



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 4924/1
Permit Holder:	Oakford Land Company Pty Ltd
Duration of Permit:	14 December 2012 – 14 December 2022

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 an extractive industry.

2. Land on which clearing is to be done

Lot 8 on Diagram 53380 (Nowergup)

3. Area of Clearing

The Permit Holder must not clear more than 15.54 hectares of native vegetation within the area hatched yellow on attached Plan 4924/1.

4. Period in which clearing is authorised

The Permit Holder shall not clear any native vegetation after 14 December 2017.

5. 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.

6. 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

7. 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.

8. 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 only move soils in *dry 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.

9. Wind erosion management

The Permit Holder shall not clear native vegetation unless extractive activities begin within 3 months of the clearing being undertaken.

10. Rehabilitation plan

The Permit Holder must implement, adhere to and report on the rehabilitation activities outlined in the document "Lot 8 Wattle Avenue Rehabilitation Plan, Prepared for Oakford Land Company by Strategen, November 2012".

11. Offset – land acquisition

Prior to undertaking any clearing authorised under this permit, and before 31 January 2013, the Permit Holder shall make a monetary contribution, of a value to the CEO's satisfaction, into a fund maintained by the State of Western Australia for the purpose of establishing or maintaining Carnaby's cockatoo (*Calyptorhynchus latirostris*) foraging habitat within the Shire of Gingin.

12. Retain vegetative material and topsoil, revegetation and rehabilitation

The Permit Holder shall:

- (a) retain the vegetative material and topsoil removed by clearing authorised under this Permit and stockpile the vegetative material and topsoil in an area that has already been cleared.
- (b) within six months following completion of the clearing authorised under this Permit *revegetate* and *rehabilitate* the area(s) that are no longer required for the purpose for which they were cleared under this Permit by:
 - (i) reshaping the surface of the land so that it is consistent with the surrounding 20 metres of uncleared land; and
 - (ii) ripping the ground on the contour to remove soil compaction; and
 - (iii) ripping the pit floor and contour batters within the extraction site; and
 - (iv) laying the vegetative material and topsoil retained under condition 12(a) on the cleared area(s); and
 - (v) deliberately *planting* and/or *direct seeding* native vegetation that will result in a similar species composition, structure and density of native vegetation to pre-clearing vegetation types in that area; and
 - (vi) ensuring only *local provenance* seeds and propagating material are used to *revegetate* and *rehabilitate* the area.
- (c) within 24 months of undertaking *revegetation* and *rehabilitation* in accordance with condition 12(b) of this Permit:
 - (i) engage an *environmental specialist* to determine the species composition, structure and density of the area *revegetated* and *rehabilitated*; and
 - (ii) where, in the opinion of an *environmental specialist*, the composition structure and density determined under condition 12(c)(i) of this Permit will not result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, the

Permit Holder must undertake additional *planting* or *direct seeding* of native vegetation in accordance with the requirements of condition 12(b)(v) and (vi) of this Permit.

- (d) Where additional *planting* or *direct seeding* of native vegetation is undertaken in accordance with condition 12(c)(ii) of this permit, the Permit Holder shall repeat condition 12(c)(i) and 12(c)(ii) within 24 months of undertaking the additional *planting* or *direct seeding* of native vegetation.
- (e) Where a determination by an *environmental specialist* that the composition, structure and density within areas *revegetated* and *rehabilitated* will result in a similar species composition, structure and density to that of pre-clearing vegetation types in that area, as determined in condition 12(c)(i) and (ii) of this permit, that determination shall be submitted for the CEO's consideration. If the CEO does not agree with the determination made under condition 12(c)(ii), the CEO may require the Permit Holder to undertake additional *planting* and *direct seeding* in accordance with the requirements under condition 12(c)(ii).

PART III - RECORD KEEPING AND REPORTING

13. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
 - (i) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (ii) the date that the clearing commenced;
 - (iii) the date the extraction operations ceased; and
 - (iv) the size of the area cleared (in hectares).
- (b) In relation to monetary contribution pursuant to condition 11 of this Permit, the date funds were transferred.
- (c) In relation to the *revegetation* and *rehabilitation* of areas pursuant to conditions 10 and 12 of this Permit:
 - (i) the location of any areas *revegetated* and *rehabilitated*, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (ii) a description of the *revegetation* and *rehabilitation* activities undertaken;
 - (iii) the size of the area *revegetated* and *rehabilitated* (in hectares);
 - (iv) the species composition, structure and density of *revegetation* and *rehabilitation*, and
 - (v) a copy of the environmental specialist's report.

14. Reporting

- (a) The Permit Holder must provide to the CEO on or before 1 July of each year, a written report:
 - (i) of records required under condition 13 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 July to 30 June of the preceding financial year.
- (b) Prior to 7 September 2022, the Permit Holder must provide to the CEO a written report of records required under condition 14 of this Permit where these records have not already been provided under condition 14(a) of this Permit.

DEFINITIONS

The following meanings are given to terms used in this Permit:

dieback means the effect of *Phytophthora* species on native vegetation;

direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

dry conditions means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

environmental specialist means a person who is engaged by the Permit Holder for the purpose of providing environmental advice, who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;

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

local provenance means native vegetation seeds and propagating material from natural sources within 20 kilometres of the area cleared.

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;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing mulch;

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;

revegetate/ed/ion means the re-establishment of a cover of *local provenance* native vegetation in an area using methods such as natural *regeneration*, *direct seeding* and/or *planting*, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area.



M Warnock
A/MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

22 November 2012

Plan 4924/1



LEGEND

Clearing Instruments

- Areas Approved to Clear
- Perth Metropolitan North
15cm Orthomosaic - Landgate
2011
- Cadastre for labelling



0 ————— 150 m

Scale 1:6012

(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.

M Warnock Date *22/11/12*

M Warnock

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

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



Department of
Environment and Conservation

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1. Application details

1.1. Permit application details

Permit application No.: 4924/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Oakford Land Company Pty Ltd

1.3. Property details

Property: LOT 8 ON DIAGRAM 53380 (House No. 259 WATTLE NOWERGUP 6032)
Local Government Area: City of Wanneroo
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
15.54		Mechanical Removal	Extractive Industry

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 22 November 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
<p>Beard Vegetation Associations:</p> <ul style="list-style-type: none"> - 949: Low woodland; banksia - 998: Medium woodland, tuart (Shepherd et al, 2001). 	<p>The application is to clear 15.54 hectares of native vegetation for the purpose of limestone and sand extraction. The vegetation under application is considered to be in an excellent (Keighery, 1994) condition (DEC, 2012)</p>	<p>Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)</p>	<p>The condition of the vegetation was established through a site inspection of the application area by Department of Environment and Conservation (DEC) officers on the 4 April 2012 (DEC 2012).</p>
<p>Hedde Vegetation Complex:</p> <ul style="list-style-type: none"> - Cottesloe Complex Central and South: Mosaic of woodland of E. gomphocephala and open forest of E. gomphocephala-E. marginata- C. calophylla; closed heath on the Limestone outcrops (Hedde et al. 1980). 	<p>The vegetation under application comprises of two communities, a Xanthorrhoea preissii and Banksia sessilis closed heath over limestone ridge and a Banksia woodland consisting of Banksia grandis and Banksia attenuata over Xanthorrhoea preissii on lower slopes of the ridge. Both recorded communities have dense shrub layers, with the vegetation including Calothamnus sp, Hibbertia sp and Acacia sp (DEC, 2012). Scattered Eucalyptus species were also recorded in the application area.</p>		

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 application is to clear 15.54 hectares of native vegetation approximately 2.2km east of Wanneroo Road, Nowergup for sand and limestone extraction. The vegetation under application was noted during a site inspection to be in an excellent (Keighery, 1994) condition (DEC, 2012).

The vegetation under application is comprised of two communities: a *Xanthorrhoea preissii* and *Banksia sessilis* closed heath over limestone and on the lower slopes a *Banksia* woodland consisting of *Banksia grandis* and *Banksia attenuata* over *Xanthorrhoea preissii* woodland. *Eucalyptus* species were also recorded. Both recorded communities have dense shrub layers, including *Calothamnus* sp, *Hibbertia* sp and *Acacia* sp (DEC, 2012).

The vegetation provides significant habitat for ground dwelling fauna and foraging habitat for the conservation significant Carnaby's cockatoo (*Calyptorhynchus latirostris*).

Several priority flora species have been mapped within 10km of the application area, including a Priority Four *Jacksonia* species. A site inspection undertaken by DEC (2012) identified the *Jacksonia* species within the application area and a flora survey undertaken by Regeneration Technology Pty Ltd in 2006 (Regeneration Technology Pty Ltd, 2006) located the species in the south-eastern area of Lot 8. The flora survey also identified *Eucalyptus foecunda* (a species poorly reserved and endemic to Swan Coastal Plain), *Leschenaultia linarioides* (poorly reserved) and *Eucalyptus petrensis* (poorly reserved and endemic to Swan Coastal Plain) as potentially occurring within the area under application.

Given the vegetation of the application area is in excellent (Keighery, 1994) condition and is likely to provide suitable habitat for fauna of conservation significance and priority and significant flora, it thus comprises a high level of biodiversity.

The application to clear is at variance to this principle.

To offset the impacts identified above the applicant has committed to the purchase of 95 hectares of remnant vegetation suitable as foraging habitat for Carnaby's cockatoo and to rehabilitate 8 hectares of completely degraded (Keighery, 1994) vegetation within Lot 8 using local provenance species.

Methodology References:
- DEC (2012)
- Keighery (1994)
- Regeneration Technology Pty Ltd (2006)
GIS Database:
- SAC Bio Datasets April 2012

(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

Several conservation significant fauna species have been recorded in the local area (10km radius), including Carnaby's cockatoo (*Calyptorhynchus latirostris*) and Graceful Sun Moth (*Synemon gratiosa*).

The Graceful Sun Moth (Priority Four species) has been recorded within close proximity to the application area. Targeted surveys conducted by GHD in March 2010 did not observe any Graceful Sun Moth individuals and noted that the area was dominated by limestone outcrops, which reduce the availability of soil and subsequently *Lomandra hermaphrodita* (RPS, 2010). Given this, it is not likely that the application area is suitable habitat for Graceful Sun Moth.

Carnaby's cockatoo is listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 and 'endangered' under the Environment and Protection and Biodiversity Conservation Act 1999. The vegetation under application is comprised of two vegetation communities: a *Xanthorrhoea preissii* and *Banksia sessilis* closed heath over limestone and a *Banksia* with *X. preissii* woodland (DEC, 2012). It is likely that the area under application would be utilised by Carnaby's cockatoo as a food source. Eight Carnaby's cockatoo roost sites have been recorded within 10km of the application area, with the closest being approximately 300 metres from the proposed clearing.

Surveys of Carnaby's cockatoo populations and their feeding and roosting habitats show that the Northern Region of the Swan Coastal Plain (SCP) appears to be an important area for Carnaby's cockatoo (Shah, 2006). Important food sources for this species include *Banksia attenuata*, *B. menziesii*, *B. grandis*, *B. ilicifolia*, *B. sessilis*, *B. prionotes*, *Corymbia calophylla* and *Eucalyptus marginata* (Valentine and Stock, 2008). The application area includes some of these species.

Considering the application area comprises feeding habitat for Carnaby's cockatoo and that one of the major threats to this species is accumulative clearing of feeding habitat on the SCP (Cale, 2003), it is considered that all feeding habitat within the SCP is significant, thus any clearing of black cockatoo feeding habitat will contribute to the cumulative loss of this habitat on the SCP.

The vegetation under application is in excellent (Keighery, 1994) condition and includes a dense understorey (DEC, 2012) that would provide suitable habitat for ground-dwelling fauna such as conservation significant species, Quenda (*Isodon obesulus fusciventer*) and Western Brush Wallaby (*Macropus irma*).

Given the application area contains important feeding habitat for Carnaby's cockatoo, the application is at variance to this principle.

To offset the above impacts the applicant has committed to the purchase of 95 hectares of remnant vegetation suitable as foraging habitat for Carnaby's cockatoo and to rehabilitate 8 hectares of completely degraded (Keighery, 1994) vegetation within Lot 8. The re-establishment of dense understorey habitat for ground dwelling fauna will eventuate as a result of the rehabilitation activities.

- Methodology**
- References:
- Cale (2003)
 - DEC (2012)
 - Keighery (1994)
 - Regeneration Technology Pty Ltd (2006)
 - RPS (2010)
 - Shah (2006)
 - Valentine and Stock (2008)
- GIS Database:
- Confirmed Carnarby's Roost Sites

(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**

A rare eucalyptus species has been mapped approximately 460 metres from the application area. The species grows in shallow sand on limestone ridges and slopes, where it emerges from heath and thickets of parrotbush (*Banksia sessilis*) and chenille honey-myrtle (*Melaleuca huegelii*) (Brown et al, 1998).

The vegetation under application is comprised of a *Xanthorrhoea preissii* and *B. sessilis* closed heath over limestone and a *Banksia* with *X. preissii* woodland (DEC, 2012) in an excellent (Keighery, 1994) condition. The vegetation within the application area could be considered suitable habitat for the rare eucalypt however, a level 2 flora survey by Regeneration Technology (2006) for Lot 8 did not identify this species.

The application is not likely to be at variance to this principle.

- Methodology**
- Reference:
- Brown et al (1998)
 - DEC (2012)
 - Keighery (1994)
 - Regeneration Technology Pty Ltd (2006)
- GIS Database:
- SAC Bio Datasets April 2012

(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 is one occurrence of a Threatened Ecological Community (TEC) mapped on Lot 8 Wattle Avenue. This TEC is known as Floristic Community Type (FCT) 26a, 'Melaleuca huegelii-Melaleuca systema shrublands on limestone ridges' (Gibson et al. 1994).

Approximately 8.5ha within Lot 8 comprises the mapped TEC and a 100m buffer. The limestone ridge community has been previously cleared and has substantially regenerated. This 8.5ha area is located immediately adjacent to the area under application.

Given the application provides a 100m buffer to the TEC, it is considered the area under application is not necessary for the maintenance of FCT 26a; therefore, the proposal is not likely to be at variance to this Principle.

- Methodology**
- Reference:
- DEC (2012)
 - Gibson et al. (1994)
- GIS Databases:
- SAC Bio Datasets April 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 vegetation under application has been mapped as Beard vegetation associations 949 and 998 which have 57 and 38 percent respectively of their pre-European vegetation remaining (Government of Western Australia, 2011). The application area has also been mapped as Cottesloe Central/South, Heddle vegetation complex. The mapped Heddle vegetation complex has 41 percent of its pre-European vegetation remaining in the Swan Coastal Plain Bioregion (Heddle et al., 1980).

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 percent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). The vegetation complexes mapped within the area under application are above the recommended minimum of 30 percent representation.

Given the extent of vegetation remaining in the City of Wanneroo (46 percent), the current representation levels of the Heddle complex and Beard vegetation associations and the extensive remnants within the local area, it is not considered likely that the vegetation under application is significant as a remnant in an area that has been extensively cleared.

	Pre-European (ha)	Current Extent Remaining (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion				
Swan Coastal Plain	1,501,209	587,832	39	34
Shire				
City of Wanneroo	67,698	31,541	46	50
Beard Vegetation Association in Bioregion				
998	50,867	19,372	38	40
949	209,983	121,248	57	51
Heddle Vegetation Complex				
Cottesloe Complex Central and South	44,995	18,474	41	8

Methodology References:
 - Commonwealth of Australia (2001)
 - Government of Western Australia (2011)
 - Heddle et al (1980)
 GIS Databases:
 - Heddle Vegetation Complexes
 - Interim Biogeographic Regionalisation of Australia
 - 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 not likely to be at variance to this Principle

The closest mapped watercourse to the area under application is Lake Neerabup, approximately 1.1km west of the application area. Lake Neerabup is mapped as a resource enhancement wetland.

Given the distance to Lake Neerabup and that the applied area consists of upland species the application is not likely to be at variance to this principle.

Methodology GIS databases:
 - EPP, Areas
 - Geodata, Lakes
 - 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 area under application is associated with an undulating dune landscape underlain by limestone which is frequently exposed. Chief soils are siliceous sands (Northcote et al, 1960-68). Generally, these soils have a

high risk of wind erosion and a low risk of water erosion due to the high infiltration rates associated with sands and limestone.

The proposed clearing has a high risk of wind erosion given the sandy soils on site and without appropriate ground cover, windbreaks or adequate dust suppression on exposed surfaces the proposal may cause appreciable land degradation. Therefore, the clearing as proposed may be at variance to this Principle.

To minimise the degree of soil wind erosion, wind erosion management practices will be required to mitigate any potential erosion problems.

Methodology Reference:
- Northcote et al (1960-68)
GIS Database:
- 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**

Bush Forever site 293 referred to as the 'Shire View Hill and Adjacent Bushland, Nowergup/Neerabup' occurs approximately 50 metres from the southern edge of the area under application. The Gnangara-Moore River State Forest is approximately 1km east of the vegetation under application.

Bush Forever site 293 is 268ha in size. Along with the vegetation under application, it forms part of a regionally significant contiguous bushland/wetland linkage providing a north/south and east/west ecological linkage (Government of Western Australia, 2000).

The clearing as proposed will not impact a 50m vegetation buffer to the adjacent Bush Forever site. Department of Planning (DPI, 2007) recommends a minimum 50-100m landscape buffer of undisturbed vegetation to the Bush Forever site for the protection of the site from impacts such as the introduction or dispersal of weeds and dieback. The proposed buffer meets the minimum requirement and therefore limits the potential impact on the adjacent conservation areas. In addition to this, and to further minimise potential impacts, the applicant has committed to rehabilitate 8 hectares of completely degraded (Keighery, 1994) vegetation within Lot 8 using local provenance species.

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

Methodology References:
- DPI (2007)
- Government of Western Australia (2000)
- Keighery (1994)
GIS databases:
- Bushforever
- 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 is not likely to be at variance to this Principle**

The area under application is situated between two protected Public Drinking Water Source Areas (PDWSA): Gnangara Underground Water Pollution Control Area (Priority 1, ca. 2.5km east) and Perth Coastal Underground Water Pollution Control Area (Priority 3, ca. 2.3km west). Groundwater generally flows north-east to south-west and depth varies from 25-65m within the applied area. Given the depth to groundwater and distance to the nearest PDWSA the proposed clearing is not considered likely to cause deterioration in the quality of groundwater.

There are three lakes within the local area: Neerabup Lake (ca. 1km west), Lake Pinjar (ca. 3km east) and Nowergup Lake (ca. 3.5km north-west). It is considered any development within 200 m of a wetland boundary would have a secondary influence on wetlands (Hill et al, 1996). Given that the vegetation under application is outside the 200m zone of influence, the proposed clearing is not considered likely to impact the surface water quality of these lakes.

Given the depth to groundwater and distance to closest wetland, the proposed clearing is not considered likely to cause deterioration in surface water or groundwater.

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

Methodology References:
- Hill et al (1996)

- GIS databases:
- Hydrography, linear
- Public Drinking Water Source Areas (PDWSAs)

(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 wetland is Neerabup Lake, ca. 1 km west of the applied area. The closest watercourse is a minor tributary of Lake Pinjar ca. 5km from the area under application. The vegetation under application occurs on yellow sand over limestone (DEC, 2010).

Given the distance to the nearest water body and high infiltration rates associated with sandy soils over limestone, the clearing as proposed is not likely to cause or exacerbate the incidence of flooding.

This application is not likely to be at variance to this principle.

Methodology References:
- DEC (2010)

- GIS databases:
- Hydrography, linear

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

Comments

The property is zoned Rural Resource under the City of Wanneroo's District Planning Scheme Number 2, with the proposed land use (extractive industry) being a discretionary use under the scheme (City of Wanneroo, 2012).

The City of Wanneroo (2012) supports the proposed removal of 15.54 ha within Lot 8 Wattle Avenue and recommend that the ongoing commitment by the proponent in meeting the responsibilities outlined in the applicants Limestone Excavation and Rehabilitation Management Plan, submitted to the City with the previous extractive industry licence application. The current licence expires on 23 June 2013 (Strategen, 2012).

Western Australia Planning Commission development approval expires on 16 June 2013.

The Department of Environment and Conservation (DEC) has given a vegetation conservation notice (VCN) over an 8.5 ha area (comprises the TEC and 100 m buffer) that is immediately adjacent to the area under application. The VCN requires restoration, monitoring and weed control of the vegetation within the previously cleared area.

The applicant previously submitted a proposal to clear 30ha of native vegetation within Lot 8 Wattle Avenue (adjacent and north of that application area) for the purpose of limestone and sand extraction (CPS 2077/1). A permit to clear for this proposal was refused on 5 June 2008. An appeal for this decision was not lodged.

The applicant re-submitted a proposal to clear 39.23ha, which was later amended to 29.23ha (CPS 2688/1). This proposal was refused on 27 November 2008, an appeal was lodged on 23 December 2008 and the appeal was dismissed by the Minister for Environment on 24 September 2009.

Clearing permit CPS 2807/1 for 9.96ha of the remaining northern area within Lot 8 Wattle Avenue was granted on 27 November 2008. It is noted that the assessment of 9.96 ha of native vegetation against the clearing principles differed in the variance of clearing principle (b) 'may be at variance'. DEC acknowledges this difference and advises that its understanding and assessment of Carnaby's cockatoo feeding habitat has evolved since the decision to grant clearing permit CPS 2807/1.

The applicant submitted a new clearing application for the current application area in March 2010 (CPS 3675/1). Several environmental issues were identified with the application including, the potential impacts to Carnaby's cockatoo (*Calyptorhynchus latirostris*) and the Graceful Sun moth (*Synemon gratiosa*). A survey of the application area for the presence of the Graceful Sun Moth was undertaken. On the basis of this survey, DEC was satisfied the species was unlikely to be found within this area of Lot 8. DEC also acknowledged that the revised application included a reduced area to be cleared and provided a 100 metre buffer for the threatened ecological community and 50 metre buffer to the Bush Forever site - these issues were raised in DEC's assessment of the previous application and the Minister's appeal determination (C039 of 2008). These issues were adequately resolved. However, the applicant did not satisfactorily address the impacts to Carnaby's cockatoo habitat. Consequently the application was refused on the 22 July 2010. The applicant lodged an appeal against the decision on 26 August 2010 but the appeal was withdrawn.

The State Planning Policy 2.4 (SPP 2.4) - Basic Raw Materials identifies Lot 8 Wattle Avenue as being within a priority resource area for extraction of basic raw material. The status of the site as a Priority Resource Location

is a matter of relevance in decision-making for the purposes of section 51O of the EP Act. SPP 2.4 specifically states that the development of land for the extraction of basic raw materials should not adversely affect the environment. DEC is therefore of the view that the SPP 2.4 should not be an overriding concern in light of the significant impacts on Carnaby's cockatoo habitat.

The area under application is located within an area identified as an Aboriginal Site of Significance under the Aboriginal Heritage Act 1972. It is the responsibility of the proponent to ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

To mitigate the environmental impacts identified in this assessment, DEC has approved the applicant's offset package which comprises contributing funds towards the purchase of 95 hectares of suitable Carnaby's cockatoo habitat within the Shire of Gingin and the rehabilitation of eight hectares of completely degraded vegetation within Lot 8 Wattle Avenue using local provenance species.

Methodology

References:

- City of Wanneroo (2012)
- Strategen (2012)

GIS databases:

- Aboriginal Sites of Significance
- Cadastre
- Metropolitan Regional Scheme

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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)