



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 3519/1
File Number: DEC14071
Duration of Permit: From 6 June 2010 to 6 June 2012

PERMIT HOLDER

Northern Corridor 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 7.3 hectares of native vegetation within the areas shaded yellow on attached Plan 3519/1.

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. 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.

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*.

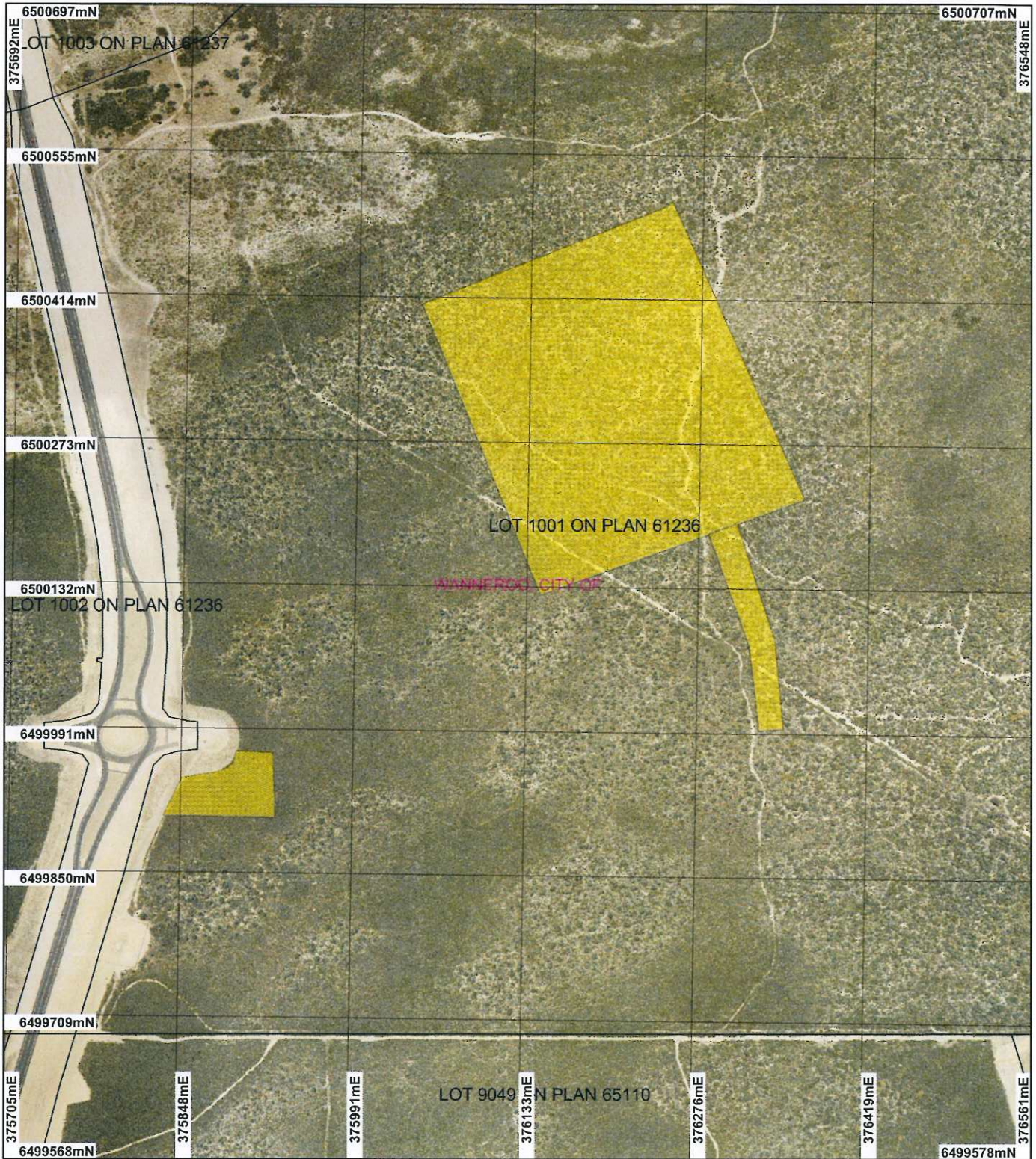


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

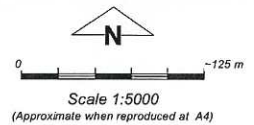
6 May 2010

Plan 3519/1



LEGEND

- | | |
|-----------------------------|---|
| Clearing Instruments | <input type="checkbox"/> Local Government Authorities |
| Areas Approved to Clear | Swan Coastal Plain North
20cm Orthomosaic - Landgate
2009 |
| Road Centrelines | Cadastre |
| Towns | |



Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

K Faulkner Date 6/5/10
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.: 3519/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Northern Corridor Developments Ltd

1.3. Property details

Property: LOT 1001 ON PLAN 61236 (ALKIMOS 6038)

Local Government Area:

Colloquial name:

1.4. Application

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

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
Hedde vegetation complex: 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. (Hedde et al. 1980)	The proposal is to clear 7.3 ha within Lot 1001 (two areas) Romeo Road, Alkimos for the purpose of clearing for storage of surplus fill material and infrastructure.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	Vegetation description based on a vegetation survey undertaken on 15 October 2004 (ATA Environmental 2004) and site visit conducted by DEC officers on 29 January (DEC, 2010). The vegetation under application was considered to be in excellent (Keighery, 1994) condition.
Beard vegetation type: 949 - Low woodland; banksia (Shepherd, 2007; SAC Bio Datasets 09/2/2010)	The vegetation under application comprises three communities with the majority of the areas under application consisting of Banksia attenuata and Banksia menziesii low woodland over Hibbertia hypericoides. The other vegetation communities include: - Banksia attenuata and B. menziesii low woodland. - Dryandra sessilis closed scrub. - Melaleuca huegelii Low Open Shrubland.		

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 at variance to this Principle

The clearing proposal is for 7.3 ha within Lot 1001 (two areas) Romeo Road, Alkimos for the purpose of storage of surplus fill material and connecting sewerage in the future.

The areas under application contain Banksia attenuata and Banksia menziesii low woodland, Dryandra sessilis closed scrub, and Melaleuca huegelii low open shrubland in excellent (Keighery, 1994) condition (ATA Environmental, 2004).

A flora survey carried out in October 2004, identified 180 species including 30 exotic species of flora within lots 1001 and 1002 Romeo Rd. The survey did not identify any rare flora species occurring within the area under application; however it identified one priority four flora species, Conostylis pauciflora ssp euryrhypis within community type Melaleuca systema low open shrubland over Lomandra maritima herbland (western side of area on Lot 1002) (ATA Environmental 2004). A site inspection of the areas under application identified priority four flora species Jacksonia sericea within community type Dryandra sessilis closed scrub (western side of area on Lot 1002) (DEC, 2010).

The flora survey has also identified one inferred Priority Ecological Communities (PEC) occurring within the one of the areas under application (0.35 ha), that being Floristic Community Type (FCT) 24: Northern Spearwood shrublands and woodlands (ATA Environmental, 2004; DEC, 2010a). 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*).

Given that the vegetation under application is in excellent condition, contains three vegetation communities, and contains high floral and faunal diversity, the proposed clearing is considered to be at variance to this Principle.

To mitigate any impacts from the proposed clearing a weed control and dieback condition will be imposed on this permit.

Methodology

References:

- ATA Environmental (2004)
- ATA Environmental (2008)
- DEC (2010)
- DEC (2010a)
- Keighery (1994)

GIS Databases:

- SAC Bio Databases (09/02/2010)

(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 at variance to this Principle

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

The vegetation under application is in 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 (includes the areas under application) undertaken in November 2007 identified 27 fauna vertebrate species including two species of burrowing frogs, two mammal species (Honey Possum (*Tarsidipes rostratus*) and the South Western Free-tail Bat (*Mormopterus sp*) and 23 reptiles species (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 recorded 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 Lots 1001 (ATA Environmental, 2008) including the conservation significant species Carnaby's black cockatoo (*Calyptorhynchus latirostris*). The largest application area comprises Banksia low woodland in excellent condition (DEC, 2010). 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 Sun moth (*Synemon gratiosa*), has been recorded 4.3 km south of the areas under application. This species requires *Lomandra* spp. as host plants and shows some preference for high quality vegetation (Williams, 2009). The western area under application (Lot 1002) comprises the community type Melaleuca systema low open shrubland over *Lomandra maritima* herbland (ATA Environmental, 2004). Therefore, it was considered likely for this section under application to provide habitat for the conservation significant Graceful Sun moth.

Coffey Environments (2010a and 2010b) submitted reports outlining the results of two surveys, a Graceful Sun Moth survey undertaken over four days in March 2010 and a *Lomandra* presence and density survey. DEC (2010c) considers that the proposed clearing of 1.1 hectares within Lot 1002 will remove a portion (~0.5 ha) of Graceful Sun Moth habitat and fragment the population. Subsequently, this 1.1 ha area of native vegetation within Lot 1002 has been removed from clearing application CPS 3519/1.

Given the diversity of the habitats present, the utilisation of Lot 1001 Romeo Road as foraging 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 Road is significant habitat for native fauna. The proposed clearing will cause fragmentation to this habitat. Therefore, it is considered likely the vegetation proposed to be cleared (7.3 ha) is necessary for the maintenance of significant habitat for local indigenous fauna. Therefore, the proposed clearing is at variance to this Principle.

To mitigate any impacts from the proposed clearing an offset is required. An offset has already been provided in relation to land clearing within Lot 1001 and satisfies the requirement of DEC.

Methodology **References**
- ATA Environmental (2008)
- Coffey Environments (2010a)
- Coffey Environments (2010b)
- DEC (2010b)
- DEC (2010c)
- Shah (2006)
- Williams (2009)
GIS Databases
-SAC Bio Databases (06/10/2009)

(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 5.8 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 mainly of *Banksia* woodland on spearwood sands (DEC, 2010). 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 not considered likely the proposed clearing is at variance to this Principle.

Methodology **References**
-ATA Environmental (2004)
-DEC (2010)
-Western Australia Herbarium (1998-)
GIS Databases
-SAC Bio Databases (09/02/2010)

(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

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

The areas under application contain *Banksia attenuata* and *Banksia menziesii* low woodland, *Dryandra sessilis* closed scrub, and *Melaleuca huegelii* low open shrubland in excellent condition (ATA Environmental, 2004; DEC, 2010).

A flora and vegetation survey undertaken during October of 2004 did not identify any vegetation associated with a threatened ecological community within the areas under application. Therefore, it is not considered likely the proposed clearing is at variance to this Principle.

Methodology **References**
-ATA Environmental (2004)
-DEC (2010)
GIS Databases
-SAC Bio Databases (09/02/2010)

(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

Heddle et al. (1980) defines the vegetation under application as Cottesloe Complex - Central and South, 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, of which there is 58.4% of pre-1750 extent remaining in the bioregion (Shepherd 2007).

The areas under application are located within the City of Wanneroo, which has 49.6% of pre-European

vegetation extent remaining. In addition, there is approximately 52.5% of pre-1750 vegetation remaining in the local area (~5 km radius).

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; EPA, 2000). The vegetation types under application retain more than the 30% threshold level.

In addition, the areas under application are not a significant remnant in the local area due to its connectivity to other bushland to the west and south. Therefore, the proposal is not considered likely to be at variance to this Principle.

	Pre-European (ha)	Current extent (ha)	Remaining (%)
IBRA Bioregion*			
Swan Coastal Plain	1,501,208	583,141	38.8
City of Wanneroo*	67,697	33,637	49.6
Local Area (~5 km radius)	7,491	~3,932	~52.5
Hedde vegetation complex**			
Cottesloe Central/ South	44,995	18,474	41.1
Beard type*			
949 (SCP)	209,983	122,677	58.4

* (Shepherd 2007)

** (EPA, 2006)

- Methodology**
- References
 - Commonwealth of Australia (2001)
 - EPA (2000)
 - EPA (2006)
 - Shepherd (2007)
 - GIS Databases
 - Hedde 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 approximately 2.2 km east of the areas under application. The areas under application are located approximately 2 km east of the coastline.

Given the distance to the nearest waterbodies it is not considered likely the proposed clearing is 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 may be at variance to this Principle

The soils within the areas 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).

Given the high risk of wind erosion, the proposed clearing may cause short term appreciable land degradation.

- Methodology**
- References
 - Department of Agriculture (2005)

-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 may be at variance to this Principle

The nearest conservation area is Neerabup National Park (also known as Bush Forever site 383), which occurs approximately 1.2 km east of the areas under application.

The proposed clearing may cause fragmentation of fauna habitat as the areas under application are part of an east-west bushland linkage (Government of Western Australia 2000). This linkage also connects Bush Forever site 383 with Bush Forever site 397.

Given this, it is considered the proposed clearing may impact on the environmental values of nearby conservation areas.

To mitigate any impacts from the proposed clearing a weed control and dieback condition will be imposed on this permit.

Methodology Reference:
- Government of Western Australia (2000)
GIS Databases:
-Bushforever
-DEC Managed Lands and Waters
-NLWRA, Current Extent of Native Vegetation

(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

The nearest wetland to the area under application is a Resource Enhancement Wetland, Carabooda lake, occurring approximately 2.2 km east of the areas under application. The areas under application are located approximately 2 km east of the coastline.

The areas under application are not within a Priority Drinking Water Source Area (PDWSA) and have 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 nearest waterbodies and the low salinity risk, it is not considered likely the proposed clearing is 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

The nearest wetland to the area under application is a Resource Enhancement Wetland, Carabooda lake, occurring approximately 2.2 km east of the areas under application. The areas under application are located approximately 2 km east of the coastline.

Given the distance to the nearest waterbodies it is not considered likely the proposed clearing is 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 An Alkimos-Eglinton Metropolitan Region Scheme Amendment No. 1029/33 was assessed by the

Environmental Protection Authority (EPA, 2005). The report and recommendations are outlined in EPA Bulletin 1207.

In November 2008 the Local Structure Plan (LSP) for Lots 1001 and 1002 (formerly known as Lot 3) Romeo Rd, Alkimos (which include the areas under application) was referred to the Department of Environment, Water, Heritage and the Arts (DEWHA) by the proponent due to Carnaby's black cockatoo being recorded on site during a fauna survey. DEWHA assessed the impact of the proposed development on the Carnaby's black cockatoo and granted approval with conditions on the 11 September 2009 (DEWHA, 2009).

Northern Corridor Developments Ltd has developed an offset proposal for the removal of significant habitat for Carnaby's black cockatoo within an urban development proposal in Alkimos on Lots 1001 and 1002 Romeo Road, which includes this current proposal. This offset proposal includes:

- Providing \$300,000 to acquire 459 ha of Carnaby's black cockatoo foraging habitat north of Gingin;
- Providing \$314,111 to acquire 477 ha of Carnaby's black cockatoo foraging habitat east of Badgingarra; and
- Retaining as part of reserves, 5.52 ha of Carnaby's black cockatoo foraging habitat within public open space.

DEC considers that this offset proposal adequately mitigates this proposed clearing of 7.3 hectares of native vegetation.

In November 2009 a permit to clear 12 ha native vegetation within an area of 121 ha was granted (CPS 3085/2) for the purpose of conducting geotechnical searches within Lot 1001. The clearing permit allowed for the clearing of native vegetation to a height no less than 100 millimetres.

On 3 December 2009 W.A. Planning Commission granted approval subject to conditions of the subdivision within Lot 1001 (immediately east of the areas under application CPS 3519/1) (Coffey Environments, 2010). W.A. Planning Commission advised that an application was received on 24 December 2009 (No. 141275) for the western side of Lot 1001 (includes two areas under application).

The City of Wanneroo (2010) advised that the proposed clearing is consistent with Local Structure Plan No. 60 and the Federal approval given under the EPBC Act 1999. Planning approval for the infill storage area from the City of Wanneroo has been received (City of Wanneroo, 2010a; Coffey Environment, 2010c).

There is one Aboriginal Site of Significance listed within the areas under application, the applicant will be advised of their obligations under the Aboriginal Heritage Act 1972.

Lot 1001 is zoned Urban under the Metropolitan Regional Scheme.

Methodology

References:

- City of Wanneroo (2010)
- City of Wanneroo (2010a)
- Coffey Environment (2010)
- Coffey Environment (2010c)
- DEWHA (2009)
- EPA (2005)

GIS Databases:

- Aboriginal Sites of Significance
- Metropolitan Regional Scheme

4. Assessor's comments

Comment

The clearing 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 assessment recommendation is that the clearing as proposed is at variance to Principles (a) and (b) and may be at variance to Principles (g) and (h).

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.
- City of Wanneroo (2010) Direct Interest Submission, City of Wanneroo. Trim Ref DOC 101529
- City of Wanneroo (2010a) Information on City of Wanneroo Development Approvals, City of Wanneroo. DEC Ref A298891
- Coffey Environments (2010) Application to Clear within Lots 1001 and 1002 and Supporting Information, Coffey Environments Australia Pty Ltd. TRIM Ref DOC 113312

- Coffey Environments (2010a) Graceful Sun Moth Assessment Lots 1001 and 1002 Romeo Road, Alkimos, Coffey Environments Australia Pty Ltd. TRIM Ref DOC 124348
- Coffey Environments (2010b) Lomandra Assessment Lots 1001 and 1002 Romeo Road, Alkimos, Coffey Environments Australia Pty Ltd. DEC Ref A297936
- Coffey Environments (2010c) City of Wanneroo Development Approval for Lot 1001 Romeo Road, Alkimos, Coffey Environments Australia Pty Ltd. DEC Ref A298346
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2010) Site Inspection Report for Clearing Permit Application CPS 3519/1, Lot 1001 and Lot 1002 Romeo Road, Alkimos. Site inspection undertaken 29/01/2010. Department of Environment and Conservation, Western Australia. TRIM Ref DOC 117702
- DEC (2010a) Species and Communities Branch, Advice on the priority ecological communities. TRIM Ref DOC 118999
- DEC (2010b) Science Division, Science Research Centre, Advice on the Graceful Sun moth. TRIM Ref DOC 117707 and DOC 118644
- DEC (2010c) Science Division, Science Research Centre, Advice on the Graceful Sun moth survey and Lomandra Survey. DEC Ref A298349 and DEC Ref A298366
- DEWHA (2009) Copy of Approval from the Department of Environment, Water, Heritage and the Arts of the Local Structure Plan for Lots 1001 and 1002 Romeo Rd, Alkimos. TRIM Ref DOC100704.
- 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) Alkimos-Eglinton Metropolitan Region Scheme Amendment, Bulletin 1207, November 2005, Environmental Protection Authority, Perth, 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.
- Government of Western Australia (2000) Bush Forever Volumes 1 and 2. Western Australian Planning Commission, Perth WA.
- Hedde, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, 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.
- 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 6/10/2009).
- 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 (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)