



1. Application details

1.1. Permit application details

Permit application No.: 2598/1
 Permit type: Area Permit

1.2. Proponent details

Proponent's name: PAJ Investments Pty Ltd

1.3. Property details

Property: LOT 55 ON PLAN 8649 (House No. 561 ALEXANDER LANDSDALE 6065)
 Local Government Area: City Of Wanneroo
 Colloquial name:

1.4. Application

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

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard Vegetation Association: 1001 - Medium very sparse woodland; jarrah, with low woodland; banksia and casuarina (SAC Bio Datasets 27/08/2008; Shepherd 2006)	The proposal is to remove 3.24ha of native vegetation within Lot 55 (a 4.1ha property) for an irrigated tree nursery.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The condition of the native vegetation under application was sourced from the three site inspections (DEC, 2008; DEC, 2009 and DEC, 2009a). The vegetation was considered to be in very good to excellent (Keighery, 1994) condition throughout the site with the exception of a small area around the perimeter, which is becoming weedy due to edge effects; apart from the perimeter firebreak there are no other noticeable tracks and very little weed invasion or other signs of degradation (DEC, 2009).
Heddle Vegetation Complexes: Bassendean complex central and south - Woodland of E. marginata - E. calophylla with well defined second storey of Allocasuarina fraseriana and B. grandis on the deeper soils and a closed scrub on the moister sites. The understorey species reflect similarities with the adjacent vegetation complexes. (Heddle et al 1980)	The vegetation under application is described as Banksia woodland over diverse dense shrubland. The vegetation includes Banksia attenuata, Banksia menziesii, Banksia illicifolia, Corymbia calophylla, Eucalyptus Marginata, Adenanthos cygnorum, Stirlingia latifolia, Dasyopogon sp, Stylidium sp, Petrophile sp, Anigozanthos humilis, Drosera sp, Hovea sp, Pterostylis sp., Conostylis sp., Lyginia barbata and Alexgeorgea nitens with Melaleuca preissiana within the western side of the area under application (DEC, 2008).		

3. Assessment of application against clearing principles

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

Comments

Proposal may be at variance to this Principle

The vegetation under application consists of 3.24 ha of vegetation that ranges from very good to excellent condition and is predominately in excellent condition (Keighery, 1994) comprising Banksia low woodland over diverse dense shrubland with Melaleuca preissiana observed on the western side of the area under application (DEC, 2008; DEC, 2009 and 2009a). There is a small area around the perimeter, which is becoming weedy due to edge effects; apart from the perimeter were there is a firebreak, there are no other noticeable tracks and very little weed invasion or other signs of degradation (DEC, 2009).

In relation to clearing principle (a) Bayley Environmental Services (2009a) assert that 'The wording of this

principle suggests that, to be regarded as having a "high level" of biological diversity then the diversity of the vegetation should be relatively high compared to other vegetation, either of the same type or of different types' and 'DEC misinterprets or misrepresents the condition of the vegetation on Lot 55'. Bayley Environmental Services (2009a) Cite two surveys by ATA (2007) who deemed vegetation condition as very good for Lot 55 and Del Fante (2009) that deemed the vegetation to range from Degraded to Very Good at a more local scale. Both surveys being carried out in accordance with DEC guidelines. Bayley Environmental Services (2009a) questions the 'strength of two one-hour "walk-overs" of the Lot' in determining the condition of the area under application. DEC remains of the view that based on site visits undertaken the vegetation under application ranges from very good to excellent condition in accordance with the Keighery scale (1994).

The vegetation under application may provide habitat for ground dwelling fauna such as the Western Brush Wallaby and Quenda (Bayley Environmental Services 2009a), and is considered to be significant habitat for Carnaby's Black-Cockatoo and may be habitat for the Graceful Sun Moth.

Additionally the local area (5 km radius) is highly cleared with ~ 30% of native vegetation remaining.

Given that the vegetation is in predominantly excellent (Keighery, 1994) condition (DEC 2009) with an intact structure in a highly cleared landscape, and that there is potential for this vegetation to provide critical habitat for fauna, it is considered that the vegetation may comprise a high level of biodiversity.

Methodology Reference:
- DEC (2008)
- DEC (2009)
- DEC (2009d)
- Bayley Environmental Services (2009a)
GIS Database:
- SAC Bio Datasets 28/08/2008

(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**

The vegetation under application ranges from very good to excellent (Keighery 1994) condition (DEC 2009) and is predominately in excellent condition. It includes an understorey that would provide suitable habitat for ground-dwelling fauna such as the Quenda (DEC 2008, Bayley Environmental Services 2009a), which has been recorded approximately 800m north-west of the area under application and Western Brush Wallaby.

Bayley Environmental Services (2009a) presented a report prepared on the significance of Lot 55 to Carnaby's Black Cockatoos. The report concluded that the impact of clearing 3.2ha on Lot 55 would be low, due in part to the presence of large areas of high-quality cockatoo feeding habitat in the adjacent Telstra land (part bush Forever Site 196), the nearby Gngangara Lake bushland (BF Site 193), State forest 65 and Whiteman Park. Noting that the cumulative loss of Carnaby's black Cockatoo food sources, including Banksia, is of concern. Also noting that planting of suitable feed species including Banksia in urban landscapes can help to offset small losses. Bayley environmental Services (2009a) concluded that the proposed clearing of part of Lot 55 will have a minor impact on the food resources available to Carnaby's Black Cockatoo.

The Report 'Carnaby's Black-Cockatoo Assessment Lot 55 Alexander Drive Landsdale' (Huang & Bamford, 2009) prepared for Bayley Environmental Services by Bamford Consulting Ecologists also indicated that 'While the bird typically visits the Plain during non-breeding season, Johnstone and Stone (1998, cited in Huang & Bamford, 2009) have recently recorded evidence of breeding on the Swan Coastal, emphasizing even more the importance of the native vegetation to the persistence of the Cockatoo in this region'. The report also noted the 'Project area contains intact vegetation typical of Banksia woodland that has not been affected by dieback. Evidence of foraging by Carnaby's Black-Cockatoos, some very recent, was found throughout the project area. There where also two large Marri trees of sufficient size to contain a hollow suitable for breeding by the cockatoos, although there was no evidence of usage.' In relation to local and regional significance of the site Huang & Bamford (2009) advise that 'The project area is within a habitat category that has been found to provide the greatest amount of food for Carnaby's Black-Cockatoo on the Swan Coastal Plain.'

The Black-Cockatoo, which has been recorded within the local area (5 km radius), is known to feed on a large variety of plants including Proteaceous species (e.g. Banksia, Dryandra and Grevillea), Marri nuts (*Corymbia calophylla*), Jarrah (*Eucalyptus marginata*) and Tuart (*Eucalyptus gomphocephala*) (Shah, 2006).

Surveys of Carnaby's populations and their feeding and roosting habits show that the northern region of the Swan Coastal Plain appears to be an important area throughout the season (Shah, 2006). Native species such as Banksia and Eucalypts play a significant role in the ecology of the Carnaby's Cockatoos on the Swan Coastal Plain (Shah, 2006).

The cumulative impacts from the reduction of Carnaby's foraging habitat on the Swan Coastal Plain has resulted in vegetation that provides a food source for Carnaby's cockatoos being considered as significant habitat; the continual net loss of critical habitat will result in additional pressure on the current population of Carnaby's cockatoos (DEC, 2009b). The vegetation under application has been identified as feeding habitat for

Carnaby's Black Cockatoo (DEC, 2009c).

In relation to the Graceful Sunmoth Bayley Environmental Services (2009a) state that 'The Graceful Sunmoth is known to occur in the Landsdale Road bushland (BF Site 199), 2.6km from Lot 55. This is one of nine known populations of the moth, all of which are within bush Forever protected sites. Recent survey efforts have failed to find any new populations of the Graceful Sunmoth outside of its already known distribution (TSSC, 2008 in Bayley Environmental Services, 2009a).' 'The Graceful Sunmoth is thought to breed exclusively on Lomandra plants, probably *L. hermaphrodita*. A sufficient density and number of this plant is probably necessary to sustain a viable breeding colony of the moth (CALM, 2005 in Bayley Environmental Services, 2009a). The major food plants for the moth are thought to be *L. hermaphrodita* and *L. maritime* (McNamara, 2009 in Bayley Environmental Services, 2009a)'. 'Lot 55 has been subject to two detailed vegetation surveys both of these surveys produced lists of all plant species observed on Lot 55 neither recorded the presence of any species of Lomandra.' Bayley Environmental Services (2009a) conclude that the likelihood of the moth being present on Lot 55 is negligible.

The Graceful Sun Moth (*Synemon gratiosa*- endangered) has been recorded approximately 1.6 km from the area under application. The Graceful Sun Moth requires Lomandra species as host plants (Williams, 2008). Lomandra species are a usual component of species rich Banksia woodland; therefore, there is the potential for the Graceful Sun Moth to utilise the vegetation under application. A site inspection of the area under application identified and recorded Lomandra hermaphrodita within the area under application, the species was observed to be widely distributed throughout Lot 55 (DEC, 2009a). DEC (2009d) recognizes that given the close proximity of Lot 55 to other known populations of the Graceful Sun Moth and the presence of Lomandra hermaphrodita, it is considered that Lot 55 is within the Graceful Sun Moth distribution range and is likely to be suitable habitat.

In addition, DEC considers that location of the site provides an ecological linkage for the movement of both Carnaby's Black Cockatoo and Graceful Sun Moth between the more extensive bushland to the east, and other bushland area to the west. In the case of Graceful Sun Moth, the limited dispersal capacity of this species may enable movement across Alexander Drive under the current configuration, but should this area under application be removed, the capacity to move between eastern and western bushland areas would be significantly curtailed (DEC 2009f). Further the vegetation under application is adjacent to the north of a small patch of remnant vegetation which contains a wetland and to the west (~40m) of Bush forever site 196. Therefore the vegetation under application, which contains both wetland (*Melaleuca preissiana* in the western section) and dryland vegetation (Banksia low woodland in the central and eastern sections) may provide an ecological corridor or link for fauna.

Given the above the proposed clearing is considered to be significant habitat for fauna indigenous to Western Australia. Specifically DEC (2009f) considers that the proposed clearing poses a significant impact on the threatened species Carnaby's Black Cockatoo and Graceful Sun Moth. Therefore the proposal is at variance to this Principle.

Methodology

References:

- ATA Environmental (2007)
 - Bayley Environmental Services (2009a)
 - DEC (2008)
 - DEC (2009a)
 - DEC (2009b)
 - DEC (2009c)
 - DEC (2009d)
 - DEC (2009f)
 - Shah (2006)
 - Williams (2008)
- GIS Databases:**
- Bushforever
 - Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
 - SAC Bio Datasets 28/08/2008

(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

Within the local area (~5km radius) there is one known record of the rare flora species *Caladenia huegelii* occurring approximately 2.4km north of the area under application.

Caladenia huegelii is a tuberous, perennial herb, 0.25-0.6 m high with green, cream and red flowers during Sep-Oct in grey or brown sand, clay loam (WA Herbarium, 1998). The vegetation complex and soil mapping for the area under application is consistent with the habitat requirements for *Caladenia huegelii*.

During the flora survey conducted in September 2002 (ATA Environmental, 2007) of the Precinct 64 East Landsdale study area, which includes the area under application, no rare flora was identified. It is therefore not considered likely that the vegetation under application includes or is necessary for the continued existence of,

rare flora.

- Methodology** References:
- ATA Environmental (2007)
 - Western Australian Herbarium (1998-)
- GIS Databases:
- Heddl Vegetation Complexes
 - SAC Bio Datasets 28/08/2008
 - 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

Within the local area (~5km radius) there are 35 known occurrences of Floristic Community Type (FCT) 20a - *Banksia attenuata* woodland over species rich dense shrublands, which is a Threatened Ecological Community (TEC). The nearest known occurrences of this TEC are located approximately 80m to the east and 300m north-east of the area under application with the area under application located within the buffer of these two occurrences.

The vegetation under application includes *Banksia* low woodland over diverse dense shrubland in excellent condition (DEC, 2008). DEC (2008a) advise the installation of plots in vegetation in best condition, and analysis of the data using appropriate statistical techniques would be advised to accurately determine the FCT present at the site. In addition, the area under application is located on the edge of the Bassendean Dunes within the transitional area so that it is difficult to determine the floristic community type of the vegetation (DEC, 2009e).

A vegetation survey undertaken in 2002 (ATA Environmental, 2007) of the Precinct 64 East Lansdale study area mapped two vegetation types within the area under application. One the vegetation types mapped within the area under application also occurs within the Crown Reserve in the south-east section of the study area, which has been inferred as a TEC 'FCT 20a: *Banksia attenuata* woodlands over species rich dense shrublands'.

ATA Environmental (2007) considers that all the vegetation under application most resembles FCT 23a (*Banksia attenuata*-*Banksia menziesii* woodlands); however, it is unclear what methodology was employed to determine this floristic community type. An additional survey in spring 2008 (Bayley Environmental Services, 2009) considers that the vegetation most resembles FCT 23a and FCT 21a.

Given the assigned vegetation types, and the location of the vegetation within a transitional area, it is considered that the vegetation under application may not comprise, or be necessary for the maintenance of, a TEC.

- Methodology** References:
- ATA Environmental (2007)
 - Bayley Environmental Services (2009)
 - DEC (2008)
 - DEC (2008a)
 - DEC (2009e)
 - Gibson et al (1994)
- GIS Database:
- SAC Bio Datasets 19/08/2008

(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 within the areas under application are identified as a component of Beard vegetation type 1001, and Heddl Bassendean Complex Central and South, of which there is 25.3% and 27.0% of Pre-European extent remaining respectively (Shepherd, 2006; EPA, 2006).

The Environmental Protection Authority (EPA) supports a 30% threshold level as recommended in the National Objectives Targets for Biodiversity Conservation; below which species loss appears to accelerate exponentially at an ecosystem level (EPA, 2000). However, the EPA (2006) recognises the Perth Metropolitan Region as a 'constrained area', providing for the reduction of vegetation complexes to a minimum of 10% of the Pre-European extent.

Both vegetation communities associated with the area of vegetation under application are above the minimum 10% target set by the EPA within the Metropolitan Region. Given this, the relatively high representation of remnant vegetation within the local area (~30.0%) and within the City of Wanneroo (49.7%), the vegetation under application is not considered to be a significant remnant within an extensively cleared area. However, any further clearing in the local area may incrementally degrade the ecological linkage between nearby conservation areas.

	Pre-European (ha)	Current extent (ha)	Remaining (%)	In secure tenure (%)
IBRA Bioregion*				
Swan Coastal Plain^	1,501,208	583,140	38.8	
City of Wanneroo*	67,697	33,637	49.7	
Local area (5km radius)	7,850	~2,400	~30.0	
Beard vegetation type*				
1001	57,410	14,545	25.3	5.1
Hedde vegetation complex**				
Bassendean-Central & South	87,477	23,624	27.0	0.7

* (Shepherd, 2007)

** (EPA, 2006)

^ Area within Intensive Land Use Zone

Methodology

References:

- DEC (2008)
- EPA (2000)
- EPA (2006)

GIS Databases:

- Interim Biogeographic Regionalisation of Australia
- NLWRA, Current Extent of Native Vegetation
- SAC Bio Datasets 19/08/2008

(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

There are numerous wetlands within the local area (~5km radius) including, a Resource Enhancement Wetland (REW) located ~20m south at the closest point and a Conservation Category Wetland (CCW) located ~400m east of the area under application. The closest major watercourse is Bennett Brook located ~4.0km east south-east of the area under application.

Bayley Environmental Services (2009a) submit that the assessment report should state that the proposal is not a variance with principle (f) noting that the 50m mapped buffer is a dry land buffer and that DEC mapping indicates that the vegetation associated with the dampland is to all intents and purposes entirely outside of Lot 55.

The critical zone of influence for wetlands is considered to be within 50m (Hill et al, 1996). Therefore, it is considered that the vegetation under application occurs within the zone of critical influence. During site inspections (DEC, 2008 and DEC, 2009a) wetland dependant vegetation, including *Melaleuca preissiana*, was observed within the western section of the area under application. A survey conducted in spring 2008 (Bayley Environmental Services, 2009) also identified *Melaleuca preissiana* within the western section under application.

Given that the vegetation under application contains vegetation associated with a wetland and is within the zone of critical influence, the proposal may impact on wetland ecology and hydrology, therefore the proposed clearing may at variance to this Principle.

Methodology

References:

- Bayley Environmental Services (2009)
- DEC (2008)
- DEC (2009a)
- Hill et al (1996)

GIS Databases:

- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
- Hydrology, 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 landscape of the areas under application and surrounds can be described as subdued dune-swale terrain (Northcote et al, 1960-68). The chief soils are leached sands on the low dunes and small areas of other sandy

soils (Northcote et al, 1960-68). These soils are known to have a low Phosphorus Retention Index (PRI), and it is considered that the proposed clearing of deep-rooted perennial vegetation is likely to result in increased nutrient loss from the soil profile (McPharlin et al, 1990).

Soils within the applied area are part of the Bassendean Dune System, which are described as well drained leached grey sands. These soils have a high risk of wind erosion and a low risk of phosphorus export (given the nutrient poor sandy soils; Bayley Environmental Services, 2009a) and low risk of surface water runoff (State of Western Australia, 2005).

Bayley Environmental Services (2009a) advise that 'The cleared land is proposed to be used as a native tree and shrub nursery. Native species are adapted to a nutrient-poor environment and will require minimal input of fertilisers. There will therefore be little opportunity for nutrient loss from the site' and 'The proposed nursery will be planted and protected to prevent wind erosion, as is normal good business practice for operations of this sort'.

Given the sandy soils present within the areas under application, it is considered that the proposed clearing may cause appreciable land degradation in the form of wind erosion. This may be managed by the planting of trees and windbreaks. Therefore, it is considered that the proposal may be at variance to this Principle.

Methodology **References:**
- Bayley Environmental Services (2009a)
- McPharlin et al (1990)
- Northcote et al (1960-68)
- State of Western Australia (2005)
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**

There are three conservation reserves within the local area (1km radius), being Bush Forever Site 196 (Gnangara Road Bushland) located ~40m east, Bush Forever Site 193 (Gnangara Lake and Adjacent Bushland) located ~520m north and State Forest 65 (Gnangara-Moore River State Forest) located ~960m north-east of the area under application.

The vegetation under application ranges from very good to excellent (Keighery 1994) condition (DEC 2009) and is predominately in excellent condition and therefore may provide an ecological linkage or corridor to adjacent or nearby conservation areas.

Bayley Environmental Services (2009a) submit that DEC misrepresents the condition of vegetation. This has been addressed under clearing principle (a).

Bayley Environmental Services (2009a) submit that despite the condition of the native vegetation Lot 55 'may still have some linkage values'. However also noting that: 'The vegetation to the west and south of Lot 55 is fragmented, extending no more than 500m west of the Lot; Other east-west links exist within 400m to the north and 1km to the south of Lot 55; and the linkage to the east of Lot 55 is severely disrupted by the fully cleared 40m Alexander Drive reserve, a 2m high security fence and a 20m firebreak around the Telstra land. This restricts the linkage value of Lot 55 to birds which are able and willing to cross these obstacles'. Bayley Environmental Services (2009a) asserts that 'Lot 55 does not link to any conservation areas apart from the Telstra site across Alexander Drive. It is therefore considered that the proposed clearing will have no significant effect on any conservation area'.

DEC (2009f) considers that Lot 55 provides an ecological linkage for the movement of Carnaby's Black Cockatoo and may also provide linkage for the Graceful Sun Moth between the more extensive bushland to the east and other bushland areas to the west.

Given that the vegetation under application may provide an ecological corridor or linkage for fauna, including fauna of conservation significance, the clearing as proposed may impact on the environmental values of nearby conservation areas.

Methodology **References:**
- Bayley Environmental Services (2009a)
- DEC (2008)
- DEC (2009f)
GIS databases:
- Bushforever
- DEC Managed Lands and Waters

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Comments Proposal is not likely to be at variance to this Principle

There are numerous wetlands within the local area (~5km radius) including, a Resource Enhancement Wetland (REW) located ~20m south and a Conservation Category Wetland (CCW) located ~400m east of the area under application. The closest major watercourse is Bennett Brook located ~4.0km east south-east of the area under application.

The area under application occurs within the Gnangara Underground Water Pollution Control Area, being a Priority 2 Public Drinking Water Source Area and has a low risk of salinity.

The area under application comprises leached Bassendean sands (Northcote et al, 1960-68), which are known to have a low Phosphorus Retention Index (PRI), and it is considered that the proposed clearing of deep-rooted perennial vegetation is likely to result in increased nutrient loss from the soil profile (McPharlin et al, 1990).

However, given the sandy soils present on site are nutrient poor there would be minimal loss of nutrients from the soil profile (Bayley Environmental Services 2009). Therefore, it is not considered likely that the proposed clearing will cause significant deterioration in the quality of surface or ground water.

Methodology Reference:

- Bayley Environmental Services (2009a)
- GIS Databases:
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain
 - Hydrogeology, linear
 - Public Drinking Water Source Areas (PDWSAs)
 - 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 area under application comprises leached Bassendean sands (Northcote et al, 1960-68), which are generally considered to have high infiltration rates and therefore a low risk of water logging.

Given the high infiltration rates of the soil mapped within the area under application, the proposal is not considered likely to cause, or exacerbate, the incidence or intensity of flooding.

Methodology Reference:

- Northcote et al (1960-68)
- GIS Database:
- Soils, Statewide

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

Comments

The area under application is within the Proclaimed Groundwater Area of Mirrabooka. Therefore any abstraction of groundwater would require a licence. As the proposed purpose of the clearing is for irrigated tree nursery a groundwater licence is required. A ground water licence has been obtained; the duration of licence is 5 October 2009 to 5 October 2018.

The area under application has a moderate to low acid sulphate soil (ASS) risk. It is not considered likely that the proposed clearing would significantly disturb these soils so that management would be required.

The City of Wanneroo has advised that they are working with Stockland Development Pty Ltd to create a Local Structure Plan (LSP) for Landsdale, Structure Plan No. 57 - East Wanneroo Cell 9 [also known as Precinct 64 East Landsdale]. They have provided a draft LSP, which is currently being advertised to the public (City of Wanneroo, 2008). In addition, the draft LSP shows the proposed Public Open Spaces (POS), areas to be reserved for conservation, with a POS located immediately adjacent to the south of the area under application (City of Wanneroo, 2008).

The City of Wanneroo (2009) has sent a submission recommending the consideration for a tree retention plan, which includes the retention of mature trees and grass trees, and a weed management plan. These recommendations were considered as part of the assessment.

The City of Wanneroo (2008) has issued Planning Approval, dated 25 March 2008 for Lot 55 Alexander Drive for the proposed development of tree farm. An amended Planning Approval (City of Wanneroo, 2009a) was issued on 24 March 2009, following a hearing at the State Administrative Tribunal.

Carnaby's Black-Cockatoo is classified as Endangered and the Graceful Sun Moth is classified as Vulnerable

under Commonwealth Environment Protection and Biodiversity Conservation (EPBC) Act 1999. Given that the clearing as proposed will result in a loss of habitat sites for these species, the proposal and the Proposed Structure Plan 57 - East Wanneroo Cell 9 [in which the area under application is a part of] (City of Wanneroo, 2009b) are likely to require referral to the Commonwealth Department of Environment and Heritage (DEH) under the EPBC Act 1999 for Carnaby's Black Cockatoo and Graceful Sun Moth.

The area under application occurs within the Gnangara Underground Water Pollution Control Area a Priority 2 Public Drinking Water Source Area (PDWSA). "Priority 2 source protection areas are defined to ensure that there is no increased risk of pollution to the water source. Priority 2 (P2) areas are declared over land where low risk development already exists. Protection of public water supply sources is a high priority in these areas. P2 areas are managed in accordance of risk minimisation and so conditional development is allowed" (Western Australian Planning Commission, 2003).

There is no other RIWI Act Licence, Works Approval or EP Act Licence that affects the area under application.

Lot 55 on Plan 8649 is zoned Rural under the Metropolitan Regional Scheme.

Methodology

References:

- Bayley Environmental Services (2009a)
 - City of Wanneroo (2008)
 - City of Wanneroo (2009)
 - City of Wanneroo (2009a)
 - City of Wanneroo (2009b)
 - Western Australian Planning Commission (2003)
- GIS databases:
- Acid Sulphate Soil risk map, Swan Coastal Plain
 - Metropolitan Regional Scheme
 - RIWI Act, Groundwater Areas

4. Assessor's comments

Comment

The 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 proposed clearing is at variance to Principle (b), may be at variance to Principles (a), (f), (g), and (h) and not likely to be at variance to the remaining clearing Principles.

5. References

- ATA Environmental (2007) Stockland WA Development Pty Ltd, Precinct 64 East Landsdale: Environmental Assessment, Version 4, July 2007, ATA Environmental. TRIM Ref DOC61324
- Bayley Environmental Services (2009) Flora and Vegetation Assessment Lot 55 Alexander Drive, Landsdale. TRIM Ref DOC75939
- Bayley Environmental Services (2009a) Additional Information relating to Lot 55 Alexander Drive, Landsdale (Email). TRIM Ref DOC102019
- City of Wanneroo (2008) Submission in response to a Direct Interest Letter. TRIM Ref DOC59828
- City of Wanneroo (2009) Direct interest submission, additional comments (email). TRIM Ref DOC77593
- City of Wanneroo (2009a) Additional information - Planning approval (email). TRIM Ref DOC105378
- City of Wanneroo (2009b) Additional information - Letter from Department of the Environment, Water, Heritage and the Arts (email). TRIM Ref DOC105820
- DEC (2008) Site Inspection 19 August 2008 on Lot 55 Alexander Drive, East Landsdale; Department of Environment and Conservation (DEC), Western Australia. TRIM Ref DOC61562.
- DEC (2008a) Species and Communities Branch advice for clearing application within Lot 55. Advice to Assessing Officer, Native Vegetation Assessment Branch, Department of Environment and Conservation, received 29/08/2008. TRIM Ref DOC61542
- DEC (2009) Site Inspection 23 February 2009 on Lot 55 Alexander Drive, East Landsdale; Department of Environment and Conservation (DEC), Western Australia. TRIM Ref DOC77192.
- DEC (2009a) Site Inspection 26 October 2009 on Lot 55 Alexander Drive, East Landsdale; Department of Environment and Conservation (DEC), Western Australia. TRIM Ref DOC103304
- DEC (2009b) Fauna advice for CPS 3074/1; Species and Communities Branch, Department of Environment and Conservation. TRIM Ref DOC92367
- DEC (2009c) Fauna advice for CPS 2598/1; Species and Communities Branch, Department of Environment and Conservation. TRIM Ref DOC97169
- DEC (2009d) Fauna advice, Graceful Sun Moth, for CPS 2598/1 (Email); Species and Communities Branch, Department of Environment and Conservation. TRIM Ref DOC103118
- DEC (2009e) Review of Flora and Vegetation Assessment Lot 55 Alexander Drive, Landsdale Report, Native Vegetation Conservation Branch; Department of Environment and Conservation (DEC), Western Australia. TRIM Ref DOC77150.
- DEC (2009f) Fauna advice, Carnaby's Black Cockatoo and Graceful Sun Moth, for CPS 2598/1; Species and Communities Branch, Department of Environment and Conservation. TRIM Ref DOC104329
- 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 (2006) Guidance for the Assessment of Environmental Factors - Level of Assessment for Proposals Affecting Natural Areas Within the System 6 Region and Swan Coastal Plain Portion of the System 1 Region. Guidance Statement No 10. Environmental Protection Authority, Western Australia.
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6. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment
DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DEC)

