



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 3474/1

File Number: DEC13878

Duration of Permit: From 23 January 2010 to 23 January 2012

PERMIT HOLDER

Stephen John Russell

Kerry-Lee Russell

LAND ON WHICH CLEARING IS TO BE DONE

LOT 2 ON DIAGRAM 42571 (BEELERUP 6239)

AUTHORISED ACTIVITY

Clearing of up to 1 hectares of native vegetation within the area cross hatched in yellow on attached Plan 3474/1.

CONDITIONS

1. 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.

A handwritten signature in black ink, appearing to be "K. Faulkner", written over a horizontal line.

Kelly Faulkner

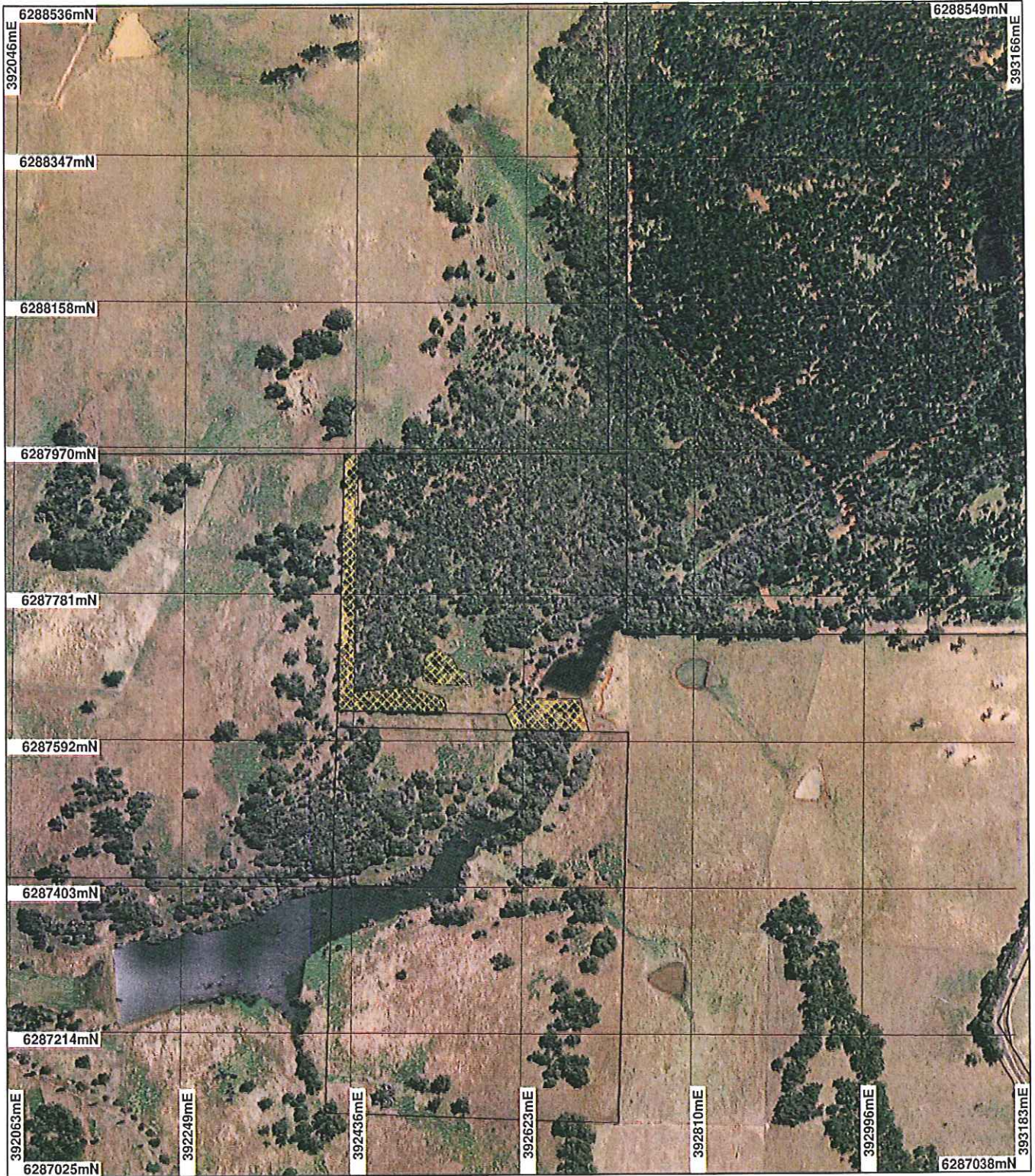
MANAGER

NATIVE VEGETATION CONSERVATION BRANCH

*Officer delegated under Section 20
of the Environmental Protection Act 1986*





23 December 2009

Plan 3474/1



LEGEND

Clearing Instruments

-  Areas Applied to Clear
-  Areas Subject to Conditions
-  Areas Approved to Clear
-  Cadastre

Donnybrook 60cm
Orthomosaic + Landgate
2004



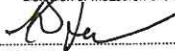
0 ————— 150 m

Scale 1:6641

(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 23/12/09
K. Faulkner

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.



Department of
Environment and Conservation

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1. Application details

1.1. Permit application details

Permit application No.: 3474/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Stephen John and Kerry-Lee Russell

1.3. Property details

Property: LOT 2 ON DIAGRAM 42571 (BEELERUP 6239)
LOT 2 ON DIAGRAM 42571 (BEELERUP 6239)

Local Government Area:

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1		Mechanical Removal	Fence Line Maintenance
1		Mechanical Removal	Grazing & Pasture

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 (1980) vegetation association 4 is described as Medium woodland; marri & wandoo	Aerial photography suggests that vegetation is good to degraded (Keighery 1994) condition.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Vegetation condition was determined from aerial photography.
Open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla on slopes and woodland of Eucalyptus rudis on the valley floor in the humid zone.			

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

This application proposes to clear 1 hectare of native vegetation for the purpose of fence line maintenance and opening up a paddock. Approximately 80% of the proposed clearing is for fence line maintenance and the remaining 20% consists of degraded vegetation for the purpose of increasing paddock size. Aerial photography suggests that vegetation is good to degraded (Keighery 1994) condition. Approximately 20% of the vegetation proposed to be cleared is riparian vegetation.

Aerial photography shows that within a 10km radius there is approximately 30% vegetation remaining. There is approximately 12ha of remnant vegetation left on the property under application which is likely to be functioning as an ecological linkage in a highly cleared landscape.

Hemigenia rigida (P1) has been recorded within 2.95 km's of the application area and Acacia semitrullata (P4) within 3.7km's.

The proposed clearing may incrementally reduce the effectiveness of ecological linkages in the local area, however, the proposed clearing is small and is unlikely to significantly affect biodiversity.

Methodology Keighery (1994)

GIS database:
 - Donnybrook 50cm Orthomosaic - Landgate 2004
 - Hydrography linear - DOW 13/7/06
 - SAC Biodatasets - accessed 19 Dec 09

(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**
 Within the local area (10km radius from the proposed clearing) there are 3 species of threatened fauna (7 records) and 2 priority species;

Threatened
 - Cricket (Pachysaga)
 - Brush Tail Phascogale (Phascogale tapoatafa)

Priority
 - Western Ringtail possum (Pseudocheirus occidentalis)
 - Quenda (Isoodon obesulus fusciventer)
 - Masked Owl (Tyto novachollandiae nova)

The area under application proposes to clear 1 hectare of native vegetation which appears to be in good to degraded (Keighery, 1994) condition. Within the local area (10km radius) there is approximately 30% native vegetation remaining. Of this 30% remaining vegetation none of the threatened or priority species have been recorded in the same vegetation type (medium woodland: marri and wandoo).

The proposed clearing may incrementally reduce the effectiveness of ecological linkages in the local area, however, the proposed clearing is small and is unlikely to significantly affect habitat for indigenous fauna.

Methodology Keighery, 1994
 GIS database:
 SAC Biodatasets - accessed 17 Dec 2009

(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 record of declared rare flora (Banksia squarrosa) within the local area (10km radius). This rare flora was found to be on different soil and vegetation type so it is unlikely that the proposed clearing is necessary for the continued existence of rare flora.

Methodology GIS database:
 - Pre European Vegetation - DA 01/01
 - SAC Biodatasets - accessed 18 Dec 09
 - Soils, Statewide DA 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 at variance to this Principle**
 There is no Threatened Ecological Communities (TEC) within a 10km radius from the proposed clearing site.

Methodology GIS Database:
 - SAC Biodatasets - accessed 18 Dec 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 at variance to this Principle**

	Pre-European (ha)	Current extent (ha)	Remaining (%)
IBRA Bioregions*			
Jarrah Forest^	4,506,655.58	2,440,940.64	54.16
Shire*			
Donnybrook Balingup	156,029.39	91,178.81	58.44
Mattiske Vegetation Complex**			
Balingup	59,446.57	18,822.78	31.66

Beard Vegetation Association*			
4	1,054,279.86	254,656.90	24.15

Beard Vegetation Association with Bioregion*			
4	1,022,712.50	247,941.53	24.24

* (Shepherd et al. 2007)

** (Mattiske Consulting 1998)

The Environmental Protection Authority (EPA) supports the retention of remnant native vegetation to a 30% threshold level as recommended in the National Objectives Targets for Biodiversity Conservation below which, species loss appears to accelerate exponentially at an ecosystem level (EPA, 2000).

The vegetation types under application retain less than this 30% threshold level.

The Jarrah Forest Bioregion has 54.16% and Beard vegetation association 4 has 24.15% of the native vegetation remaining. In addition, the Shire of Donnybrook Balingup has 58.44% of native vegetation remaining.

Due to the reduction of vegetation in good condition (Keighery 1994) consisting of Beard vegetation association 4 within the bioregion, the proposed clearing is at variance to this principle.

However, the majority of proposed clearing of vegetation in this condition (80%) is for fenceline maintenance

Methodology DEC 2007)
EPA (2000)
Hopkins et al. (2001)
Mattiske Consulting (1998)
Shepherd (2007)
Shepherd et al (2001)

GIS Databases:

- Hedde Vegetation Complexes - DEP 22/06/95
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Local Government Authorities - DLI 8/07/04
- Mattiske Vegetation - CALM 1/03/1998
- Pre European Vegetation - DA 01/01
- SAC Biodatasets - accessed 18 Dec 09
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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 may be at variance to this Principle

The proposed clearing is within a 5th order minor, perennial water course. Collingutup Brook is also located within 114m of application area.

The clearing over this part of the property is for fenceline maintenance.

Methodology GIS Databases:
Donnybrook 50cm Orthomosaic - Landgate 2004
Hydrography linear - DOW 13/7/06

(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

Mapped soil type Tf5 is described as dissected lateritic plateau of a generally hilly relief: chief soils on the slopes are hard acidic, and also neutral, yellow mottled soils containing moderate to large amounts of ironstone gravels.

Topographic contours show that the application area is located on a slope. There is a chance that the proposed clearing may result in some temporary erosion and consequently causing sedimentation in the water reservoir adjacent to the clearing whilst the fence is being repaired. Erosion may be accelerated due to the high mean annual rainfall (1000mm).

The ground water salinity is 500-100mg/L and the immediate area around the application area is not highly cleared therefore salinity is not a risk.

- Methodology** GIS database:
- Acid Sulfate Soil Risk Map, Swan coastal Plain - DEC 07/08/06
 - Average Annual Rainfall Isohyets - WRC 29/09/98
 - Annual Evaporation Contours (Isopleths) - WRC 29/09/98
 - Donnybrook 50cm Orthomosaic - Landgate 2004
 - Hydrogeology, statewide ? DOW 13/07/06
 - Hydrographic catchments, catchments - DoW 01/06/07
 - Hydrography, linear - DOW 13/7/06
 - Salinity Risk LM 25m - DOLA 00
 - Soils, Statewide DA 11/99
 - Topographic contours statewide - DOLA and ARMY 12/09/02

(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 five Conservation Areas within the local area (10km radius): Wellington State Forest, Boyanup State Forest, an unnamed Nature Reserve and two System 6 areas.

The location of the property under application maybe important in providing connectivity between these reserves however based on the scale of clearing it not likely to sever any major ecological links.

- Methodology** GIS Databases:
- CALM Managed Lands and Waters - DEC Sept 08
 - Donnybrook 50cm Orthomosaic - Landgate 2004
 - Register of National Estate - Environment Australia

(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**
As the proposed clearing is located on a slope there maybe a chance that erosion will occur and consequently cause temporary sedimentation in the water reservoir adjacent to the clearing whilst the fence is being repaired.

The ground water salinity is 500-100mg/L and the immediate area around the application area is not highly cleared therefore salinity is not a risk.

- Methodology** GIS database:
- Evapotranspiration Isopleths - WRC 29/09/98
 - Groundwater Salinity Statewide DoW 13/07/06
 - 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 at variance to this Principle**
Due to the scale of the proposed clearing (1ha) flooding is unlikely to result.

Methodology

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

- Comments**
The clearing under application is within the Preston River and Tributaries, Rights in Water and Irrigation area. The proponent has not provided a licence to interfere with bed and banks.

Methodology

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 is at variance to Principle (e), may be at variance to Principle (f) and is not likely to be at variance to the remaining clearing Principles.

5. References

- DEC (2007) DEC Fauna Habitat Notes.xls. February 2007. Department of Environment and Conservation, Western Australia.
- 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.
- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.
- 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.
- Sac Bio Datasets (19/12/09). Department of Environment and Conservation, Sac Bio Datasets, Kensington, Western Australia.
- 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)