



1. Application details

1.1. Permit application details

Permit application No.: 3998/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Wayne Francis Credaro

1.3. Property details

Property: LOT 2 ON DIAGRAM 64719 (Lot No. 2 HAAG YELVERTON 6280)
ROAD RESERVE (CARBUNUP RIVER 6280)
Local Government Area: City of Busselton
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
14.77		Mechanical Removal	Extractive Industry
0.01		Mechanical Removal	Road construction or maintenance

1.5. Decision on application

Decision on Permit Application: Refuse
Decision Date: 29 October 2012

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
The vegetation under application is mapped as: Beard vegetation association: 1181: Medium woodland, jarrah & Eucalyptus haematoxyton (Hopkins et al 2001; Shepherd 2001)	The amended proposal is to clear up to 14.78 ha within a 71 ha property (Lot 2), for sand extraction and Haag Road Reserve for a crossover.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The vegetation condition and clearing description is based on information obtained during a site inspection by DEC officer undertaken on 08 September 2009 (DEC 2009).
Mattiske vegetation complexes: Yelverton (Y): Woodland of Eucalyptus marginata subsp. marginata-Corymbia calophylla-Allocasuarina fraseriana-Agonis flexuosas and open woodland of Corymbia calophylla on low undulating uplands in the humid zone.	The vegetation under application can be described as predominately Agonis flexuosa, Banksia attenuata, Allocasuarina fraseriana; also present is Nuytsia floribunda, Eucalyptus marginata, Corymbia calophylla, Eucalyptus patens and Banksia illicifolia (DEC 2009). The surrounding woodlands consisted of mainly Kunzea glabrescens (DEC 2009).	To Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	A flora survey from Ekologica Pty Ltd (2008) identified the vegetation within the applied area as being predominantly degraded (Keighery 1994) with areas in completely degraded, and good to very good (Keighery 1994) condition.
Yelverton (Yd): Woodland of Allocasuarina fraseriana-Eucalyptus marginata subsp. marginata-Xylomelum occidentale-Banksia attenuata on sandy slopes in the humid zone.			
Yelverton (Yw): Woodland of Allocasuarina fraseriana-Nuytsia floribunda-Agonis flexuosa-Banksia attenuata on slopes and open forest of Corymbia calophylla-Eucalyptus patens-Eucalyptus marginata subsp. marginata on the lower slopes and woodland of Eucalyptus rudis-Melaleuca raphiophylla on valley floors in the humid zone. (Mattiske and Havel 1998)			

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments **Proposal is not likely to be at variance to this Principle**
The amended areas under application consist of 14.78 hectares of vegetation in completely degraded to very good (Keighery, 1994) condition (DEC 2009; Ekologica Pty Ltd 2008). The vegetation consists of predominately

Agonis flexuosa, Banksia attenuata and Allocasuarina fraseriana (DEC 2009).

The Environmental Protection Authority (EPA 2009) Environmental Protection Bulletin No 8 recognises the importance of maintaining and improving ecological linkages, and supports the South West Regional Ecological Linkages. The areas under application fall within the South West Regional Ecological Linkage area and the removal of the vegetation within the areas under application will cause a decrease in the value of the local linkages and further fragment the landscape (Molloy et al 2009).

There are three declared threatened and two priority fauna species recorded within a 10 km radius of the areas under application. There are also six species of rare flora and 16 species of priority flora within a 10 km radius of the areas under application. The areas under application fall within the Whicher Scarp area, which is recognised as having a unique flora and vegetation (Keighery et al 2008).

The local area (10 km radius) is highly fragmented with a few large remnant vegetation patches remaining. Further, the area is considered to be within a highly cleared landscape and as such small patches of intact native vegetation are considered to have high biodiversity values within the local context.

The proponent engaged Ekologica Pty Ltd (2008) to conduct a flora and vegetation survey of a 23 ha study area that included 17 ha of remnant vegetation, of which 14.78 ha is under application. This survey was undertaken in December 2008 and the report identified the vegetation under application as Banksia woodland and advised that 48 flora species were identified within the 17 ha remnant, including one priority and one rare flora species; this is less than half the number of species expected from the 17 hectare remnant vegetation, which is related to the history of grazing and the presence of Phytophthora dieback disease (Ekologica Pty Ltd 2008). A flora survey in October 2010 of the Haag Road Reserve, which includes an area under application, identified 52 species of native flora (Ekologica Pty Ltd 2008).

The consultant (NGH Environmental 2011) engaged by the applicant provided supporting information to DEC on 15 April 2011. This information included:

- amending the area under application from 15.22 ha to 14.78 ha to avoid identified priority and rare flora species and provide a 50 m wetland buffer;
- an assessment of Phytophthora cinnamomi dieback disease occurrence, which identified 2.55 ha within the 17.07 ha study area as uninfested;
- a revised flora report identified that the remnant vegetation in the study area is mostly of low significance with regard to conservation values because of its level of degradation; and
- the site does not currently support any continuous linkage.

DEC acknowledges the lack of species diversity within the areas under application, which is likely to be attributable to disturbances from grazing and Phytophthora dieback disease; and also notes that the sites comprising the two identified priority flora species have been excluded from the areas under application.

Therefore, given the additional information provided, it is considered that the proposal in its current form is not likely to be at variance to this Principle.

Methodology

References:

- DEC (2009)
 - Ekologica Pty Ltd (2008)
 - EPA (2009)
 - Keighery (1994)
 - Keighery et al (2008)
 - Molloy et al (2009)
 - NGH Environmental (2011)
- ##### GIS Databases:
- SAC Bio Datasets (accessed 8/11/2010)
 - Pre-European Vegetation
 - Matisse Vegetation

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

Comments

Proposal is at variance to this Principle

There are 35 known records of three species listed 'as rare or likely to become extinct' under the Wildlife Conservation Act 1950 and two priority fauna species recorded within a 10 km radius of the areas under application. The closest record is the Engaewa reducta (Dunsborough Burrowing Crayfish), located approximately 75 m east of the applied area within a mapped multiple use wetland. Engaewa reducta inhabits sandy or loamy soil in heathlands. As there is a lack of preferred habitat, the areas under application are unlikely to be significant habitat for Engaewa reducta. There are two records of the Pseudocheirus occidentalis (Western Ringtail Possum) 3.2 km south east and one record 8.7 km north of the areas under application.

The vegetation under application has been identified as Banksia woodland (Ekologica Pty Ltd 2008), which is known to have some foraging capacity for endangered Carnaby's cockatoo (Calyptorhynchus latirostris) (also

Endangered under Environment Protection and Biodiversity Conservation Act 1999) and over half of the applied area is mapped within the Swan Coastal Plain bioregion. Shah (2006) concludes that *Banksia* species constitutes more than half of the native plant diet of this species with the entire landscape of the Swan Coastal Plain considered important throughout the non-breeding season for this species. The vegetation under application includes *Banksia* species, therefore has the potential to provide suitable feeding habitat for the Carnaby's cockatoo and other local foraging bird species.

The consultant (NGH Environmental 2011) engaged by the applicant provided supporting information to DEC on 15 April 2011. This information included:

- amending the area under application from 15.22 ha to 14.78 ha to avoid identified priority flora and provide a 50 m wetland buffer;
- an assessment of *Phytophthora cinnamomi* dieback disease occurrence, which identified 2.55 ha within the 17.07 ha study area as uninfested;
- a revised flora report identified that the remnant vegetation in the study area is mostly of low significance with regard to conservation values because of its level of degradation;
- the site does not currently support any continuous linkage; and
- a proposal to rehabilitate an area 10.28 ha in size, which includes an action to fence off, retain and improve a 5.22 ha vegetation patch adjacent to Haag Reserve.

The supporting information (NGH Environmental 2011; Harewood 2011) also included:

- that habitat for Western Ringtail Possums and 12 potential habitat trees were located within the subject site; however there was no evidence of current or past use for breeding black cockatoos;
- the areas under application comprised foraging and breeding habitat for Carnaby's, Baudin's and Forest Red-tailed black cockatoos;
- mapping of remnant vegetation characteristic of foraging habitat for black cockatoos indicates that there is approximately 9,215 ha of suitable vegetation within a 25 km radius of the subject site; and
- nearby Haag Reserve and Yelverton Nature Park provide significantly improved foraging habitat.

DEC acknowledges the level of degradation of the vegetation under application, which is likely to be attributable to disturbances from grazing and *Phytophthora* dieback disease, and that the values of the vegetation may be further diminished in the long term. However, DEC assesses the current values of vegetation. It should be noted that given presence of some banksias and other native vegetation and a potential seed bank, plant recruitment may occur in the future.

DEC notes that the revised flora report by Ekologica Pty Ltd (2008) identifies the areas under application as *Banksia* woodland and the species list includes *Banksia attenuata*, *B. ilicifolia*, as well as other species known to be food resources for Carnaby's cockatoos, such as *Hakea* sp, *Corymbia calophylla*, *Allocasuarina* sp, *Agonis flexuosa* and *Xanthorrhoea preissii* (Valentine and Stock 2008).

In addition, it is noted that 12 habitat trees (having >50 cm DBH), including seven habitat trees with hollows, were observed within the areas under application (Harewood 2011). It must be considered that the development of nesting hollows is a dynamic process and so the existing nesting hollows are important as well as the retention and maintenance of healthy trees to allow for the development of future hollows.

DEC acknowledges that Haag Reserve and Yelverton National Park are likely to have a higher level of biodiversity and therefore comprise significantly improved habitat than that of the areas under application. However, given the location of the vegetation under application in an extensively cleared local landscape, the areas under application are considered to comprise significant habitat values and are part of an ecological linkage or stepping stone. It must be noted that ecological linkages are not necessarily continuous.

The areas under application also comprise significant habitat for Western Ringtail Possums as three dreys, possum scats and a possum were observed during a fauna survey (Harewood 2011). In addition, information from DEC databases shows that Mary Brook and its associated vegetation, located approximately 300 m south of the applied areas, supports Western Ringtail possum habitat and provides an ecological linkage to other areas of Western Ringtail Possum habitat within the Dunsborough to Bunbury region.

Given the above, considering the vegetation in its current form with its current values and the substantial size of the areas (14.78 ha), the vegetation under application provides significant habitat for black cockatoo species and Western Ringtail Possums. Therefore the proposal is at variance to this Principle.

Methodology

References:

- Ekologica Pty Ltd (2008)
- Harewood (2011)
- NGH Environmental (2011)
- Shah (2006)
- Valentine and Stock (2008)

GIS Databases:

- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
- Hydrography, linear
- Interim Biogeographic Regionalisation of Australia

- Ringtailed Possum Areas
- SAC Bio Datasets (accessed 8/11/2010)

(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 six species of rare flora recorded within the local area (10 km radius). One species of rare flora species occurs within the same Beard vegetation association and soil type as the areas under application.

This rare flora species occurs on white-grey sands, in disturbed sites (Brown et al 1998), flowers during September - October (WA Herbarium, 1998) and is known from low lying Kunzea sites, which appear to be present within the applied area. In October 2009 NGH Environmental commissioned IGNAM (Fire) Consulting to conduct a targeted flora survey for the rare flora species. This targeted survey (IGNAM (Fire) Consulting 2009) identified habitat suitable; however, no populations or individuals were located during the survey.

Ekologica Pty Ltd (2008) conducted a flora and vegetation survey in December 2008. The report (Ekologica Pty Ltd 2008) outlined that a rare flora species that prefers wet areas was found in the wetland of the applied area. The applicant amended the application to remove this rare flora species from the area.

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

Methodology

References:

- Brown et al (1998)
- Ekologica Pty Ltd (2008)
- IGNAM (Fire) Consulting (2009)
- WA Herbarium (1998)

GIS Databases:

- Pre-European Vegetation
- Matiske Vegetation
- SAC Bio Datasets (accessed 8/11/2010)
- Soils, Statewide

(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 record of a threatened ecological community (TEC) within a 10 km radius of the proposed clearing. The TEC is not representative of the vegetation or soil type under application. Therefore, the proposed clearing is not likely to be at variance to this Principle.

Methodology

GIS Databases:

- Pre-European Vegetation
- SAC Bio Datasets (accessed 8/11/2010)
- Soils, Statewide

(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 at variance to this Principle

The vegetation within the area under application is identified as a component of Beard vegetation association 1181, and Matiske Complexes Yelverton (Y), Yelverton (Yd) and Yelverton (Yw), of which there is 47.5%, 30.2%, 57.9% and 24.1% of pre-1750 extent remaining respectively (Government of Western Australia 2011; Matiske and Havel 1998). In addition, there is approximately 25-30% of native vegetation left within a 10 km radius of the areas under application. The area is considered to be highly fragmented with a few large remnant vegetation patches remaining.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001). The vegetation types mapped within the areas under application, except for Yelverton (Yw) retain more than the recommended minimum of 30% representation. The areas under application are predominantly mapped as Matiske Complex Yelverton (Yd) with only 0.06 hectares of Yelverton (Yw) and 0.05 ha of Yelverton (Y) mapped within the areas applied to clear.

However, an updated report from Havel and Matiske Consulting Pty Ltd (2002) reviewed the poorly represented vegetation complexes of the southwest forest region, which includes the Yelverton complexes (Y, Yd and Yw). This reports states that the pre-1750 area remaining for the complexes are 20% (Y), 12% (Yd) and 12% (Yw), respectively (Havel and Matiske Consulting Pty Ltd 2002).

The consultant (NGH Environmental 2011) engaged by the applicant provided supporting information to DEC on 15

April 2011. This information included:

- amending the area under application from 15.22 ha to 14.78 ha to avoid identified priority flora and provide a 50 m wetland buffer;
- an assessment of *Phytophthora cinnamomi* dieback disease occurrence, which identified 2.55 ha within the 17.07 ha study area as uninfested;
- a revised flora report identified that the remnant vegetation in the study area is mostly of low significance with regard to conservation values because of its level of degradation; and
- the site does not currently support any continuous linkage.

DEC acknowledges that Haag Reserve and Yelverton National Park are likely to have a higher level of biodiversity, and therefore comprise significantly improved habitat than that of the areas under application. However, given the location of the vegetation under application in an extensively cleared local landscape, the areas under application is considered to be significant, as well as be part of an ecological linkage or stepping stone. Also DEC considers that the proposed clearing will further fragment the local landscape that is extensively cleared.

Given the highly cleared and fragmented local landscape, the 14.78 ha under application, which comprises significant habitat values for native fauna, is considered to be significant as a remnant. Therefore, the clearing proposal is at variance to this Principle.

It is noted that the applicant proposes to revegetate 10.28 ha and to retain 5.6 ha of native vegetation on the property.

	Pre-European (ha)	Current extent (ha)	Remaining (%)	% In reserves DEC Managed land
IBRA Bioregions*				
Jarrah Forest (JF)	4,506,657	2,473,560	54.9	67.9
Swan Coastal Plain (SCP)	1,501,209	587,833	39.1	34.84
City of Busselton*				
	146,478	62,298	42.5	66.11
Mattiske Vegetation Complex*				
Yelverton (Y)	7,637	2,308	30.2	12.1
Yelverton (Yd)	1,768	1,024	57.9	3.4
Yelverton (Yw)	3,841	926	24.1	5.1
Beard Vegetation Association*				
1181	19,217	9,089	47.3	56.5
Beard Vegetation Association with Bioregion**				
1181 JF	9,978	5,388	54	
1181 SCP	9,238	3,701	40	

* (Mattiske and Havel 1998)

** (Government of WA 2011)

Methodology

References:

- Commonwealth of Australia (2001)
- Havel and Mattiske Consulting Pty Ltd (2002)
- Mattiske and Havel (1998)
- Government of Western Australia (2011)
- NGH Environmental (2011)

GIS Databases:

- Interim Biogeographic Regionalisation of Australia
- Local Government Authorities
- Mattiske Vegetation
- NLWRA, Current Extent of Native Vegetation
- Pre European Vegetation
- SAC Bio Datasets (accessed 8/11/2010)

(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 nearest watercourses to the areas under application are a tributary of Mary Brook, located approximately 60 m south and Mary Brook located approximately 300 m south. A multiple use wetland (Palusplain) is located approximately 20 m, at the nearest point, to the east of the applied area and a resource enhanced wetland

(Palusplain) is located 50 m to the south of the applied area. Given the distance to the multiple use wetland, the applied area is considered to be located within the wetland's western buffer zone and therefore may be variance to this Principle.

DEC recommends a minimum 50m buffer from the eastern edge of the application area to the multiple use wetland to limit hydrological impact and potential sedimentation issues.

The consultant (NGH Environmental 2011) engaged by the applicant provided supporting information to DEC on 15 April 2011. This information included amending the areas under application from 15.22 ha to 14.78 ha to avoid identified priority flora and provide a 50 m wetland buffer.

Shapefiles of the amended area, to confirm a 50 m buffer to the wetlands, were provided to DEC. DEC calculated the buffer as varying from 50 m to 30 m; the buffer from the south-eastern section of the applied area is considered to be inadequate.

Methodology Reference:
- NGH Environmental (2011)
GIS databases:
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
- Hydrography, linear
- Rivers

(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 mapped soil types are Mt7 and Mt9. The soil appears consistent with Mt7 and is comprised of white sandy soils (DEC 2009). There is only a slight slope on the applied area, sloping from the western section down to the eastern edge of the area (DEC 2009). Given the low relief on site and type of soil on site it is unlikely that water erosion or waterlogging will be a risk.

In addition, DAFWA (2009) advise that if the project is staged over a period of time and past excavated staged areas are reseeded after the extractive phase is completed the proposed clearing is unlikely to cause appreciable land degradation (DAFWA 2009). Therefore the proposed clearing is not likely to be at variance to this Principle.

Methodology References:
- DEC (2009)
- DAFWA (2009)
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 may be at variance to this Principle**

Haag Nature reserve is located 1 km north of the areas under application and Yelverton National Park is located 2.8 km west of the areas under application. There is approximately 25-30% of native vegetation remaining within a 10 km radius of the areas under application. The loss of the vegetation under application will disrupt the continuity of a vegetation corridor that occurs in this local area and although the landscape is fragmented, this corridor links to DEC lands in the Yelverton National Park.

The areas under application fall with the South West Regional Ecological Linkage area. Analysis of the impact of the removal of the vegetation within the application area indicates that on a local level the removal of the vegetation will cause a decrease in the ecological linkage value and increase the fragmentation of the landscape (Molloy et al 2009).

The consultant (NGH Environmental 2011) engaged by the applicant provided supporting information to DEC on 15 April 2011. This information included:

- amending the areas under application from 15.22 ha to 14.78 ha;
- a revised flora report identified that the remnant vegetation in the study area is mostly of low significance with regard to conservation values because of its level of degradation;
- the site does not currently support any continuous linkage; and
- a proposal to rehabilitate an area 10.28 ha in size.

DEC remains of the view that due to the short distances to nearby conservation areas, the proposed clearing is likely to impact upon the conservation areas by decreasing wildlife corridors, which do not necessarily have to be continuous, within the local area and increasing the fragmentation of the vegetation. Therefore the proposed clearing may be at variance to this Principle.

- Methodology** References:
- Molloy et al (2009)
 - NGH Environmental (2011)
- GIS Databases:
- NLWRA, Current Extent of Native Vegetation
 - 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 areas under application are mapped with a low groundwater salinity of <500mg/L and no salinity risk. The mapped soil types are Mt7 and Mt9. The soil seems consistent with Mt7 and is comprised of white sandy soils (DEC 2009). There is only a slight slope on the applied area, sloping from the western section down to the eastern edge of the area (DEC 2009). Given the free draining soils and distance to the nearest watercourse, the proposed clearing not likely to be at variance to this Principle.

- Methodology** Reference:
- DEC (2009)
- GIS databases:
- Groundwater Salinity Statewide
 - Hydrography, linear
 - Soils, Statewide
 - Salinity Risk LM 25m - DOLA 00

(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 mapped soil types are Mt7 and Mt9. The soil seems consistent with Mt7 and is comprised of white sandy soils (DEC 2009). There is only a slight slope on the applied area, sloping from the western section down to the eastern edge of the area (DEC 2009). Given the free draining soils and topography, the proposed clearing not likely to be at variance to this Principle.

- Methodology** Reference:
- DEC (2009)
- GIS database:
- Soils, Statewide

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

- Comments**
- The applicant had previously submitted a proposal to clear 17.87 ha of native vegetation within Lot 2 Haag Road for the purpose of sand extraction (CPS 3265/1). A permit to clear for this proposal was refused on 7 January 2010. An appeal for this decision was not lodged.
- CPS 3265/1: The City of Busselton (2009) advised that they object to the clearing on the grounds that the vegetation is poorly represented, the area contains resource enhanced and multi-use wetlands and that the area is significant and will reduce the area of remnant vegetation in that area by 20%. The Shire also advises that they are yet to receive an application for an Extractive Industry Licence and that the proponent was recently refused rural subdivision from the Department of Planning and Infrastructure.
- In December 2009, the applicant submitted a targeted flora survey report advising that no *Drakaea micrantha* was identified within the application area (IGNAM (Fire) Consulting, 2009), and subsequently provided further information in March 2010. After reviewing the additional information DEC considered the flora survey methodology was consistent with Guidance Statement No. 51 published by the Environmental Protection Authority (EPA, 2004).
- On 24 September 2010 the applicant submitted this application to clear 15.22 ha of native vegetation within Lot 2 Haag Road and Haag Road Reserve (proposed crossover only) (CPS 3998/1) and a proposal to offset (retain, fence and revegetate) 14.45 ha. The clearing proposal is for the purpose of sand extraction after which the area will be used for pasture.
- CPS 3998/1: The City of Busselton (2010) advised that the Council 'determined that a development application for an extractive industry (sand) on the subject lot should be approved, the Council provided the following reasons for its decision: It was the Council's decision to approve the application as the Council considered that it was generally consistent with District Town Planning Scheme No 20. It was also believed that there was a need for sand within the City and the proposed use of the site would meet that need. There was not considered to be any undue environmental impact associated with the development, with the drainage able to be adequately managed without the need for formal drainage management plan. The Council determined offset

planting would be an appropriate condition of approval to include'.

Planning Consent [dated 30 August 2010] is granted for Lot 2 Haag Road, for a period of 5 years with 17 conditions (NGH Environmental 2010), including:

Condition 6: Haag Road and the crossover onto Haag Road shall be sealed and drained

Condition 11 (ix): An offset re-vegetation plan, fully fenced, of the same area as the sand mining area.

Condition 13: No extraction of materials shall occur within 30m of the eastern boundary or 30m of the identifiable wetland area, whichever is greater. No extraction of materials shall occur within 30m of the identified Priority flora species. Where a greater setback does not apply, no extraction of materials shall occur within 20m of any lot boundary.

The areas have some foraging capacity for Carnaby's cockatoo and will result in a net loss of foraging habitat if returned to pasture, which should be avoided. To mitigate the loss of foraging capacity DEC requires that the area is not used for pasture and is to be revegetated after sand extraction has been completed.

Lot 2 is freehold land, zoned for general farming under the local Town Planning Scheme.

Two submissions were received for this proposal.

Submission (2010) made points in relation to insufficient flora and fauna studies, the rehabilitation of the mined area back to a vegetated state rather than pasture, WAPC's SW Framework that adopts a position of no further clearing or providing offsets that result in a net ecological benefit for essential clearing, and insufficient preventative measures for dieback disease.

Submission (2010a) made points in relation to the impacts to the landscape comprising wetlands, sandplains and bushland; the Shire's Planning Officer recommended to not approving the development application for sand extraction; and the offset condition lacks clarity as what would be sufficient to offset the loss of an existing amenity.

These points raised in the submissions have been considered in the relevant clearing principles during the assessment of this clearing proposal.

The consultant (NGH Environmental 2011) engaged by the applicant provided supporting information to DEC on 15 April 2011. This information included:

- amending the areas under application from 15.22 ha to 14.78 ha to avoid identified priority flora and provide a 50 m wetland buffer;
- an assessment of *Phytophthora cinnamomi* dieback disease occurrence, which identified 2.55 ha within the 17.07 ha study area as uninfested;
- a revised flora report identified that the remnant vegetation in the study area is mostly of low significance with regard to conservation values because of its level of degradation;
- the site does not currently support any continuous linkage; and
- a proposal to rehabilitate an area 10.28 ha in size to retain 5.6 ha of vegetation.

DEC considers the reduction in the size of clearing and the proposal to revegetate 10.28 ha on the property does not adequately address the impacted environmental values such as the significant black cockatoo and Western Ringtail possum habitat values identified above. Also, it is noted that the applicant also proposes to retain 5.6 ha of native vegetation; however, this does not mitigate the impacts to significant environmental values, unless the areas have security of tenure (e.g. conservation covenant).

The vegetation under application provides Baudin's and Carnaby's cockatoo foraging habitat and Western Ringtail Possum habitat. These species are listed as endangered under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). As such there may be notification responsibilities to the under the Department of Sustainability, Environment, Water, Population and Communities under the EPBC Act.

DEC formally wrote to the applicant on 16 August 2012 after discussions with the applicant in which it was advised that he wished to withdraw the application. This letter was sent registered post and was not received by the applicant. DEC sent the letter via email to the applicant on 24 September 2012, requesting a response by 5 October 2012. No further information was received.

Methodology

References:

- EPA (2004)
- NGH Environmental (2010)
- NGH Environmental (2011)
- City of Busselton (2009)
- City of Busselton (2010)
- IGNAM (Fire) Consulting (2009)
- Submission (2010)
- Submission (2010a)

GIS databases:

- Cadastre
- Town Planning Scheme Zones

4. References

- Brown A., Thomson-Dans C. and Marchant N. (1998). Western Australia's Threatened Flora, Department of Conservation and Land Management, Western Australia.
- City of Busselton (2009) Direct Interest Submission for Lot 2 Haag Road, Yelverton. DEC TRIM Ref DOC 96641
- City of Busselton (2010) Direct Interest Submission for Lot 2 Haag Road, Yelverton. DEC Ref A343660
- DAFWA (2009) Commissioner of Soil and Land Conservation Advice and Land Degradation Assessment Report, Department of Agriculture and Food, Western Australia. DEC TRIM Ref DOC 99314
- DEC (2009) Site Inspection Report for Clearing Permit Application CPS 3265/1, Lot 2 Haag Road, Yelverton. Site Inspection undertaken 08/09/2009, Department of Environment and Conservation, Western Australia. DEC TRIM Ref DOC 97852
- Ekologica Pty Ltd (2008) Report on a Flora and Vegetation Survey for Lot 2, Yelverton. DEC TRIM Ref DOC 93165
- EPA (2004) Guidance for the Assessment of Environmental Factors - Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia. Guidance Statement No 51. Environmental Protection Authority, Western Australia.
- EPA (2009) Environmental Protection Bulletin No 8 South West Regional Ecological Linkages, Environmental Protection Authority, Western Australia.
- Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.
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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)