



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 3799/1
Permit Holder:	Western Australian Rifle Association Inc.
Duration of Permit:	17 January 2011– 17 January 2016

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I – CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of expanding an existing rifle range.

2. Land on which clearing is to be done

Lot 3071 on Plan 36440 (Reserve 47881), Canning Mills 6111

3. Area of Clearing

The Permit Holder must not clear more than 0.8 hectares of native vegetation within the area hatched yellow on attached Plan 3799/1.

4. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

5. Compliance with Assessment Sequence and Management Procedures

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

PART II – ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

6. Avoid, minimise etc clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

7. 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) shall only move soils in *dry conditions*;
 - (iii) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - (iv) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (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.

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;

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;

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*.

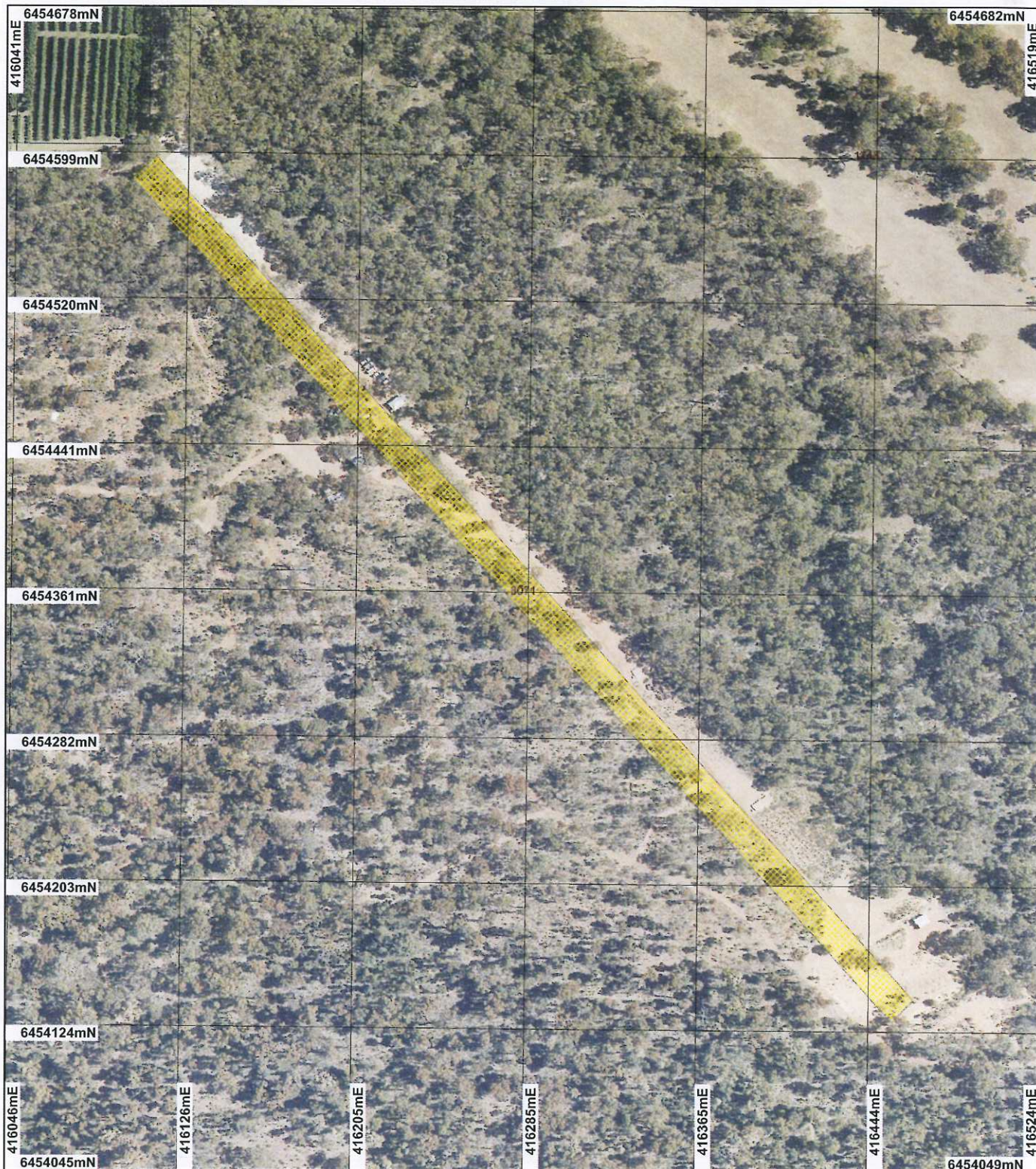


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

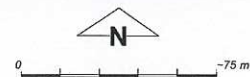
23 December 2010

Plan 3799/1



LEGEND

- | | | | |
|--|--|--|--|
| Road Centrelines | Crown Reserve | Public Roads | |
| Clearing Instruments | State Forest / Timber Reserve | Unallocated Crown Land | |
| Areas Approved to Clear
Cadastral for labelling | Marine Park | Water | |
| Freehold
(cont) | Crown Lease | Swan Coastal Plain Central
20cm Orthomosaic - Landgate
2009 | |
| | Lease / Reserve | | |
| | Lease on State Forest / Timber Reserve
(cont) | | |



Scale 1:2802
(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 23/12/10

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



1. Application details

1.1. Permit application details

Permit application No.: 3799/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: West Australian Rifle Association Incorporated

1.3. Property details

Property: LOT 3071 ON PLAN 36440 (Lot No. 3071 CANNING CANNING MILLS 6111)
Local Government Area:
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.8		Mechanical Removal	Recreation

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 23 December 2010

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
Beard Vegetation Complex: 3 Medium forest; Eucalyptus marginata (Jarrah) - Eucalyptus calophylla (Marri). (Shepherd 2009, Mattiske 1998). Mattiske Vegetation Complexes: Dwelling up 2: Open forest of Eucalyptus marginata subsp. marginata - Eucalyptus calophylla on lateritic uplands.	The proposal is to clear 0.8ha for the purpose of widening an existing rifle range and construction of a club house and parking facilities. The vegetation under application consists of: Low forest dominated by Eucalyptus marginata (jarrah) with Corymbia calophylla (Marri) over patches of thicket dominated by Banksia sessilis over low heath with Xanthorrhoea preissii occurring in the north section of the application area in an excellent condition.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The vegetation condition was determined from a site visit conducted by DEC officers on the 15 July 2010 (DEC 2010) and from flora survey carried out December 2010 (Paul Armstrong and Associates 2010).
Yarragil 1: Open forest of Eucalyptus marginata subsp. marginata - Eucalyptus calophylla on slopes with mixtures of Eucalyptus patens and Eucalyptus megacarpa on the valley floors.	Low woodland dominated by Eucalyptus marginata (Jarrah) with Corymbia calophylla (Marri) over scrub dominated by Banksia sessilis over low scrub with Xanthorrhoea preissii occurring in the southern section of the application area in a predominantly excellent condition. (Paul Armstrong and Associates 2010).		
As above	Condition decreasing to very good in the southern portion of this area due to evidence of previous clearing and disturbance.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	As above

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 may be at variance to this Principle

The application area has been amended from 1.25ha down to 0.8ha and excludes the area for the proposed club hut and parking areas as originally proposed. The proposed clearing is now for the expansion of the existing rifle range.

The vegetation consists of low forest dominated by Eucalyptus marginata (jarrah) with Corymbia calophylla

(Marri) over patches of thicket dominated by *Banksia sessilis* over low heath with *Xanthorrhoea preissii* occurring in the north section of the application area in an excellent condition. Low woodland dominated by *Eucalyptus marginata* (Jarrah) with *Corymbia calophylla* (Marri) over scrub dominated by *Banksia sessilis* over low scrub with *Xanthorrhoea preissii* occurring in the southern section of the application area in a predominantly excellent condition (Paul Armstrong and Associates 2010), with condition decreasing to very good (Keighery, 1994) in the southern portion of this area due to evidence of previous clearing and disturbance (DEC 2010). Two trees with hollows were observed in this area (DEC 2010); these habitat trees may provide significant nesting habitat for threatened black cockatoo species recorded in the local area.

The area under application occurs within the Korung National Park, which has been conserved for the conservation of flora and fauna.

A flora survey targeting property and rare flora observed in the local area (10km radius) was carried out during early December 2010 (Paul Armstrong and Associates 2010) and identified 59 taxa occurring within the application area. A priority 4 flora species, *Stylidium striatum* was observed within the survey area. The proposed clearing will approximately impact 200 to 500 plants of this species. However, the area to the west of the application area contains similar vegetation community and is 7.5ha in size (Paul Armstrong and Associates 2010). It is considered that *Stylidium striatum* would most likely occur there in similar densities to those recorded within the application area, although unconfirmed ~ 3000 plants may occur in that area (Paul Armstrong and Associates 2010). Therefore, it is not considered for the proposed clearing to significantly impact this population of *Stylidium striatum*.

Given the area under application contains habitat for a priority 4 flora species, is predominantly in an excellent (Keighery 1994) condition, it is considered the proposed clearing may be at variance to this Principle.

- Methodology** **References**
- DEC (2010)
 - Western Australian Herbarium (1998-)
 - Keighery (1994)
 - Paul Armstrong and Associates (2010)
- GIS Databases**
- SAC Bio Datasets (30/6/2010)
 - DEC Tenure

(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

Eight conservation significant fauna species were recorded in the local area (~5km radius) of the areas under application.

The area under application consists of Jarrah and Marri forest in a predominately excellent (Keighery 1994) condition (DEC 2010). Out of the eight recorded fauna species, Chuditch (*Dasyurus geoffroii*), Southern Death Adder (*Acanthopis antarcticus*), Quenda (*Isoodon obesulus fusciventer*) and Western Brush Wallaby (*Macropus irma*) may use the areas under application for nesting and foraging habitat. In addition, the area under application contain feeding habitat for black cockatoo species such as the Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) and the Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*), which are know to forage on Dryandra, Marri and Jarrah species (CALM 2005, Cale 2003) that have been recorded in the areas under application.

Two habitat trees were observed containing one large and four medium size hollows and six Carnaby's Black Cockatoos were observed roosting nearby (DEC 2010). Both the Forest Red-tailed Black Cockatoo and the Carnaby's Black Cockatoo have been recorded in the local (~ 5km radius) area, and are known to nest in large hollows occurring in jarrah and marri trees (CALM 2005, Cale 2003).

The decrease in the area proposed to be cleared from 1.25ha down to 0.8ha and that there is a large amount of similar condition vegetation in the local area (~75%) has reduced the significance of the application area as feeding habitat for species of black cockatoo. Therefore the amended proposed clearing may be at variance to this Principle.

- Methodology** **References**
- CALM (2005)
 - Cale (2003)
 - DEC (2010)
 - Keighery (1994)
- GIS Databases**
- SAC Bio Datasets (30/6/2010)
 - NLWRA, Current Extent of Native Vegetation
 - Swan Coastal Plain Central 20cm Orthomosaic - Landgate 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 are three rare flora species recorded in the local area (5 km radius) including *Acacia anomala*, *Conospermum undulatum* and *Thelymitra stellata*. All three of these species occur within the same beard vegetation complex and in similar soil as the area under application.

The areas under application consist of Jarrah and Marri woodland over red loamy lateritic soils (DEC 2010),

All three of these rare flora species have been recorded within Jarrah - Marri woodlands over sandy lateritic soils (Western Australian Herbarium 1998-), therefore it is considered that these species may occur within the application area.

However, given that the area under application has decrease from 1.25ha down to 0.8ha and a targeted flora survey carried out in December 2010 did not find any rare flora species (Paul Armstrong and Associates 2010), the variance to this principle has changed from maybe at variance to not at variance.

Methodology

References

- DEC(2010)
 - Western Australian Herbarium (1998-)
 - Paul Armstrong and Associates (2010)
- GIS Databases
- SAC Bio Databsets (30/6/2010)

(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

The closest Threatened Ecological Community (TEC) to the areas under application is Floristic Community Type (FCT) 20b Eastern *Banksia attenuata* woodlands and or *Eucalyptus marginata* woodlands, which occurs 8.3 km west of the applied area.

The vegetation under application consists of Jarrah and Marri Forest over red loamy lateritic soil (DEC 2010) and as such it is not considered likely to contain the FCT 20a.

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

Methodology

References

- DEC (2010)
- GIS Databases
- SAC Bio Datasets (30/6/2010)

(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 described as Beard vegetation association 3 of which there is 69.35% of pre-European extent remaining within the Jarrah Forest bioregion (Shepherd 2007). The Matiske Vegetation complex for the areas under application is Yarragil 1 and Dwellingup 2 of which there is 83.77% and 85.53% of pre-European vegetation extent remaining respectively (Matiske 1998).

In addition, there is approximately 78% of pre-European vegetation remaining in the local area (~5km radius) and 73.82% remaining in the Shire of Kalamunda.

The Beard and Matiske vegetation complexes mapped within the vegetation under application retains more than the recommended 30% pre-European level in the National Objectives Targets for Biodiversity Conservation below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001).

The area under application occurs within the conservation area, Korung National Park and are considered a part of a significant remnant of vegetation that has been reserved for conservation purposes. However, the areas under application occur within a local landscape that has not been extensively cleared and does not contain vegetation complexes that are unrepresented within the bioregion. Therefore, the proposed clearing is not at variance to this Principle.

	Pre-European (ha)	Current extent (ha)	Remaining %
IBRA Bioregion			
Jarrah Forest*	4,506,656	2,514,549	55.80

Shire of Kalamunda*	32,384	23,906	73.82	
Local Area (~5km radius)	7,850	6,316	~78.0	
Beard type in Bioregion*				
3	2,390,591	1,657,963	69.35	
Mattiske Vegetation Complex **				
Yarragil 1	80,061	67,068	83.77	
Dwellingup 2		86,087	73,632	85.53

* (Shepherd 2007)

** (Mattiske 1998)

Methodology References
 -Mattiske (1998)
 - Commonwealth of Australia (2001)
 - Shepherd (2007)
 GIS Databases
 -DEC Tenure
 - Pre-European Vegetation
 -Mattiske Vegetation Complexes
 -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 may be at variance to this Principle

The closest watercourse and wetland to the application area is a minor perennial watercourse occurring ~150m east and a wetland (conservation category palusplain) occurring ~1.1km west.

The areas under application contain transitional vegetation occurring between upland and swampy area of the jarrah forest and contain species that occur in damp areas including the Swamp Teatree (*Pericalymma ellipticum*) and Swamp Peppermint (*Taxandria linearifolia*) (DEC 2010).

Therefore, given the vegetation present within the landscape and the distance to the nearest watercourse, the proposed clearing may be at variance to this Principle.

Methodology References
 -DEC (2010)
 GIS Databases
 -Hydrography, linear
 -Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain

(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 area under application have chief soils of acid red earths and some soils containing ironstone gravel (Northcote et al 1960-68). These soils have a high risk of water erosion.

However, given the relatively small area to be cleared and that the area under application are surrounded by vegetation, it is not considered for the proposed clearing to cause appreciable land degradation through water erosion.

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

Methodology References
 -Northcote et al (1960-68)
 GIS Databases
 -Soils, 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 at variance to this Principle

The area under application occur within the Korung National Park which is a conservation area. Dieback is known to occur within this area (Shire for Kalamunda 2010).

The proposed clearing will directly impact this conservation area by clearing native flora and fauna habitat and will indirectly impact the conservation area through the introduction and spread of weeds and dieback.

Therefore, the proposed clearing is at variance to this Principle.

Methodology References
-Shire of Kalamunda (2010)
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 closest watercourse and wetland to the application area is a minor perennial watercourse occurring ~150m east and a wetland (conservation category palusplain) occurring ~1.1km west.

The proposed clearing occurs within a Priority 1 zone of the Victoria Reservoir Catchment area, a Public Drink Water Source Area (PDWSA). A Priority 1 zone of a PDWSA is the most stringent classification for drinking water sources and managed to ensure that there is no degradation of the drinking water source. Most land use creates some risk to water quality and is therefore defined as incompatible in P1 areas (DOE 2004).

The Department of Water does not support the proposed clearing and expansion of the rifle range facilities as it is considered incompatible, in accordance with DOW's Water Quality Protection Note Land Use Compatibility in Public Water Source Areas, as it will increase the risk to water quality within the Priority 1 zone (Department of Water 2010).

Therefore the proposed clearing of 0.8ha may cause deterioration in the quality of surface or ground water. Therefore, the proposed clearing may be at variance to this Principle.

Methodology References
-DOE (2004)
-Department of Water (2010)
GIS Databases
-PDWSA
-Hydrography, linear
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain

(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 closest watercourse and wetland to the application area is a minor perennial watercourse occurring ~150m east and a wetland (conservation category palusplain) occurring ~1.1km west.

Given the relatively small area proposed to be cleared and that the areas under application are surrounded by continuous vegetation, it is not considered for the proposed clearing of 0.8ha to cause or exacerbate flooding.

Methodology GIS Databases
-Hydrography, linear
-Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain

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

Comments

The application area has been amended from 1.25ha down to 0.8ha and excludes the area for the proposed club hut and parking areas as originally proposed. The proposed clearing is now for the expansion of the existing rifle range within the Korung National Park.

The WA Rifle Association has had a lease in operation since 1948 which expired in 2007. In 2007 the Minister for Environment approved a 21 year lease for the Pickering Brook Rifle Range. In October 2009 the WA Rifle Association put in a request to DEC to amend their lease area to include an addition 1.4ha for proposed new club house, ablution block and car parking facilities. Endorsement from the Conservation Commission of Western Australia and Ministerial delegate was received in March 2010. The amended lease is currently with the applicant awaiting signatures before being returned to DEC for final approval.

As stipulated within the amended draft lease under section 5.2, development approval is required from the landlord for the proposed expansion of the rifle range (DEC 2010a). In addition, under section 7.6 and 7.9 of the draft lease, the WA rifle association may not cut down or damage vegetation within the lease area without the

written consent of the landlord. Also as stated under section 7.11, 'Unless otherwise stated, this lease is not to be taken as exempting the Tenant from or limiting the obligation of the Tenant to comply with any law relating to the protection of the environment' (DEC 2010a).

The areas under application occur within a Priority 1 zone of the Victoria Reservoir Catchment Area, a Public Drinking Water Source Area (PDWSA). Most land uses are incompatible within this zoning (DOE 2004). The Department of Water does not support the proposed clearing and expansion of the rifle range facilities as it is considered incompatible, in accordance with DOW's Water Quality Protection Note Land Use Compatibility in Public Water Source Areas, as it will increase the risk to water quality within the P1 area (Department of Water 2010).

The Shire of Kalamunda (2010) has no objections to West Australian Rifle Association's proposal. However notes that dieback has occurred in the area and therefore recommends a dieback management plan for the clearing activities and disposal of vegetation should be completed proper to approval. The Shire of Kalamunda also recommends a revegetation project to offset the area cleared (Shire of Kalamunda 2010).

Methodology	References
	-DEC (2010b)
	-DEC (2009)
	-DOE (2004)
	-Department of Water (2010)
	-Shire of Kalamunda (2010)

4. References

- Cale (2003) Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) Recovery Plan 2002-2012. For Carnaby's Black Cockatoo Recovery Team, Department of Conservation and Land Management, Western Australia.
- CALM (2005) Fauna Note No. 05/2005 Carnaby's Cockatoo. Department of Conservation and Land Management, Western Australia.
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2009) Swan Region comments on amendment to Lease 2206/11- Pickering Brook Rifle Range. Department of Environment and Conservation, Western Australia.
- DEC (2010) Site Inspection Report for Clearing Permit Application CPS 3799/1, Korung National Park. Site inspection undertaken 15 July 2010. Department of Environment and Conservation, Western Australia (TRIM Ref. A318749).
- DEC (2010b) DRAFT Lease No 2206/100 Part of Pickering Brook National Park - Rifle Range - West Australian Rifle Association Inc. Department of Environment and Conservation. Western Australia. DEC ref A312870
- Department of Water (2010) Advice for CPS 3799/1 - WA Rifle Association - Korung National Park regarding PDWSA. Department of Water, Western Australia. DEC ref A321592
- DOE (2004) Water Quality Protection Notes: Land Use Compatibility in Public Drinking Water Source Areas. Department of Environment, 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.
- Paul Armstrong and Associates (2010) Targeted Rare Flora Survey and the Pickering brook Rifle Range. For the West Australian Rifle Association Inc. December 2010. DEC ref A356036
- 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.
- Shire of Kalamunda (2010) Direct interest submission for CPS 3799/1 - WA Rifle Association - Korung National Park. DEC ref A318511
- Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Environment and Conservation. <http://florabase.dec.wa.gov.au/> (Accessed 19/7/2010)

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)