

# **CLEARING PERMIT**

Granted under section 51E of the Environmental Protection Act 1986

#### PERMIT DETAILS

Area Permit Number: 3085/1

File Number:

DEC11208

Duration of Permit: From 20 September 2009 to 20 September 2011

#### PERMIT HOLDER

Northern Corridors Developments Ltd

# LAND ON WHICH CLEARING IS TO BE DONE

Lot 1001 Romeo Road, Alkimos

#### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 2 hectares of native vegetation within the area hatched yellow on attached Plan 3085/1.

# CONDITIONS

1. 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:

- (a) avoid the clearing of native vegetation;
- (b) minimise the amount of native vegetation to be cleared; and
- (c) reduce the impact of clearing on any environmental value.
- 2. The Permit Holder shall not clear any native vegetation to a height less than 100 millimetres.

Keith Claymore

A/ ASSISTANT DIRECTOR

NATURE CONSERVATION DIVISION

Officer delegated under Section 20

of the Environmental Protection Act 1986

20 August 2009

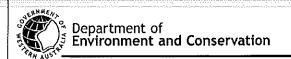
# Plan 3085/1





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

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# **Clearing Permit Decision Report**

# 1. Application details

Permit application details

Permit application No.:

Permit type:

Area Permit

Proponent details

Proponent's name:

Coffey Environments Pty Ltd on behalf of Northern Corridor Developments Ltd

**Property details** 

Property:

LOT 1001 ON PLAN 61236 (Lot No. 1001 ROMEO ALKIMOS 6038)

Local Government Area:

Colloquial name:

City Of Wanneroo

**Application** 

Clearing Area (ha)

No. Trees

Method of Clearing

For the purpose of: Miscellaneous

Mechanical Removal

#### Site Information

# **Existing environment and information**

# 2.1.1. Description of the native vegetation under application

#### Vegetation Description

vegetation

Heddle complex:

Cottesioe Complex Central and South: Mosaic woodland of gomphocephala and open forest E. of gomphocephala E. marginata - E. calophylla; closed heath on the Limestone outcrops.

Beard vegetation types:

949 -Low woodland; banksia

(Heddle et al. 1980, SAC Bio Datasets 07/05/2009)

#### Clearing Description

The proposal is to clear 2ha within an area of 43.8 ha for the purpose of conducting an unexploded ordnance search prior to geotechnical surveys as request by the City of Wanneroo. It is proposed for 3m wide corridors to be cleared in a north-south direction spaced 100m apart across the area under application.

The vegetation under application comprises of four communities. The majority of the area under application consists of Banksia attenuata and Banksia menziesii hypericoides, low woodland over Hibbertia Gompholobium tomentosum, Lepidosperma angustatum, Mesomelaena sp in an excellent condition.

Banksia attenuata low woodland over Calothamnus include Calothamnus quadrifidus heath. Species quadrifidus, Allocasuarina humilis, Hibbertia hypericoides, Jacksonia stricta, Hakea trifurcata and Dryandra lindleyana occur to the south and is also in an excellent condition.

Drvandra sessilis closed scrub including Hibbertia hypericoides, Calothamnus quadrifidus, and Jacksonia stricta occur in a small area in the middle of the area under application in excellent condition.

Eucalyptus gomphocephala (Tuart) woodland with a middle storey of Banksia sp over Hibbertia hypericoides and Xanthorrhoea preissii and a rich herb layer occur along the southern boundary of the area under application and occurs in good to very good condition.

# **Vegetation Condition**

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)

#### Comment

Vegetation clearing description based on a site vegetation survey under taken during 15 October 2004 Environmental 2004) and site visit conducted by DEC officers on 7 May 2009.

# 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 at variance to this Principle

The area under application contains four vegetation communities including Banksia attenuata and Banksia menziesii low woodland, Banksia attenuata low woodland over Calothamnus quadrifidus heath, Dryandra sessilis closed scrub and Eucalyptus gomphocephala (Tuart) woodland in good to excellent condition (ATA Environmental 2004).

A flora survey carried out in October 2004, identified 180 species including 30 exotic species of flora within lot 1001 (area under application) and 1002 Romeo Rd. The survey did not identify any rare or priority flora species occurring within the area under application, however it identified three significant flora species including Lechenaultia linariodes which is considered to be poorly reserved but not a priority or rare flora species, Petrophile serruriae subsp. nov, which is considered to be at its northern extent of its distribution and Stylidium junceum which has been identified as a distinct variant of this species which grows in the local area (ATA Environmental 2004).

The flora survey has also identified a Priority Ecological Community (PEC) occurring within the area under application, that being Floristic Community Type (FCT) 24: Northern Spearwood shrublands and woodlands and occurs in excellent condition (ATA Environmental 2004). In addition, 66 fauna species were recorded during the fauna survey (ATA Environmental 2008) including the conservation significant species Carnaby's Black Cockatoo (Calyptorhynchus latirostris).

Tuart woodlands are in decline on the Swan Costal Plain (CALM 2003). The south-western portion of the application area has been identified in the Atlas of Tuart Woodlands on the Swan Coastal Plain in Western Australia (CALM 2003) as having no disturbance with 10 to 19% canopy density. Approximately only 25 % of this canopy density class on the swan costal plain is in the condition rating of no disturbance (CALM 2003).

Given that the majority of the area under application is in excellent condition, contains three vegetation communities, contains a PEC and Tuart woodland, contains habitat for conservation fauna species and contains high floral and faunal diversity, it is considered likely for the proposed clearing to be at variance to this Principle.

#### Methodology

References

- -ATA Environmental (2004)
- ATA Environmental (2008)
- -CALM (2003)

**GIS Databases** 

SAC Bio Databases (07/05/2009)

# (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 may be at variance to this Principle

Within the local area (~ 5 km radius) 5 species of conservation significant fauna have been recorded.

The majority of the vegetation under application is in very good to excellent condition and includes an understorey that would provide suitable habitat for ground-dwelling fauna such as snakes, lizard and the conservation significant species, Quenda (Isoodon obesulus fusciventer) and Carpet python (Morelia spilota). A fauna survey of both Lot 1001 and 1002 under taken in November 2007 identified 27 fauna vertebrate species including two species of burrowing frogs, two mammal species (Honey Possum (Tarsidpes rostratus) and the South Western Free-tail Bat (Mormopterus sp) and 23 reptiles species occurring within the area under application. In addition, there are three fauna habitat types identified within the area under application all in very good condition (ATA Environmental 2008).

Other species of conservation significance such as the Rainbow Bee-eater (Merops ornatus), Peregrine Falcon (Falco peregrinus), Western Brush Wallaby (Macropus irma), Southern Brush-tailed Phascogale (Phascogale tapoatafa tapoatafa), Black-Striped Snake (Neelaps calonotus) and the Quenda (Isoodon obesulus fusciventer) have not been recoded during the fauna survey but has been identified in similar habitat in the local area during previous surveys (ATA Environmental 2008).

The fauna survey also recorded 39 bird species within the area under application (ATA Environmental 2008) including the conservation significant species Carnaby's Black Cockatoo (Calyptorhynchus latirostris). The area under application consists of Banksia woodland and Tuart woodland in excellent condition (DEC 2009). Carnaby's Black Cockatoos are known to feed on seeds, nuts and flowers of a large variety of plants including Banksia, Dryandra and Grevillea, with the Northern Region of the Swan Coastal Plain considered being an important area throughout the season for this species (Shah 2006).

The Graceful Sunmoth (Synemon gratiosa), has been recorded 4.3km south of the area under application. This species requires Lomandra spp. as host plants and shows some preference for high quality vegetation (DEC 2008, Williams 2009). The area under application contains Banksia woodland and costal heath and shrublands in an excellent condition and three Lomandra species (including both L. maritima, which is describes as common in parts of the area under application, and L. hermaphrodita) were recorded during the flora survey (ATA Environmental 2008). Therefore, it may be considered likely for the area under application to provide habitat for the conservation significant Graceful Sunmoth.

Given the diversity of habitats present, the utilisation of Lot 1001 Romeo Rd for foraging and habitat by

Carnaby's Black Cockatoo and the potential of the vegetation being used by many other conservation significant species, it is considered that vegetation at Lot 1001 Romeo Rd is a significant habitat for native fauna. The proposed clearing of 3 m wide gridlines across Lot 1001 Romeo Rd will cause fragmentation to this habitat. Therefore, it may be considered likely for the vegetation proposed to be cleared (2ha) to be necessary for the maintenance of significant habitat for local indigenous fauna.

#### Methodology

References

- ATA Environmental (2008)
- -DEC (2008)
- DEC (2009)
- Shah (2006)
- Williams (2009)

**GIS Databases** 

- -SAC Bio Databases (07/05/2009)
- (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 rare flora species, Eucalyptus argutifolia, recorded in the local area (~ 10 km radius) being 5.1 km east of the area under application.

This species occurs on shallow soils over limestone on slopes or gullies of limestone ridges or outcrops (Western Australia Herbarium 1998-).

The vegetation under application comprises a mixture of Banksia woodland and Tuart woodland located on spearwood sands (DEC 2009). A vegetation survey undertaken in October 2004 did not identify this species or any other rare flora within the area under application (ATA Environmental 2004). Therefore, it is considered not likely for the proposed clearing to be at variance to this Principle.

#### Methodology

References

- -ATA Environmental (2004)
- -DEC (2009)
- -Western Australia Herbarium (1998-)

GIS Databases

-SAC Bio Databases (07/05/2009)

(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

Twelve recordings of the Threatened Ecological Community (TEC) 26a: Melaleuca huegelii- Melaleuca acerosa shrublands over limestone ridges was recorded in the local area (~5km radius). The nearest occurrence is 1.6 km north of the area under application.

The area under application contains Banksia low woodlands, Tuart woodlands and Dryandra sessilis health on spearwood sands in a very good to excellent condition (ATA Environmental 2004, DEC 2009)

A flora and vegetation survey undertaken during October of 2004 did not identify any TECs occurring within the area under application, however a Priority Ecological Community, Floristic Community Type (FCT) 24: Northern Spearwood shrublands and woodlands was recorded within the area under application (ATA Environmental 2004).

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

### Methodology

References

-ATA Environmental (2004)

-DEC (2009)

GIS Databases

-SAC Bio Databases (07/05/2009)

# (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

Heddle et al. (1980) defines the vegetation under application as consisting off the Cottesloe Complex - Central and South: Mosaic of woodland of E. gomphocephala and open forest of E. gomphocephala - E. marginata - E. calophylla; closed heath on the limestone outcrops, of which there is 41.1% of pre-European extent remaining (EPA 2006). The vegetation under application is also described as Beard vegetation association 949: Low woodland; banksia of which there is 58.4% of pre-European extent remaining (Shepherd 2007).

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The area under application is located within the City of Wanneroo, within which there is 49.7% of pre-European vegetation extent remaining. In addition, there is approximately 52.5% of pre-European vegetation remaining in the local area (~5km radius).

The vegetation types under application retain more than the EPA supported threshold level (30%) recommended in the National Objectives Targets for Biodiversity Conservation; below which species loss appears to accelerate exponentially at an ecosystem level (EPA, 2000).

In addition, the area under application is not a significant remnant in the local area due to its small linear shape (2 ha within 40 ha) and connectivity to other bushland to the east and north. Therefore, the proposal is not considered likely to be at variance to this Principle.

Swan Coastal Plain City of Wanneroo Local Area (~5km radius)	Pre-European (ha) C 1,501,208 67,697 7491	urrent extent (ha) 583,141 33 637 ~3932	Remaining % 38.84* 49.69* ~52.5
Heddle vegetation complex Cottesloe Complex- Central And South	44 995	18 474	41.1
Beard vegetation association 949	209 983	122 677	58.4**

<sup>\* (</sup>Shepherd 2007)

#### Methodology

References

-EPA (2000)

-EPA (2006)

-Shepherd (2007)

GIS Databases

- -Heddle Vegetation Complexes
- -NLWRA, Current Extent of Native Vegetation
- -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 nearest wetland to the area under application is a Resource Enhancement Wetland, Carabooda Lake, occurring 1.3 km northwest and a Conservation Category Wetland occurring 2 km west of the area under application. The nearest watercourse (Chandala Brook) occurs 26 km east of the area under application.

Given the distance to the nearest watercourse and wetlands it is not considered likely for the proposed clearing to be at variance to this Principle.

#### Methodology

**GIS** Databases

- -Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
- -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 within the area under application are part of the Spearwood Dune System and comprise of siliceous sands with some brown sands and leached sands (Northcote et al. 1960-68), which are considered to have a high risk of wind erosion (Department of Agriculture 2005).

There is a low salinity risk within the applied area. Therefore, it is not considered likely that the proposed clearing would result in an increase in salinity. Given this and the thin, linear nature of the proposed clearing, the risk of wind erosion will be reduced. Therefore, it is not considered likely for the proposed clearing to cause appreciable land degradation.

#### Methodology

References

- -Department of Agriculture (2005)
- -Northcote et al. (1960-68)

<sup>\*\*(</sup>EPA, 2006)

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 not likely to be at variance to this Principle

The nearest conservation area is Neerabup National Park which is also Bush Forever site 383 and occurs 160m west of the area under application.

Given the small area to be cleared (2 ha) within a 43.8 ha area and that the area under application is not connected through continuous vegetation to the conservation area, it is not considered likely for the proposed clearing to be at variance to this Principle.

#### Methodology

**GIS Databases** 

- -Bushforever
- -DEC Managed Lands and Waters
- Perth Metropolitan Area North 20cm Orthomosaic Landgate 2007

# (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

There nearest wetland to the area under application is a Resource Enhancement Wetland, Carabooda Lake, occurring 1.3 km northwest and a Conservation Category Wetland occurring 2 km west of the area under application. The nearest watercourse (Chandala Brook) occurs 26 km east of the area under application.

The area under application is not within a Priority Drinking Water Source Area (PDWSA) and has a low salinity risk. Therefore, it is unlikely for the proposed clearing to cause deterioration to the quality of underground water.

Given the distance to the closest wetlands and watercourse, the small area to be cleared and low salinity risk, it is not considered likely for the proposed clearing to be at variance to this Principle.

#### Methodology

**GIS Databases** 

- -Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
- -Hydrography, linear
- -Priority Drinking Water Source Area (PDWSA)
- -Salinity Risk

# (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

There nearest wetland to the area under application is a Resource Enhancement Wetland, Carabooda lake, occurring 1.3 km northwest and a Conservation Category Wetland occurring 2 km west of the area under application. The nearest watercourse (Chandala Brook) occurs 26 km east of the area under application.

Given the distance to the nearest watercourse and wetlands it is not considered likely for the proposed clearing to be at variance to this Principle.

#### Methodology

**GIS** Databases

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

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

#### Comments

The proposal is to clear 2ha within an area of 43.8 ha for the purpose of conducting an unexploded ordnance search prior to geotechnical surveys as request by the City of Wanneroo. It is proposed for 3m wide corridors to be cleared in a north- south direction spaced 100m apart across the area under application.

Correspondence was sent to applicant on 9 July 2009 requesting for additional information regarding the manner and timing in which the proposed clearing is to occur. A response was received on 9 August 2009 stating that clearing is proposed to occur prior to March 2010 and native vegetation will be cleared up a height no less than 100mm.

The area under application falls within the Alkimos Eglinton Structure Plan which has been referred to the EPA and formally assessed. The ministerial condition and EPA Bulletin 1207 outlines that the area under application does not contain regionally significant vegetation and that the area under application has been re-

zoned to Urban (EPA 2005).

The Local Structure Plan (LSP) for Lots 1002 and 1001( area under application falls within 1001) Romeo Rd, Alkimos has been referred to the Department of Environment , Water, Heritage and the Arts (DEWHA) by the proponent due to the Carnaby's Black Cockatoo being recoded on site during a fauna survey. The DEWHA has determined that the LSP to be a controlled action due to the potential impacts on the Carnaby?s Black Cockatoo (Coffey Environmental 2009).

The DEWHA have no objections to a clearing permit being granted for the area under application however states that no clearing can occur on site until a decision is made on approval under the EPBC Act. They state that an approval in principle would be the most appropriate way to inform the proponent of this requirement (DEWHA 2009).

The City of Wanneroo (2009) has given approval for the Local Structure Plan and has requested that the proponent carry out geotechnical surveys before the Local Structure Plan (LSP) is submitted to the WAPC for approval. The City has not requested for an unexploded ordinance search. The City is concerned that the property is within the Ecological Linkage that forms connectivity between remnant bushlands allowing fauna movement. In addition, the City is concerned that the proposed clearing may occur within Public Open Spaces that have been set aside within the council approved Local Structure Plan for conservation purposes. The two Public Open Spaces that are set aside for conservation within the LSP is not within the area proposed to be cleared.

#### Methodology

References

- -City of Wanneroo (2009)
- -Coffey Environmental (2009)
- -DEWHA (2009)
- -EPA (2005)

## 4. Assessor's comments

#### Comment

The assessable criteria have been addressed and the clearing as proposed is at variance to Principles (a) and may be at variance to Principles (b).

# 5. References

- ATA Environmental (2004) Lot 3 Romeo Road, Alkimos Flora and Vegetation Survey, Northern Corridor Developments LTD.
- ATA Environmental (2008) Lot 3 Romeo Road, Alkimos Vertebrate Fauna Assessment, Northern Corridor Developments LTD.
- CALM (2003), An Atlas of Tuart Woodlands on the Swan Coastal Plain in Western Australia. Department of Conservation and Land Management, Western Australia.
- City of Wanneroo (2009) Direct Interest Submission. Trim Ref.DOC84268
- Coffey Environments (2009) Clearing Permit Application and additional documents. TRIM Ref DOC81478 and DOC81483.
- DEC (2008), Science Division, Science Research Centre, Advice on the Graceful Sunmoth. TRIM Ref DOC27059
- DEC (2009) Site Inspection Report for Clearing Permit Application CPS 3085/1, Lot 1001, Romeo Road, Alkimos. Site inspection undertaken 07/05/2009. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC84115).
- Department of Agriculture (2005) AgMaps Land Manager CD-rom for the Shires of Serpentine-Jarrahdale, Kwinana, Rockingham, Mandurah, Murray, Boddington, Waroona and Harvey. Department of Agriculture, Western Australia. ISSN: 1448-235X.
- DEWHA (2009) Advice from Department of Environment, Water, Heritage and the Arts on controlled action placed on Local Structure Plan for Lots 1001 and 1002 Romeo Rd, Alkimos. TRIM Ref DOC85386.
- 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 (2005) EPA Bulletin 1207 Alkimos Eglinton MRS Amendment 1029/33, 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.

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- 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.
- Shah, B. (2006) Conservation of Carnaby's Black-Cockatoo on the Swan Coastal Plain, Western Australia. December 2006. Carnaby's Black-Cockatoo Recovery Project. Birds Australia, 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.
- Western Australian Herbarium (1998-). FloraBase The Western Australian Flora. Department of Environment and Conservation, http://florabase.dec.wa.gov.au/ (Accessed 06/05/2009).
- Williams M.R (2009) Butterflies and Day-flying Moths in a Fragmented Urban Landscape, South-west Western Australia: Patterns of Species Richness, Pacific Conservation Biology V15.p 32-46, TRIM Ref DOC88237

## 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

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)