



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 5093/1

File Number: DEC8111

Duration of Permit: From 17 August 2012 to 17 August 2014

PERMIT HOLDER

Jarnadup Investments Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 2 on Plan 17088, Smith Brook

AUTHORISED ACTIVITY

The permit holder shall not clear more than 3.9 hectares of native vegetation within the area hatched yellow on attached Plan 5093/1

CONDITIONS

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*:

- clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- 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;

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

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*.

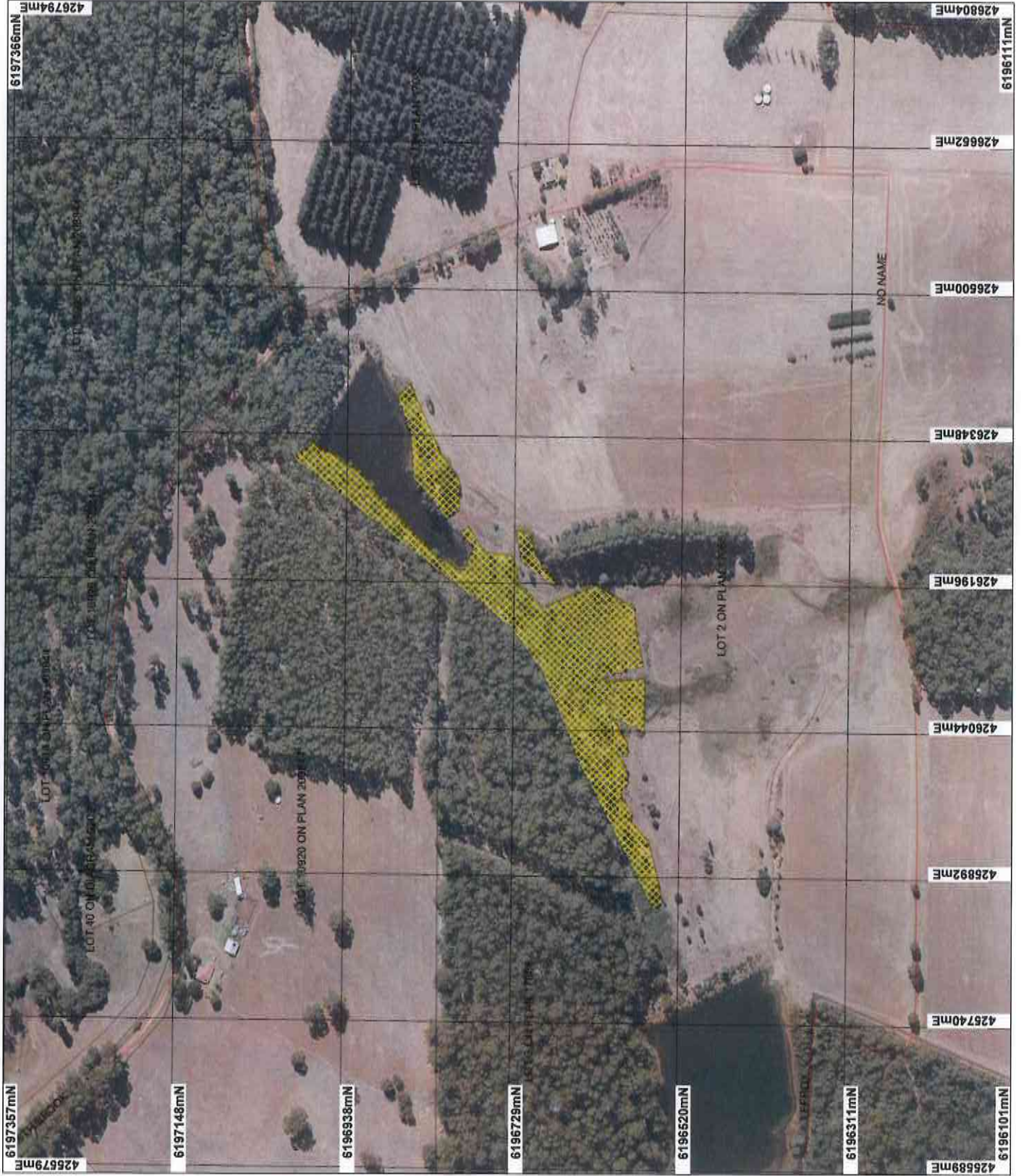
A handwritten signature in black ink, appearing to be "KF", written over a horizontal line.

Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

26 July 2012

Plan 5093/1



LEGEND

- Cadastral**
- Fenceline
 - Crown Reserve
 - State Forest / Timber Reserve
 - Marine Park
 - Crown Lease
 - Lease / Reserve
 - Lease on State Forest / Title
 - Public Roads
 - Unallocated Crown Land
 - Water
- Clearing Instrument**
- Road Centrelines
 - Areas Approved to Clear
 - Manjimup 50cm Ort 2007

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



0 100 m

Scale 1:5953

(Approximate when reprothesed at A4)

Geospatial Datum: Australian 1994

Note: The data in this map have not been checked for accuracy. It may result in geometric discrepancies or measurement inaccuracies.

Kelly Faulkner 29/12/12
Date

Kelly Faulkner

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



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1. Application details

1.1. Permit application details

Permit application No.: 5093/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Jarnadup Investments Pty Ltd

1.3. Property details

Property: LOT 2 ON PLAN 17088 (House No. 380 SMITH BROOK SMITH BROOK 6258)
Local Government Area:
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3.9		Mechanical Removal	Dam construction or maintenance

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 26 July 2012

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
The vegetation under application has been mapped as Mattiske vegetation Wheatley Complex (WH1) consisting of tall open forest of Eucalyptus diversicolor-Corymbia calophylla on slopes and tall open forest of Eucalyptus patens on the valley floor in perhumid and humid zones (Mattiske and Havel, 1998).	This application proposes to clear 3.9ha of native vegetation within Lot 2 on Plan 17088 for the purpose of enlarging an existing dam.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The condition of the vegetation was established through a site inspection by DEC (2012)
Mattiske vegetation Lefroy complex (LF) is described as tall open forest of Eucalyptus diversicolor-Corymbia calophylla on slopes and low woodland of Agonis juniperina-Callistachys lanceolata on lower slopes in hyperhumid and perhumid zones (Mattiske and Havel, 1998).	A site inspection (DEC, 2012) identified the vegetation community to be Karri regrowth along the northern edge of the dam with open stream vegetation occurring towards the south western portion of the proposed clearing area.	To Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	
Mapped Beard Vegetation Association 1144 is described as medium woodland consisting of York gum & Salmon gum and shrublands consisting of Melaleuca thyioides thicket (Shepherd et al, 2001).			

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 3.9ha of native vegetation within Lot 2 on Plan 17088, Smith Brook, for the purpose of enlarging an existing dam. The vegetation community consists of Karri regrowth along the northern edge of the dam with open stream vegetation occurring towards the south western portion of the proposed clearing area. The vegetation is in a very good to degraded (Keighery, 1994) condition.

Two priority flora species have been recorded in the local area (10km radius). The closest known record being Xanthopamelia xanthomelanoides (Priority 2) mapped approximately 6.1km west of the application area on the same vegetation type and a different soil type.

No Priority Ecological Communities occur within the local area (10km radius).

There are no mature trees present in the proposed clearing area and therefore no primary habitat trees.

The local area (10km radius) surrounding the application has approximately 60 percent of its pre-European vegetation remaining.

Given that the local area (10km radius) has a high level of vegetation remaining, and the vegetation under application consists largely of Karri regrowth with no primary habitat trees, the proposed clearing is not likely to comprise of a high level of biodiversity. Therefore, the application is not likely to be at variance to this Principle.

Methodology References:
-DEC (2012)
-Keighery (1994)

GIS Databases:
-NLWRA, Current Extent of Native Vegetation
-SAC Biodatasets (Accessed July 2012)
-NatureMap
-Pre European Vegetation

(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**

Eight conservation significant fauna species have been recorded in the local area (10km radius) including *Calyptorhynchus banksii* subsp. *naso* (Forest Red-tailed Black-Cockatoo), *Calyptorhynchus baudinii* (Baudin's Cockatoo), *Calyptorhynchus latirostris* (Carnaby's Cockatoo), *Dasyurus geoffroyi* (Chuditch), *Pseudocheirus occidentalis* (Western Ringtail Possum), *Setonix brachyurus* (Quokka) *Westralunio carteri* and *Isodon obesulus* subsp. *fusciventer* (Quenda).

The Karri regrowth present is too young to have developed hollows, therefore the application area is unlikely to provide primary habitat trees. No conservation significant fauna species were observed during a site inspection (DEC, 2012).

The proposed clearing area lies in close proximity to better condition vegetation remnants in the nearby conservation reserves, which are likely to provide greater habitat values. There is approximately 84 per cent vegetation remaining in the Shire of Manjimup and approximately 60 per cent within the local area (10km radius). Therefore the application area of 3.9ha is unlikely to provide significant habitat for indigenous fauna.

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

Methodology References:
-DEC (2012)

GIS Databases:
-NatureMap
-DEC Tenure

(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**

No rare flora species have been mapped within the local area (10km radius). The closest mapped rare flora record is *Caladenia christineae* which occurs 12.3 km south west of the on a different soil and vegetation type.

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

Methodology GIS Databases:
-Soils, Statewide
-WaHerbarium (1998-)
-Pre-European Vegetation
-Matiske 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 mapped within the local area (10km radius).

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

Methodology GIS Databases
-SAC Bio Datasets - accessed July 2012

(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 local area (10km radius) surrounding the application has approximately 60 percent of its pre-European vegetation remaining.

Pre-European	Current Extent (ha)	Remaining Extent in DEC Managed Lands (ha)	(%)	(%)
IBRA Bioregion* Warren	833,982	664,123	80	83
Shire* Manjimup	697,370	589,098	84	92
Beard Vegetation Association in Bioregion* 1144	159,668	126,979	80	91
Mattiske Vegetation Complex				
Lefroy complex	20,125	16,812	84	74
Wheatley complex	18,325	14,865	81	73

* Government of Western Australia (2011)

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). The Region, Shire and Vegetation complexes shown above all retain greater than 70 per cent native vegetation.

Given the vegetation representation within the local area, it is unlikely that the vegetation under application is significant as a remnant in an extensively cleared landscape.

Methodology References:
-Commonwealth of Australia (2001)
-Government of Western Australia (2011)

GIS Databases:
-NLWRA, Current Extent of Native 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 at variance to this Principle**
A minor perennial watercourse, a tributary to the Smith Brook and Warren River, runs through the middle of the application area. A site inspection confirmed the presence of open stream vegetation occurring along the edge of this tributary (DEC, 2012).

Given the above the proposed clearing is at variance to this Principle.

Methodology References:
-DEC (2012)

GIS Databases:
-Hydrography, linear

(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 soils of the area under application are described as hard acidic yellow soils, red mottled soils and brown earths, containing ironstone gravels, some on major stream terraces (Northcote et al. 1960-68). These soils are not at high risk of wind erosion following clearing.

The groundwater salinity is 500 to 1000 mg/L and the hydrogeology consists of rocks of low permeability with local aquifers in fractured and weathered rocks.

Given the percentage of surrounding vegetation in the local area (60 per cent in a 10km radius), and the groundwater salinity and hydrogeology, the proposed clearing of 3.9 hectares is unlikely to cause appreciable land degradation and therefore is not likely to be at variance to this Principle.

Methodology References:
-Northcote et al, (1960-68)

GIS Databases:
-Groundwater salinity
-NLWRA, Current Extent of Native Vegetation

(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 lies adjacent to DEC managed lands and is within 2km of Smith Brook Nature Reserve, Warren State Forest and Tone State Forest. The vegetation within these reserves is sensitive to dieback infection and the proposed clearing may increase the risk of dieback and / or weeds impacting on these areas. Weed and dieback management practices will assist in mitigating the effects of clearing.

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

Methodology GIS Databases:
-DEC Tenure

(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**

The application area falls within the unassigned Public Drinking Water Source area of the 'Warren River Water Reserve' and zone B of the 'Warren River Water Reserve' catchment area covered by the Country Areas Water Supply Act 1947.

The Department of Water advise that zone B is a high salinity risk part of the catchment and native vegetation should be retained on at least 10 per cent of the holding area. It is advised that if the proposed clearing of 3.9ha is approved, the native vegetation area on the holding will be 15.2 per cent and above the limiting threshold (DoW, 2012).

The proposed clearing may cause temporary deterioration in surface water through sedimentation as the clearing involves removing vegetation from a minor perennial watercourse. The impact on surface water is considered to be short-term during the construction of the dam.

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

Methodology References:
-DoW (2012)

GIS Databases:
-Hydrography linear,

(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**

Clearing of the proposed area is unlikely to significantly increase surface water runoff, and therefore the risk of flooding is low.

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

Methodology GIS database:
-Topographic Contours, Statewide

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

Comments

The application area is zoned 'priority agriculture' under the Town Planning Scheme.

No public submissions were received regarding this application.

The Shire of Manjimup (2012) advised that there is no planning or other matter which would affect the proposed clearing.

The Department of Water (DoW) has received Rights in Water and Irrigation Act 1941 (RIWI Act) applications for a Permit to enlarge the existing dam and an amendment to an existing licence to take water. It has been advised that both RIWI applications are likely to be approved subject to the proponent obtaining a clearing Permit (DoW, 2012).

DoW has advised that if the proposed clearing of 3.9 hectares is approved, native vegetation remaining on the holding will be 15.2 per cent and above the threshold limit of 10 per cent. Consequently DoW has no objection to the proposed clearing (DoW, 2012).

Methodology

References:

- DoW (2012)
- Shire of Manjimup (2012)

GIS Databases:

- Town Planning Schemes

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2012) Site Inspection Report for Clearing Permit Application CPS 5093/1, Lot 2 on Deposited Plan 17088, Smith Brook. Site inspection undertaken 04/07/2012. Department of Environment and Conservation, Western Australia (DEC Ref A521059).
- Department of Water (2012). Country Area Water Supply and RIWI Advice for CPS5093/1. DEC Ref: A518279
- Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). 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.
- 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., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.
- Shire of Manjimup (2012) Direct interest submission for CPS 5093/1. Received 19/06/2012. DEC Ref: A517729.
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed xx/xx/xxxx).

5. 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
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)