15 December 2009. The exemption order is made for the purpose of constructing and maintaining a drain along specified coordinates that is not more than 12 metres wide, 2 hectares in area and 0.6 metres deep. The exemption notice (as advised by the Minister 1 May 2009) removes the prohibition preventing the Department of Environment and Conservation from granting a clearing permit.

The application area is within the Warren River catchment area Country Areas Water Supply Zone A. A CAWS licence from the Department of Water will need to be applied for along with a clearing permit as compensation has been paid over the property. The applicant has received a CAWS licence (No. LMR1003).

### Methodology

Commissioner of Soil (2009)

DoE (2005) Keighery (1994) GIS Lavers:

- Salinity Risk LM 25m DOLA 00
- Soils, Statewide DA 11/99
- Topographic contours statewide DOLA and ARMY 12/09/02
- Hydrogeology, Statewide 05 Feb 2002

# (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

Cootayerup Nature Reserve is situated 3.6km south east of the application area. It is not connected to the application area by continuous native vegetation.

The Tone River Area (a Registered National Estate) is north west of the area under application. There is a vegetated link to the area, however this corridor is narrow in parts.

Given the above it is unlikely that the proposal is at variance to this principle.

### Methodology

GIS Layer:

- CALM Managed Lands and Waters CALM 01/06/05
- Hydrography, linear DOW 13/7/06
- Register of National Estate Environment Australia, Australian and world heritage division 12 Mar 02
- System 1 to 5 and 7 to 12 areas DEC 11/7/06

## (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 may be at variance to this Principle

Clearing of the area under application is likely to decrease the impacts of salinity on Lake Talye and the surrounding vegetation by improving the quality of water entering the system (DoE, 2005). The drain is designed to direct saline water into the already salt affected Mobrup Creek.

The application area is within the Warren River catchment area Country Areas Water Supply Zone A. A CAWS licence from the Department of Water will need to be applied for along with a clearing permit as compensation has been paid over the property. The applicant has received a CAWS licence (No. LMR1003).

The purpose of the application is to divert saline surface water around three freshwater wetlands and back into Mobrup Creek. In doing this, no deep rooted vegetation will be removed during drain construction (DEC, 2009),

and groundwater dependant communities are not likely to be adversely affected by this clearing.

#### Methodology

DEC (2009)

DoE (2005)

GIS Layers:

- Hydrography, linear DOW 13/7/06
- Mean Annual Rainfall Isohytes (1975 2003) DEC 02/08/05
- Salinity Risk LM 25m DOLA 00
- 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 likely to be at variance to this Principle

The applied area is mapped as having peaty soils (Northcote, 1960-68), which contains less nutrients than most soils and are prone to over-retaining water. Purpose of clearing is to alleviate this flooding (water logging). Only shrubs and regrowth melaleucas to 1 metre high are to be cleared (DEC, 2009). 'Clearing of vegetation is unlikely to significantly increase surface runoff, which would contribute to stream flows' (Commissioner of Soil, 2009).

Due to the small scale of clearing, and the completely degraded (Keighery, 1994) condition of the vegetation within the application area it is unlikely that the proposal is at variance to this principle.

### Methodology

Commissioner of Soil (2009)

DEC (2009) Keighery (1994) Northcote (1960-68)

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

#### Comments

The application was amended to remove revegetation and stock exclusion conditions from the permit. Revegetation conditions have been placed on the Country Areas Water Supply Licence issued by the Department of Water.

The application is to install, with a grader, a 'w' surface drain (3 feet deep and 20m wide) with the spoils forming the centre of the drain (DEC, 2009). The proposal is an attempt at saving stands of vegetation from waterlogging and to protect wetlands from brackish water (DEC, 2009).

An exemption order was published in the Government Gazette on 15 December 2009. The exemption order is made for the purpose of constructing and maintaining a drain along specified coordinates that is not more than 12 metres wide, 2 hectares in area and 0.6 metres deep. The exemption notice (as advised by the Minister 1 May 2009) removes the prohibition preventing the Department of Environment and Conservation from granting a clearing permit.

There is currently a conservation covenant imposed by the Remnant Vegetation Protection Scheme under section 30(b)(1) of the Soil and Land Conservation Act over the application area. The Commissioner of Soil has no objections with the proposal to install a shallow surface drain to reduce salinity and waterlogging, and if a clearing permit is to be granted will lift the covenant (Commissioner of Soil, 2009).

The application falls within an EPA Position Statement No. 2 area. The EPA does not support further clearing for agriculture within these areas.

The application is for a surface drain only (no groundwater involved). Therefore, a notice of Intent to Drain from DAFWA is not required.

The application area is within the Warren River catchment area Country Areas Water Supply Zone A. A CAWS licence from the Department of Water will need to be applied for along with a clearing permit as compensation has been paid over the property. The applicant has received a CAWS licence (No. LMR1003).

The application is for the extension of a w drain which has been partially installed on an adjacent property. Waterlogging is occurring within the property as the drain has not been extended through.

### Methodology

Commissioner of Soil (2009)

DEC (2009)

### 4. Assessments recommendations

### Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s510 of the Environmental Protection Act 1986, and the proposed clearing is not likely to be at variance to any of the clearing Principles.

### 5. References

- DEC (2009) Site Inspection Report for Clearing Permit Application CPS 248/1, Lot 1 on Plan 8822, Scotts Brook Road, Mobrup. Site inspection undertaken 05/02/2009. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC76036).
- Department of Agriculture and Food (2009) Advice. Commissioner of Soil and Land Conservation. DEC TRIM Ref: DOC77263. 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 (2006) Guidance for the Assessment of Environmental Factors Level of Assessment for Proposals Affecting Natural Areas Within the System 6 Region and Swan Coastal Plain Portion of the System 1 Region. Guidance Statement No 10. Environmental Protection Authority, Western Australia.
- 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.
- 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. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

### 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)